2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

MISSISSIPPI POWER COMPANY

PLANT WATSON ASH POND

Report Submitted – August 1, 2020

Prepared By:

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CERTIFICATION STATEMENT

This *2020 Annual Groundwater Monitoring and Corrective Action Report, Mississippi Power Company - Plant Jack Watson – Ash Pond* has been prepared in compliance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D; published in 80 FR 21302-21501, April 17, 2015) and the agreed order signed on December 23, 2019 between Mississippi Commission on Environmental Quality and Mississippi Power Company under the supervision of a licensed professional geologist with Southern Company Services.

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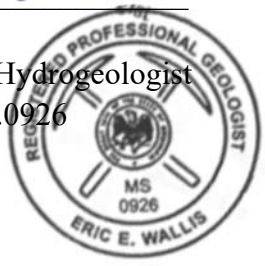

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1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 C.F.R. Part 257 Subpart D) and the Agreed Order (number(7010 19)), this Annual Groundwater Monitoring and Corrective Action Report documents the groundwater monitoring activities completed from July 2019 through June 2020 at Mississippi Power Company's (MPC) Plant Jack Watson Electric Generating Plant (Plant Watson) Ash Pond (former CCR Unit). Semi-annual assessment monitoring and associated reporting for the former CCR Unit is performed in accordance with the monitoring requirements § 257.90 through § 257.95.

1.1 Site Description & Background

The former CCR Unit, ceased receiving CCR in April 2015 and closure was complete in May 2018. As part of closure, the former CCR Unit was dewatered sufficiently to remove the free water. The CCR material remaining in the former CCR Unit was graded and a final cover system installed. The final cover system consists of ClosureTurf® cover system by WatershedGeo™ that utilizes a 50-mil linear low-density polyethylene (LLDPE) geomembrane overlain by an engineered synthetic turf. The cover system was constructed to control, minimize or eliminate, to the maximum extent feasible, the infiltration of water into the former CCR Unit by providing sufficient grades and slopes to promote surface runoff from the site. The permeability of the final cover system is less than the permeability of the natural soils beneath the surface impoundment and not greater that 1 x 10^{-5} centimeters/second (cm/s).

The former CCR Unit is inactive and ceased operation prior to April 17, 2015. A notification of intent to close the former CCR Unit was placed in the operating record on December 15, 2015 and posted to the internet within 30 days. The former CCR Unit was closed in May 2018 and the Certification of Closure was posted to the internet on June 4, 2018. Therefore, groundwater monitoring and reporting for the former CCR Unit is being completed in accordance with the alternate schedule in § 257.100(e)(5) of the revised CCR rule (August 5, 2016) and the Agreed Order.

2.0 REGIONAL GEOLOGY & HYDROGEOLOGIC SETTING

2.1 Site Location and Physical Setting

Plant Watson is located in Harrison County near the city of Gulfport, Mississippi. The physical address of the plant is 10406 Lorraine Road, Gulfport, Mississippi 39503. The former CCR Unit is located southeast of the plant and west of the Biloxi River. **Figure 1, Site Location Map,** depicts the location of Plant Watson and former CCR Unit with respect to the surrounding area. Harrison County, Mississippi lies within the Eastern Section of the Gulf Coastal Plain physiographic province (USGS, 1998). The topography of Harrison County is gently rolling to flat with elevations ranging from 200 feet (ft) above mean sea level (MSL) inland to approximately 0 ft MSL near the coastal waterbodies (USGS, 1985). Local site elevations near the former CCR Unit are between 25 and 5 ft MSL.

2.2 Geology and Hydrogeology

The subsurface geology at the site is characterized by deposits of clay, silt, and sand deposited between the Pliocene and Holocene series. This sequence of sediments has been subdivided, from oldest to youngest, into the units of Upper Graham Ferry Member of the Pensacola Formation, Citronelle Formation, Biloxi Formation, Prairie Formation, and Holocene coastal wetland, deltaic, and alluvium deposits (Otvos, 2001). The unconsolidated sediment at the site is underlain by Pliocene and Miocene sedimentary rocks at depths greater than -500 ft MSL (USGS, 1998; Hoffmann et al, 2017).

At the Site, four geologic units have been encountered surrounding and underlying the former CCR Unit and are described from shallowest to deepest as follows:

- Unit 1 is dike fill material comprising the dike along the perimeter of the former CCR Unit with a thickness ranging from 0 to 20 feet
- Unit 2 is a sandy clay to clay aquitard underlying the former CCR Unit. The unit corresponds to the Biloxi Formation and ranges from 5 to 20 feet thick. Permeability testing conducted on Unit 2 soils indicate a permeability in the 10^{-8} cm/s range.
- Unit 3 is a fluvial sand aquifer corresponding to the Citronelle Formation. The unit is approximately 40 feet thick. Unit 3 is the uppermost aquifer at the site for groundwater monitoring purposes.
- Unit 4 is a clay aquitard underlying the Unit 3 aquifer and is continuous across the site. Unit 4 corresponds to the Upper Graham Ferry Formation. Permeability testing conducted on Unit 4 clays, indicates a permeability in the 10^{-8} cm/s range.

All site monitoring wells are screened in the uppermost aquifer beneath the site in the Unit 3 sands corresponding to the Citronelle Formation. The Unit 3 sand aquifer is typically located at elevations between 0 and -42 ft MSL. The Unit 3 sand generally consists of fine to coarse, well-graded sands with occasional lenses of clay and preserved wood fragments or tree logs. Groundwater recharge to the uppermost aquifer is largely through infiltration of precipitation.

A subsurface cement-bentonite wall was installed around the perimeter of the former CCR Unit to provide structural support of the soil dike between 1994 and 2000. The subsurface wall was installed to a common depth around the former CCR Unit. Although installed primarily for structural stability, the subsurface wall impedes groundwater flow within Unit 3 beneath the former CCR Unit. Unit 3 groundwater monitoring wells are installed outside of the subsurface wall.

2.3 Groundwater Monitoring Network

To meet the performance standards of § 257.91(a), Mississippi Power installed a groundwater monitoring system consisting of wells at appropriate locations with screens in the uppermost aquifer. The number, spacing, and depths of the groundwater monitoring wells were selected based on the characterization of Site-specific hydrogeologic conditions and certified by a PE. **Table 1, Groundwater Monitoring Network Details**, summarizes the monitoring well construction details and design purpose for the former CCR Unit. Monitoring wells in the certified monitoring system are shown on **Figure 2, Monitoring Well Location Map**.

3.0 GROUNDWATER MONITORING ACTIVITIES

In accordance with 40 CFR §257.90(e), the following describes monitoring-related activities performed during the monitoring period and presents the status of the monitoring program. Groundwater sampling was performed in accordance with 40 CFR §257.93. Samples were collected from each well in the certified monitoring system. The location of each of these monitoring wells is shown on **Figure 2**.

3.1 Monitoring Well Installation and Maintenance

In summary, monitoring well installation and maintenance activities included:

- Installing four additional background monitoring wells (APMW-13, APMW-14, APMW-15, and APMW-16) during the week of June 15, 2020 northeast of the former CCR Unit.
- Installing seven vertical delineation monitoring wells adjacent to existing CCR monitoring wells APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-8, and APMW-10 from April 28 through May 16.

Pursuant to § 257.95(g)(1), and the Agreed Order (7010 19), additional monitoring wells were installed to characterize the vertical extent of groundwater protection standard (GWPS) exceedances identified during assessment monitoring. Additional background wells were installed to further characterize upgradient conditions at the site. Delineation wells and additional background wells are identified on **Figure 2** and detailed on **Table 1. Appendix A, Boring and Well Construction Logs** provides information on the design and installation of the additional background and delineation wells.

3.2 Assessment Monitoring

Based on results presented in the *2019 Annual Groundwater and Corrective Action Monitoring Report*, MPC initiated an assessment monitoring program in August 2019. Pursuant to § 257.95(b) and within 90 days of initiating the assessment monitoring program, an initial assessment monitoring event was conducted August 8 through 9, 2019 and monitoring wells were sampled for all Appendix IV parameters. Pursuant to § 257.95(d)(1), a semiannual assessment monitoring event was conducted August 29 through 30, 2019. During the semiannual assessment monitoring event, monitoring wells were sampled for Appendix III parameters as well as Appendix IV parameters that were detected in the initial assessment event.

Table 2, Summary of Sampling Events, presents a summary of groundwater sampling events and their purpose completed during the August 2019 initial assessment event, and the semiannual assessment monitoring events conducted in August 2019 and March 2020. Analytical data from initial assessment event and the groundwater monitoring events conducted in August 2019 and March 2020 are included in **Appendix B, Groundwater Analytical Data**. Newly installed wells will be sampled and analyzed for Appendix III and Appendix IV parameters and submitted with the Comprehensive Groundwater Investigation Report in December 2020.

4.0 GROUNDWATER SAMPLING METHODOLOGY AND ANALYSIS

Sampling events completed for the former CCR Unit represent both the annual initial Appendix IV monitoring event as well as the 2 subsequent semi-annual assessment monitoring events. The following describes the methods used to conduct groundwater monitoring at the former CCR Unit.

4.1 Groundwater Elevation Measurement

Prior to each sampling event, groundwater levels were measured and recorded to the nearest 0.01 feet within a 24-hour period. Each well was opened and allowed to equilibrate to atmospheric pressure prior to measuring groundwater levels. Depths are referenced from the top of the well casing. Groundwater elevations are calculated by subtracting the depth to groundwater from surveyed top of casing (TOC) elevations.

Groundwater elevations fluctuate in response to rainfall and tides. Seasonal variations of 1.5 to 2.5 feet are typical at the site. **Table 3, Summary of Groundwater Elevations**, provides a summary of water level data for the site observed in the August 2019 initial assessment event, and the semiannual assessment monitoring events conducted in August 2019 and March 2020.

Groundwater elevation data from the initial assessment, and semiannual assessment monitoring events were used to develop the potentiometric surface elevation contour map provided as **Figures 3 through 5**. As shown on these figures, the general direction of groundwater flow is from west to east and radially from the former CCR Unit. Groundwater elevations and flow patterns are generally consistent across the monitoring events.

4.2 Groundwater Sampling

Groundwater samples were collected in accordance with § 257.93(a). Each of the monitoring wells at the former CCR Unit is equipped with a dedicated bladder pump, except for recently installed wells APMW-11, APMW-12, APMW-6R, and APMW-1R. For wells without dedicated pumps, a peristaltic pump along with disposable polyethylene tubing was used to purge and sample from the middle of the well screen interval.

Monitoring wells were purged and sampled using low-flow sampling procedures whereby samples are collected when field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen) were measured to determine stabilization. A SmarTroll (In-Situ field instrument) was used to monitor and record field water quality parameters for stabilization during well purging. Turbidity was measured using a Hach 2100Q (or similar) portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met:

- 0.1 standard units for pH
- 5% for specific conductance
- 0.2 milligrams per liter (mg/L) or 10% for DO > 0.5 mg/l (whichever is greater)
- Turbidity measurements less than 5 nephelometric turbidity units (NTU)

- Temperature and oxidation reduction potential (ORP) – record only, no stabilization criteria

Once stabilization was achieved, samples were collected directly into appropriately preserved laboratory-supplied sample containers and placed in iced coolers and submitted to Eurofins Test America, Inc. (Eurofins) following chain-of-custody protocol.

4.3 Laboratory Analysis

Laboratory analyses were performed by Eurofins in Pensacola, Florida; Pittsburg, Pennsylvania; and St. Louis, Missouri. The Eurofins locations are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed. Analytical methods used for groundwater sample analysis and chain-of-custody records for each monitoring event are presented in **Appendix B**.

4.4 Quality Assurance/Quality Control

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

Background and detection monitoring groundwater quality data were independently validated following guidance from the EPA Region IV Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (November 2001); the EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011); and the analytical methods. Data validation consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences (RPDs), post digestion spikes, laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits. A narrative providing the results of the data validation is provided in **Appendix B**.

5.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III and IV groundwater monitoring data was performed on samples collected from the certified groundwater monitoring network pursuant to § 257.93 following the PE-certified statistical method for the former CCR Unit. The statistical method used at the site was developed by Groundwater Stats Consulting, LLC. (GSC), 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 (USEPA, 2009).

5.1 Statistical Methods

The Sanitas groundwater statistical software was used to perform the statistical analyses. Sanitas is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations. Statistical analysis was performed using methods described in the PE-certified statistical analysis plan for the site.

5.1.1 Appendix III Statistical Method

Interwell prediction limits (PL), combined with a 1-of-2 verification resample plan is the statistical method used to evaluate the groundwater monitoring data at the former CCR Unit. Interwell PLs pool upgradient well data to establish a background limit for an individual constituent. This method is appropriate where there is no significant variability in the data to be pooled as determined using an Analysis of Variability (ANOVA) test. The most recent sample from each downgradient well is compared to the background limit to identify statistically significant increases (SSIs) over background.

If data from a detection monitoring sampling event initially exceed the PL, the resampling strategy may be used to verify the result within 90 days. If the resample exceeds the PL, the initial exceedance is verified, and an SSI of that Appendix III parameter is determined. When the resample result does not verify the initial result, the initial exceedance is considered an erroneous result and the resample value will replace the initial result. If resampling is not conducted the initial exceedance is verified.

5.1.2 Appendix IV Statistical Method

When in assessment monitoring, Appendix IV constituents are statistically compared to groundwater protection standard (GWPS). Following the Unified Guidance, spatial variation for Appendix III parameters is tested using the ANOVA – this test is not prescribed for Appendix IV constituents. Unlike the statistical evaluation of Appendix III constituents (where single-sample results are compared to the statistical limit), Appendix IV analysis uses the pooled results from each downgradient well to develop a well-specific confidence interval that is compared to the statistical limit. The statistical limit is either the interwell tolerance limit (i.e., background) calculated using the pool of all available upgradient well data, or an applicable groundwater protection standard. Appendix IV background data are screened for outliers and extreme trending

patterns that would lead to artificially elevated statistical limits. Parametric tolerance limits (i.e. UTLs) were calculated using pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The UTLs were then used as the GWPS.

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

(1) The MCL established under 40 CFR §141.62 and 141.66.
(2) Where an MCL has not been established:
    (i) Cobalt 0.006 mg/L;
    (ii) Lead 0.015 mg/L;
    (iii) Lithium 0.040 mg/L; and
    (iv) Molybdenum 0.100 mg/L.
(3) Background levels for constituents where the background level is higher than the MCL or rule specified GWPS.

In assessment monitoring, when the lower confidence limit (LCL), or the entire confidence interval, exceeds the GWPS as discussed in the USEPA Unified Guidance, the result is recorded as a statistically significant level (SSL) over the GWPS. **Table 4, Summary of Background Levels and Groundwater Protection Standards** summarizes the background limit established at each monitoring well and the GWPS.

5.2 Statistical Analysis Results

Appendix III and IV analytical data from the August 2019 and March 2020 semiannual monitoring events was statistically analyzed in accordance with the PE-certified Statistical Analysis Plan. Appendix III statistical analysis was performed, and constituents have not returned to background levels. Appendix IV assessment monitoring parameters were evaluated using confidence intervals to determine if concentrations statistically exceeded the established GWPS.

5.2.1 First Semiannual Assessment Monitoring Event – August 2019

Statistical analysis of Appendix IV data identified the following SSLs over GWPS as follows:

- Arsenic: APMW-3, APMW-4, APMW-5, APMW-6R, APMW-8, and APMW-10
- Barium: APMW-2
- Radium 226+228: APMW-1R, APMW-2, APMW-3, APMW-7, and APMW-9
- Lithium: APMW-3, APMW-4, APMW-5, APMW-6R, and APMW-8
- Molybdenum: APMW-6R and APMW-8

Confidence intervals, time series plots, and box plots are provided in **Appendix C - Statistical Analyses.** Time-series plots were used to evaluate concentrations in wells and to visually compare concentrations in downgradient wells to those in background wells.

5.2.2 Second Semiannual Assessment Monitoring Event – March 2020

Statistical analysis of Appendix IV data identified the following SSLs over GWPS as follows:

- Arsenic: APMW-3, APMW-4, APMW-5, APMW-6R, APMW-8, and APMW-10
- Barium: APMW-2
- Radium 226+228: APMW-1R, APMW-2, APMW-3, APMW-7, and APMW-9
- Lithium: APMW-3, APMW-4, APMW-5, APMW-6R, and APMW-8
- Molybdenum: APMW-6R and APMW-8

Confidence intervals, time series plots, and box plots are provided in **Appendix C.** Time-series plots were used to evaluate concentrations in wells and to visually compare concentrations in downgradient wells to those in background wells.

6.0 MONITORING PROGRAM STATUS

This site is currently in assessment monitoring. Statistical evaluations of the groundwater monitoring data for the former CCR Unit identified SSIs of Appendix III and SSLs of Appendix IV groundwater monitoring parameters. An Alternate Source Demonstration (ASD) is being pursued to address some Appendix IV SSLs, however not all SSLs will be addressed. MPC has initiated an Assessment of Corrective Measures (ACM) pursuant to § 257.95(g)(3)(i) and the Agreed Order. The ACM will be completed by August 11, 2020 and posted to the operating record.

Pursuant to Part 3. E. of Agreed Order No. 7010 19, a Semi-Annual Progress Report has been included as **Appendix D, Semi-Annual Progress Report,** to detail activities completed at the site since the submittal of the *Anticipated 2020 Schedule and Plan for Comprehensive Groundwater Investigation.*

7.0 CONCLUSIONS AND FUTURE ACTIONS

Based on the results reported in the *2019 Annual Groundwater Monitoring and Corrective Action Report*, MPC initiated an assessment monitoring program. Groundwater samples were subsequently collected from the certified well network and analyzed for Appendix IV parameters.

This *Groundwater Monitoring and Corrective Action Report* has been prepared to fulfill the requirements of USEPA CCR rule 40 CFR 257 Subpart D. Pursuant to 40 CFR § 257.95(g)(5), MPC initiated an ACM at the site to be completed by August 11, 2020 and posted to the operating record.

An ASD will be prepared to address some of the SSLs; however, not all SSLs will be addressed. MPC will characterize the nature and extent of GWPS exceedances as required by §257.95(g)(1) and the Agreed Order and report result pursuant to the Agreed Order and §257.90(e)(3).

The next semiannual sampling event is scheduled for the fourth quarter of 2020.

8.0 REFERENCES

ASTM Standard D5092, 2004, Standard Practice for Design and Installation of Groundwater Monitoring Wells, ASTM International, West Conshohocken, PA, DOI 10.1520/D5092-04R10E01, www.astm.org.

Harvey, E.J., Golden, H. G., Jeffery H. G., 1965, Water Resources of the Pascagoula Area Mississippi: Geological Survey Water-Supply Paper 1763.

Hoffman, J.H., Stewart, L., Everett, J.F., 2017, Geohydrologic Cross-Sections of the Grand Gulf Aquifer System in Southeastern Mississippi: Open-File Report 284.

Otvos, E. G., 2001, H. Mississippi Coast: Stratigraphy and Quaternary Evolution in the Northern Gulf Coastal Plain Framework, United States Geological Survey Open-file Report 01-415-H.

USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March.

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

United States Geological Survey (USGS), 1985, Gulfport North Quadrangle, 7.5 Minutes Series Topographic Map.

United States Geological Survey (USGS), 1998, Hydrologic Investigations Atlas 730-F, Ground Water Atlas of the United States, Segment 5, Arkansas, Louisiana, Mississippi.

Southern Company Services (SCS), 2018, Plant Watson Ash Pond Groundwater Monitoring Plan.

Southern Company Services (SCS), 2019, 2019 Annual Groundwater Monitoring and Corrective Action Report.

Stewart, L. and J.F. Everett. (2002). Groundwater Study of Historical Water-Level and Water-Quality Data in Harrison County, Mississippi. Mississippi Department of Environmental Quality. Open-fileReport 02-102.

Tables

Table 1. Groundwater Monitoring Network Details

Well Name	Installation Date	Purpose	Northing	Easting	Ground Elevation	Top of Casing Elevation	Top of Screen Elevation	Bottom of Screen Elevation
APMW-1	7/12/2016	Water Level	339968.40	924453.57	22.48	24.86	-1.52	-11.92
APMW-1R	1/24/2019	Downgradient (APMW-1 Replacement)	339938.30	924486.30	22.50	25.16	-8.34	-13.34
APMW-2	7/18/2016	Downgradient	339436.26	925145.20	19.95	22.58	-9.05	-19.65
APMW-3	7/18/2016	Downgradient	338466.67	926382.75	5.60	8.40	-17.40	-28.00
APMW-4	7/19/2016	Downgradient	338360.09	926947.41	10.76	13.39	-13.24	-23.84
APMW-5	7/19/2016	Downgradient	339095.64	926946.56	6.01	8.68	-17.99	-28.59
APMW-6	7/20/2016	Not Applicable[3]	340025.90	926838.72	7.00	8.91	-16.00	-26.00
APMW-6R	1/29/2019	Downgradient (APMW-6 Replacement)	340071.30	926854.60	5.50	8.11	-44.09	-54.09
APMW-7	7/20/2016	Downgradient	340970.41	927159.53	10.50	13.00	-14.50	-24.30
APMW-8	7/21/2016	Downgradient	341076.09	926536.95	18.08	21.00	-11.60	-21.60
APMW-9	7/21/2016	Downgradient	341069.72	925210.34	19.83	22.41	-9.17	-19.77
APMW-10	7/22/2016	Downgradient	341075.20	924053.45	18.20	21.11	-1.80	-11.40
APMW-11	1/24/2019	Upgradient	342047.37	922071.42	19.60	22.45	-18.59	-28.44
APMW-12	1/28/2019	Upgradient	341563.98	922052.04	17.10	20.06	-22.44	-32.98
PZ-4	1/29/2019	Water Level Only	339990.47	926829.94	5.00	7.93	-20.90	-30.90

Notes:

1. Northing and easting are in feed relative to the State Plane Mississippi East North America Datum of 1983.
2. Elevations are in feed relative to the North American Vertical Datum of 1988.
3. APMW-6 was damaged and is no longer part of the monitoring network.

Table 1. Groundwater Monitoring Network Details

Well Name	Installation Date	Purpose	Northing	Easting	Ground Elevation	Top of Casing Elevation	Top of Screen Elevation	Bottom of Screen Elevation
APMW-13	6/18/2020	Upgradient	342483.05	926186.44	1.77	4.49	-14.23	-19.23
APMW-14	6/16/2020	Upgradient	342570.07	926269.01	2.04	4.12	-13.96	-18.96
APMW-15	6/17/2020	Upgradient	342649.05	927097.17	2.17	4.25	-17.83	-22.83
APMW-16	6/17/2020	Upgradient	342564.75	927191.96	1.88	4.14	-17.13	-22.13
APMW-2D	4/28/2020	Vertical Delineation	339427.96	925162.46	21.40	23.78	-128.60	-138.60
APMW-3D	4/30/2020	Vertical Delineation	338457.03	926404.68	7.12	9.77	-77.88	-82.88
APMW-4D	5/1/2020	Vertical Delineation	338347.21	926910.01	12.94	12.70	-77.06	-87.06
APMW-5D	5/4/2020	Vertical Delineation	339099.81	926933.66	10.69	10.30	-95.31	-100.31
APMW-6D	5/5/2020	Vertical Delineation	340046.56	926847.95	7.81	10.05	-90.19	-95.19
APMW-8D	5/13/2020	Vertical Delineation	341077.32	926559.91	19.77	22.23	-65.23	-70.23
APMW-10D	5/15/2020	Vertical Delineation	341077.51	924031.34	19.06	21.68	-179.94	-184.94

Notes:

1. Northing and easting are in feed relative to the State Plane Mississippi East North America Datum of 1983.
2. Elevations are in feed relative to the North American Vertical Datum of 1988.
3. APMW-6 was damaged and is no longer part of the monitoring network.

Table 2. Groundwater Sampling Event Summary

Purpose of Sampling Event		Initial Assessment	SA01 2019 Assessment Monitoring	SA02 2020 Assessment Monitoring
APMW-1R	Downgradient	8/8/2019	8/30/2019	3/16/2020
APMW-2	Downgradient	8/8/2019	8/30/2019	3/16/2020
APMW-3	Downgradient	8/8/2019	8/30/2019	3/16/2020
APMW-4	Downgradient	8/9/2019	8/30/2019	3/16/2020
APMW-5	Downgradient	8/9/2019	8/30/2019	3/17/2020
APMW-6R	Downgradient	8/9/2019	8/30/2019	3/17/2020
APMW-7	Downgradient	8/9/2019	8/30/2019	3/17/2020
APMW-8	Downgradient	8/9/2019	8/30/2019	3/17/2020
APMW-9	Downgradient	8/8/2019	8/30/2019	3/17/2020
APMW-10	Downgradient	8/8/2019	8/30/2019	3/17/2020
APMW-11	Upgradient	8/8/2019	8/29/2019	3/17/2020
APMW-12	Upgradient	8/8/2019	8/29/2019	3/17/2020

Notes:

1. BKG # indicates Background Event and the number corresponds with the event number.
2. SA # indicates Semiannual Assessment Monitoring Event and the number corresponds with the event number.

Table 3. Summary of Groundwater Elevations

Well ID	TOC Elev (ft MSL)	Depth to GW 8/9/2019 (ft BTOC)	GW Elevation 8/9/2019 (ft MSL)	Depth to GW 8/29/2019 (ft BTOC)	GW Elevation 8/29/2019 (ft MSL)	Depth to GW 3/16/2020 (ft BTOC)	GW Elevation 3/16/2020 (ft MSL)
APMW-1	24.86	24.10	0.76	23.59	1.27	24.59	0.27
APMW-1R	25.16	24.36	0.80	23.84	1.32	24.89	0.27
APMW-2	22.58	21.85	0.73	21.09	1.49	22.30	0.28
APMW-3	8.40	7.68	0.72	7.29	1.11	8.14	0.26
APMW-4	13.39	12.45	0.94	12.23	1.16	12.94	0.45
APMW-5	8.68	7.57	1.11	7.31	1.37	7.89	0.79
APMW-6	8.91	7.48	1.43	7.31	1.60	7.74	1.17
APMW-6R	8.11	6.55	1.56	6.46	1.65	6.88	1.23
APMW-7	13.00	12.00	1.00	11.87	1.13	12.31	0.69
APMW-8	21.00	20.35	0.65	19.84	1.16	20.65	0.35
APMW-9	22.41	21.80	0.61	21.3	1.11	22.16	0.25
APMW-10	21.11	20.20	0.91	19.67	1.44	20.77	0.34
APMW-11	22.45	18.95	3.50	18.34	4.11	18.73	3.72
APMW-12	20.06	16.62	3.44	16.01	4.05	16.41	3.65
PZ-4	7.93	6.52	1.41	6.29	1.64	6.75	1.18

Notes:

1. TOC Elev indicates top of casing elevation
2. ft MLS indicates feet relative to mean sea level.
3. BTOC indicates below top of casing.

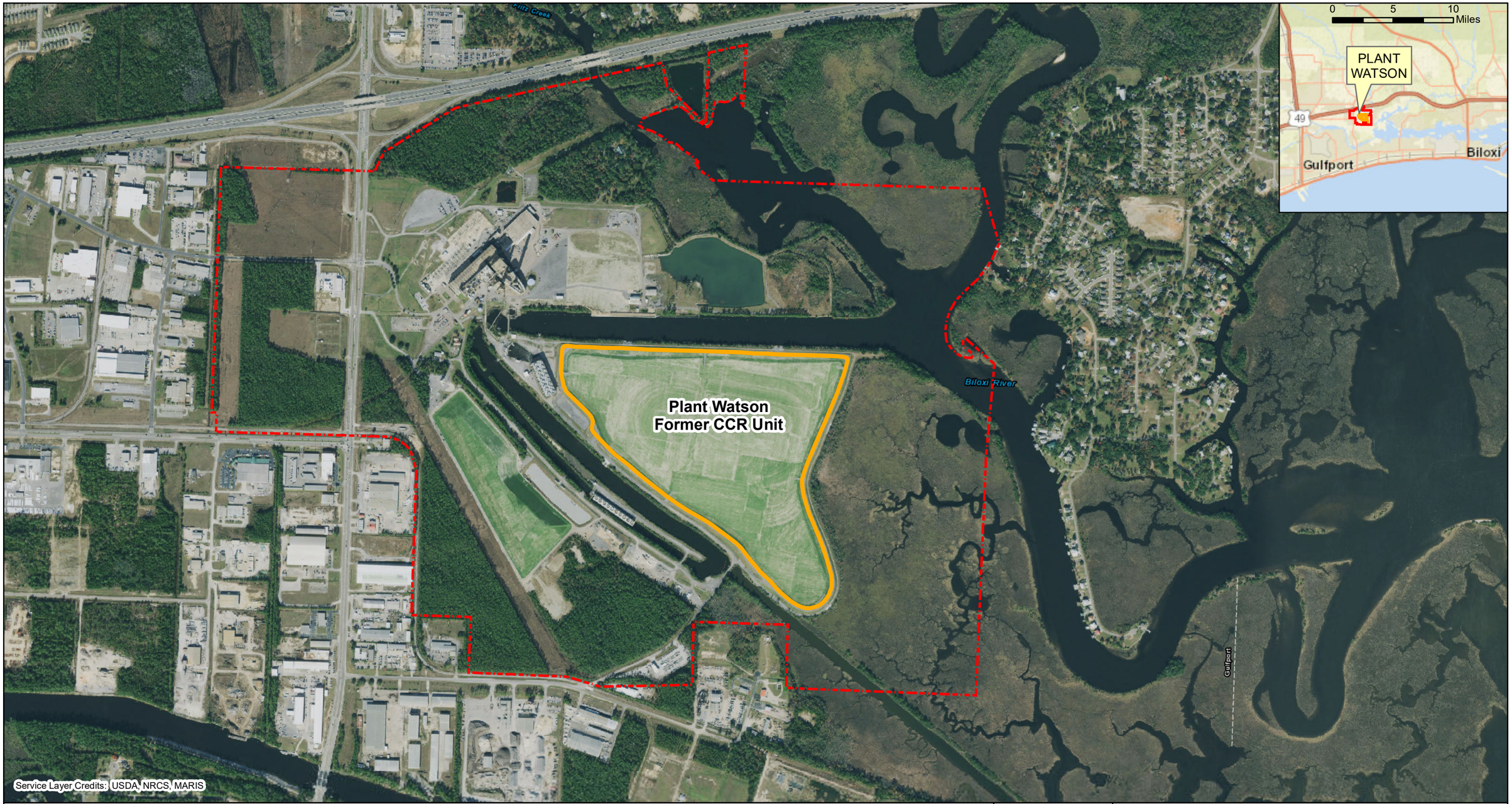
Table 4. Summary of Background Levels and Groundwater Protection Standards

Analyte	Units	Background	Rule Specified GWPS	Site-Specific GWPS
Antimony	mg/L	0.002	0.006	0.006
Arsenic	mg/L	0.0013	0.01	0.01
Barium	mg/L	0.11	2	2
Beryllium	mg/L	0.001	0.004	0.004
Cadmium	mg/L	0.001	0.005	0.005
Chromium	mg/L	0.0022	0.1	0.1
Cobalt	mg/L	0.0005	0.006	0.006
Combined Radium-226/228	pCi/L	2.49	5	5
Fluoride	mg/L	0.49	4	4
Lead	mg/L	0.49	0.015	0.015
Lithium	mg/L	0.019	0.04	0.04
Mercury	mg/L	0.0002	0.002	0.002
Molybdenum	mg/L	0.005	0.1	0.1
Selenium	mg/L	0.005	0.05	0.05
Thallium	mg/L	0.001	0.002	0.002

Note:

1. Rule Specified GWPS is the MCL or standard listed in the CCR Rule.
2. Site-Specific GWPS is the greater of background or rule specified GWPS.

Figures



Legend

Plant Watson Property Boundary

CCR Unit Boundary

N

0 1,000 2,000 4,000 Feet

SCALE	1:12000
DATE	7/31/2020
DRAWN BY	KAR
CHECKED BY	LPC

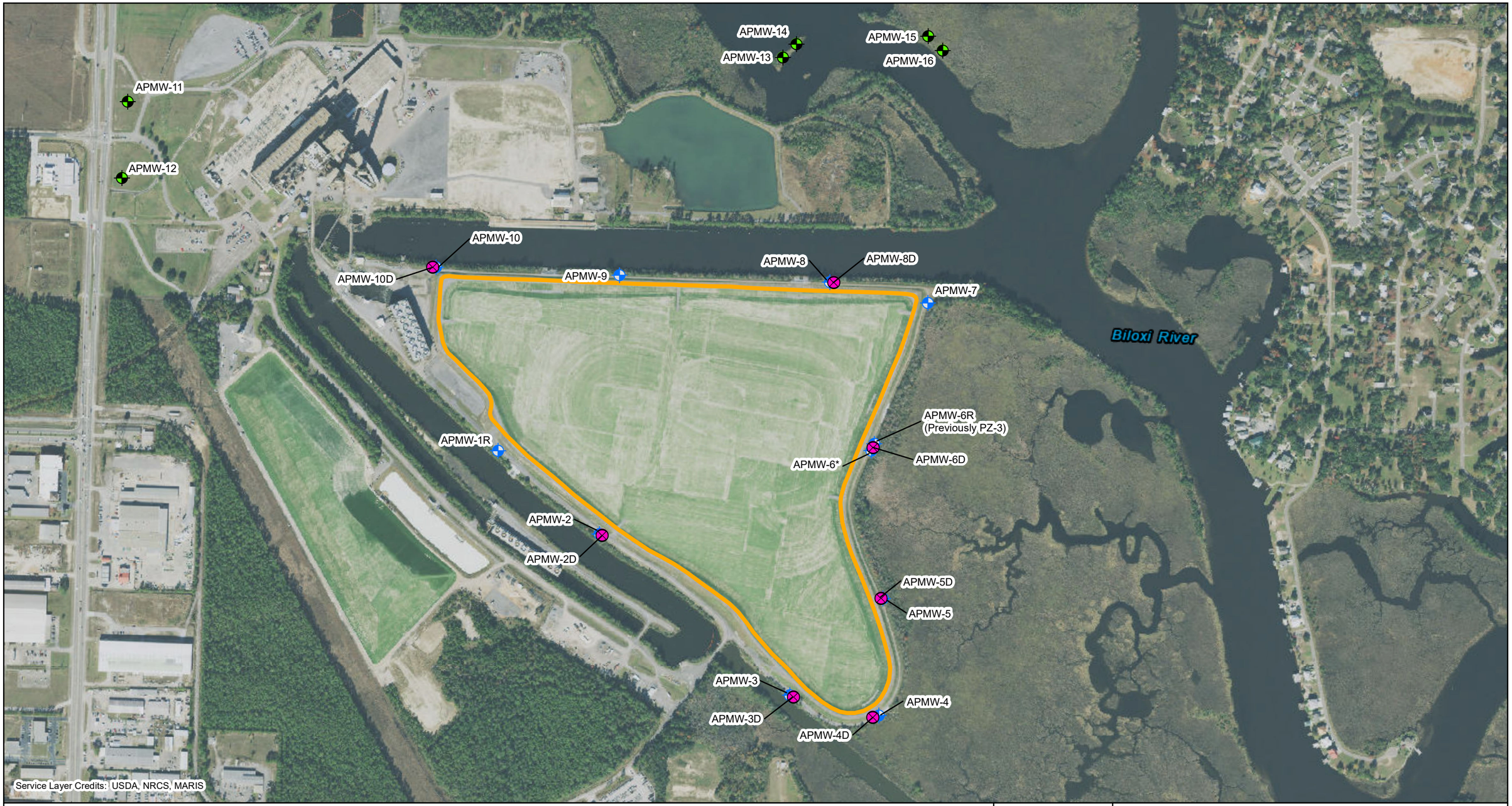
DRAWING TITLE

SITE LOCATION MAP
PLANT WATSON
FORMER CCR UNIT

FIGURE NO

FIGURE 1

Southern Company



Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Delineation Well
- CCR Unit Boundary

N

0 500 1,000 2,000 Feet

NOTE: *APMW-6 to be abandoned in 2020.

SCALE	1:7200
DATE	7/31/2020
DRAWN BY	KWR
CHECKED BY	LPC

DRAWING TITLE
MONITORING WELL NETWORK
PLANT WATSON
FORMER CCR UNIT

FIGURE NO
FIGURE 2

Southern Company

Legend

- Monitoring Well — **APMW-1** Well Name; 0.76 Groundwater Elevation (ft NAVD88)
- Piezometer
- Inferred Groundwater Elevation Contour (ft NAVD88)
- Estimated Groundwater Elevation Contour (ft NAVD88)
- Inferred Groundater Flow Direction
- CCR Unit Boundary

N

0 500 1,000 2,000 Feet

NOTE: ft NAVD88 indicates feet above North American Vertical Datum of 1988

SCALE	1:6000
DATE	7/31/2020
DRAWN BY	KWR
CHECKED BY	LPC

DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP AUGUST 8, 2019 PLANT WATSON FORMER CCR UNIT

FIGURE NO

FIGURE 3

Southern Company

Legend

- Monitoring Well — **APMW-1** Well Name; 1.27 Groundwater Elevation (ft NAVD88)
- Piezometer
- Estimated Groundwater Elevation Contour (ft NAVD88)
- Inferred Groundwater Elevation Contour (ft NAVD88)
- Inferred Groundater Flow Direction
- CCR Unit Boundary

N

0 500 1,000 2,000 Feet

NOTE: ft NAVD88 indicates feet above North American Vertical Datum of 1988

SCALE	1:6000
DATE	7/31/2020
DRAWN BY	KWR
CHECKED BY	LPC

DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP AUGUST 29, 2019 PLANT WATSON FORMER CCR UNIT

FIGURE NO **FIGURE 4**

Southern Company

Legend

- Monitoring Well — **APMW-1** Well Name; 0.27 Groundwater Elevation (ft NAVD88)
- Piezometer
- Estimated Groundwater Elevation Contour (ft NAVD88)
- Inferred Groundwater Elevation Contour (ft NAVD88)
- Inferred Groundater Flow Direction
- CCR Unit Boundary

N

0 500 1,000 2,000 Feet

NOTE: ft NAVD88 indicates feet above North American Vertical Datum of 1988

SCALE	1:6000
DATE	7/31/2020
DRAWN BY	KWR
CHECKED BY	LPC

DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP MARCH 16, 2020 PLANT WATSON FORMER CCR UNIT

FIGURE NO **FIGURE 5**

Southern Company

Appendix A
Boring and Well Construction Logs

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BORING APMW-13

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 06/16/2020 **COMPLETED** 06/16/2020 **TOC ELEV.** 4.49 **SURF. ELEV.** 1.77 **COORDINATES** N: 342483.05 E: 926186.44

CONTRACTOR Universal Engineering Sciences **EQUIPMENT** Marsh Master **DRILLING METHOD** Mud Rotary

DRILLED BY L. Prince **LOGGED BY** N. Quick **CHECKED BY** K. Carlton **BORING DEPTH** 21.5 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 1' x 1' concrete pad.

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
		(0') No recovery (organics).	2" Sch 40 PVC riser (2.72' ags)	0
		(2') No recovery (organics).		
5		(4') No recovery (organics).		
		(6') No recovery.		-5
		(7.5') SILT (ML); brown, wet, organic roots, sulfur odor. (8') Same as above.	30/65 Silica sand	
10		(9.6') SANDY CLAY (CL); dark gray (2.5Y 7/1), moist, cohesive. (10') Same as above.		
		(11') SAND (SP); white (5Y 2/1), wet, fine-medium grained, sulfur odor.		-10
		(13.5') SAND (SP); light brown (10YR 4/7), wet, medium grained, sulfur odor.		
15		(14') SAND (SP); white, wet, well-graded, fine-coarse grained, rounded, sulfur odor.	20/40 Silica sand	-15
		(18.5') SAND (SP); dark gray (5Y 4/1), wet, well-graded, fine-medium grained with trace gravel at base, rounded, sulfur odor.	2" Sch 40 PVC 0.010" slotted screen	
20		(19.3') SAND (SP); white (5Y 2/1), wet, well-graded, fine-medium grained with trace gravel, rounded, sulfur odor.		
		(20') SAND (SP); dark gray, wet, well-graded, fine-coarse grained with gravel, rounded.	2" Sch 40 PVC point	-20
		(20.7') SAND (SP); white, wet, poorly graded, fine grained, rounded.		
		Bottom of borehole at 21.5 feet.		
25				-25
30				-30

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BORING APMW-14

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 06/16/2020 **COMPLETED** 06/16/2020 **TOC ELEV.** 4.12 **SURF. ELEV.** 2.04 **COORDINATES** N: 342570.07 E: 926269.01

CONTRACTOR Universal Engineering Sciences **EQUIPMENT** Marsh Master **DRILLING METHOD** Mud Rotary

DRILLED BY L. Prince **LOGGED BY** N. Quick **CHECKED BY** K. Carlton **BORING DEPTH** 22.5 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 1' x 1' concrete pad.

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
0		(0') Organics.	2" Sch 40 PVC riser (2.08' ags)	0
5		(5.5') CLAY (CL); light gray (7.5YR 7/1) and yellow (2.5Y 7/8), wet, soft, high plasticity, trace organics at top. (7.5') Same as above, trace organic roots at bottom.	30/65 Silica sand	-5
10		(8.5') SAND (SP); gray (2.5Y 6/1), wet, poorly graded, fine grained with trace silt, rounded. (9') SAND (SP); light gray (2.5Y 7/1), wet, poorly graded, fine grained, rounded.		-10
15		(13.5') (SP); Slough, clay from above caved into sample. (14.2') SAND (SP); white (10YR 8/1), wet, well-graded, fine-medium grained with trace gravel, rounded.	20/40 Silica sand	-15
20		(18.5') SAND (SP); white (2.5Y 8/1), wet, well-graded, fine-medium grained with gravel present at top, rounded. (21') SAND (SP); light yellowish brown (10YR 6/4), wet, poorly graded, fine grained, rounded. (21.5') SAND (SP); white (2.5Y 8/1), wet, moderately graded, fine-medium grained, rounded.	2" Sch 40 PVC 0.010" slotted screen 2" Sch 40 PVC point	-20
25		Bottom of borehole at 22.5 feet.		-25
30				-30

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BORING APMW-15

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 06/17/2020 **COMPLETED** 06/17/2020 **TOC ELEV.** 4.25 **SURF. ELEV.** 2.17 **COORDINATES** N: 342649.05 E: 927097.17

CONTRACTOR Universal Engineering Sciences **EQUIPMENT** Marsh Master **DRILLING METHOD** Mud Rotary

DRILLED BY L. Prince **LOGGED BY** N. Quick **CHECKED BY** K. Carlton **BORING DEPTH** 40 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 1' x 1' concrete pad.

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
		(0') No recovery (soft with organics).	2" Sch 40 PVC riser (2.08' ags)	0
5				-5
			30/65 Silica sand	
10		(10') ORGANIC SOIL (OL); black, wet, roots.		-10
		(10.9') SILTY CLAY (CL); dark brown (7.5YR 3/3), trace organics, non-cohesive.		
		(11.4') SAND (SP); dark gray (10YR 4/1), wet, poorly graded, fine grained, rounded.		
		(12') No recovery.		
		(13') SILTY SAND (SM); gray (2.5Y 6/1), wet, moderately graded, fine grained, rounded, sulfur odor.		
15		(14.5') SAND (SP); gray (5Y 6/1), wet, poorly graded, fine grained, rounded, sulfur odor.		-15
		(18') No recovery.	20/40 Silica sand	
		(18.5') SILTY CLAY and CLAYEY SAND (CL); dark gray (10YR 4/1), wet, fine grained, moderately cohesive, interbedded.		
20		(19') SILTY CLAY (CL); dark gray (5Y 4/1).		-20
		(19.1') SAND (SP); gray (5Y 5/1), wet, poorly graded, fine grained, well-rounded, sulfur odor.		
		(19.6') Light gray (5Y 7/1).		
		(20') Moderately graded, fine-medium grained.	2" Sch 40 PVC 0.010" slotted screen	
		(21.5') SAND (SP); light gray (5Y 7/1), wet, moderately graded, fine-medium grained with trace coarse from 22.5-23 feet bgs, well-rounded, sulfur odor.		
25		(23.5') SAND (SP); dark gray (2.5Y 4/1), wet, well-graded, fine-medium grained with trace coarse gravel, rounded, trace roots.	2" Sch 40 PVC point	-25
		(28.5') CLAY (CL); red (10R 4/8), wet, soft, high plasticity.		
		(28.8') CLAY with SILT (CL-ML); reddish yellow (5YR 6/8), wet, soft, high plasticity, mottling present.		
30		(29.2') CLAY (CL); red (10R 4/8), wet, soft, high plasticity.		-30
		(29.7') Small (<1/8 inch) gray silt pocket.		
		(33.5') SILTY CLAY/CLAYEY SILT (CL-ML); red (10R 4/8), wet, soft, slightly cohesive.		

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LOG OF TEST BORING

BORING APMW-15

PROJECT Plant Watson

LOCATION Gulfport, MS

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
		(33.5') SILTY CLAY/CLAYEY SILT (CL-ML); red (10R 4/8), wet, soft, slightly cohesive. *(continued)*		-35
		(38.5') CLAY (CL); tan (7.5YR 7/6) and light red (2.5YR 7/6), hard, medium plasticity.		
40		Bottom of borehole at 40.0 feet.		-40
45				-45
50				-50
55				-55
60				-60
65				-65
70				-70

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BORING APMW-16

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 06/17/2020 **COMPLETED** 06/17/2020 **TOC ELEV.** 4.14 **SURF. ELEV.** 1.88 **COORDINATES** N: 342564.75 E: 927191.96

CONTRACTOR Universal Engineering Sciences **EQUIPMENT** Marsh Master **DRILLING METHOD** Mud Rotary

DRILLED BY L. Prince **LOGGED BY** N. Quick **CHECKED BY** K. Carlton **BORING DEPTH** 25 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 1' x 1' concrete pad.

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
0		(0') No recovery (organics).	2" Sch 40 PVC riser (2.26' ags)	0
5				-5
10			30/65 Silica sand	-10
		(11') No recovery.		
		(12') SILTY CLAY (CL); dark brown (10YR 3/3), wet, trace pulp at base, non-cohesive.		
		(13') Same as above.		
15		(14.5') SAND (SP); gray (2.5Y 6/1), wet, poorly graded, fine grained, rounded, sulfur odor.		-15
		(17') No recovery.		
		(18.8') SAND (SP); gray (2.5Y 6/1), wet, poorly graded, fine grained, rounded, sulfur odor.		
20		(19') SAND (SP); gray/white (10YR 9.5/1), wet, well-graded, fine-coarse grained, rounded.	20/40 Silica sand	-20
			2" Sch 40 PVC 0.010" slotted screen	
		(23.5') No recovery.		
25		(24.5') SAND (SP); white (2.5Y 8/1), wet, well-graded, fine-coarse grained with trace gravel, rounded.	2" Sch 40 PVC point	-25
		Bottom of borehole at 25.0 feet.		
30				-30

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BORING APMW-2D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 04/27/2020 **COMPLETED** 04/28/2020 **TOC ELEV.** 23.78 **SURF. ELEV.** 21.4 **COORDINATES** N: 339427.96 E: 925162.46

CONTRACTOR Cascade **EQUIPMENT** TS-150CC **DRILLING METHOD** Sonic

DRILLED BY T. Arido **LOGGED BY** T. Wilson **CHECKED BY** K. Carlton **BORING DEPTH** 160.25 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 3' x 3' concrete pad.

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
0		100		(0') SAND (SP); very pale brown (10YR 7/3), moist, loose, poorly graded, fine grained.	2" Sch 40 PVC riser (2.38' ags)	20
5		90		(5') No recovery. (5.5') SAND with GRAVEL (SP); light brown (7.5YR 6/3), moist, loose, poorly graded, fine grained with a layer of gravel/shell material at 7 feet.		15
10		100		(7.5') SANDY CLAY (CL); mottled light brown (7.5YR 6/3), gray (10YR 6/1), dark gray (10YR 4/1) and black (10YR 2/1), wet, soft, low plasticity, with layers of shells and woody material.	PVC Centralizer	10
15					2" Sch 40 PVC riser	5
20				(20') No recovery.	Bentonite-cement grout	0
25		70		(23') SANDY CLAY (CL); mottled light brown (7.5YR 6/3), dark gray (10YR 4/1), black (10YR 2/1), wet, soft, high plasticity, fat clay, trace root material.		-5
30						-10
		100		(31.5') CLAYEY SAND (SC); grayish brown (10YR 5/2), wet, loose, well-graded, fine-coarse grained. (33') SAND (SW); light brownish gray (10YR 6/2), wet, loose, well-graded, fine-coarse grained.	PVC Centralizer	

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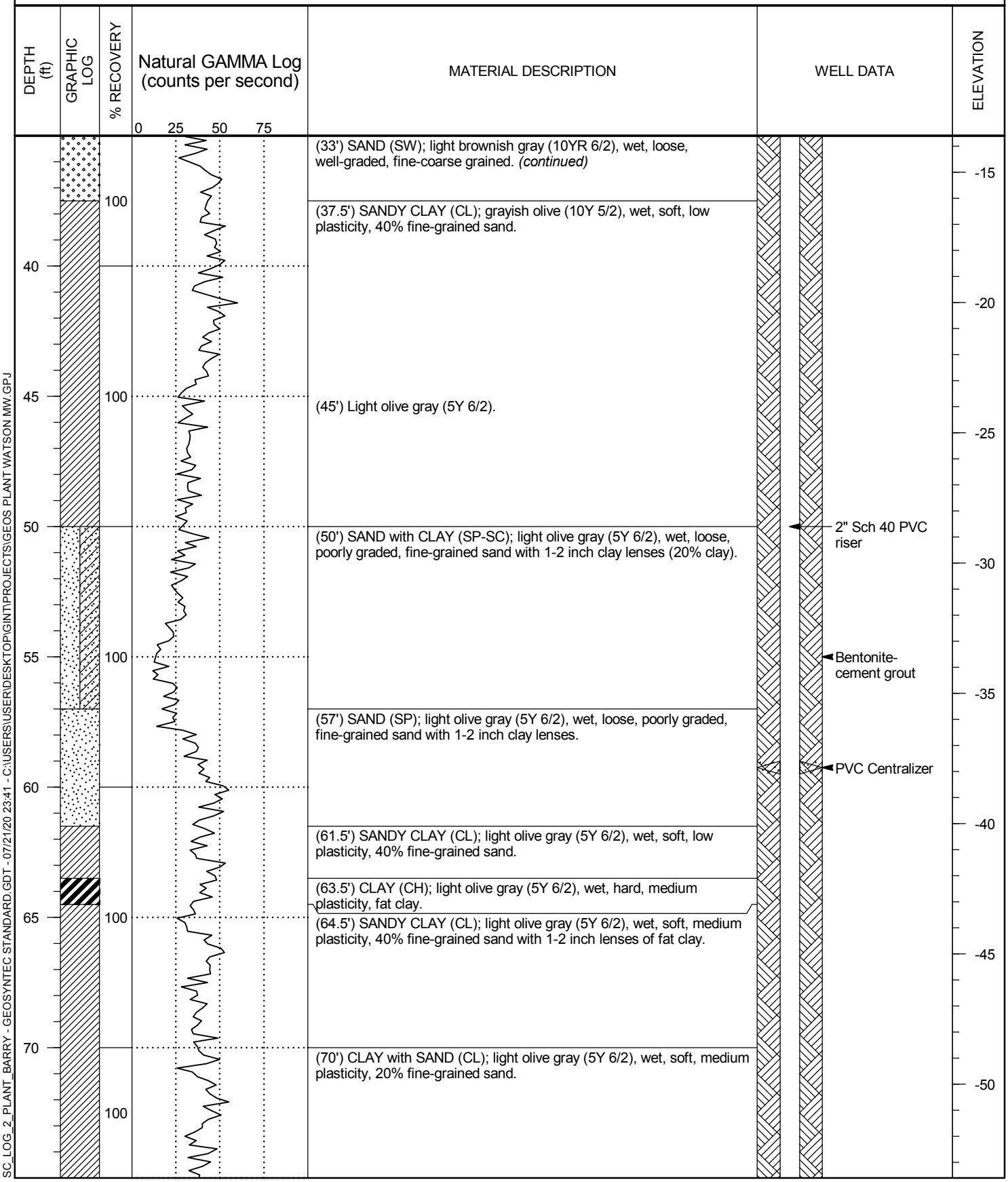
LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

DEPTH (ft)	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
	100		(70') CLAY with SAND (CL); light olive gray (5Y 6/2), wet, soft, medium plasticity, 20% fine-grained sand. *(continued)*		-55
			(77') SANDY CLAY (CL); light olive gray (5Y 6/2), wet, soft, medium plasticity, 40% fine-grained sand.		
80			(80') No recovery.		-60
			(82') CLAYEY SAND (SC); light grayish green (5Y 6/2), wet, loose, poorly graded, fine-grained sand with 1-2 inch lean clay lenses.	PVC Centralizer	
85	80				-65
90			(90') Same as above with decreased clay content and 1/2-1 foot thick sandy clay layers.		-70
95	70				-75
100			(100') No recovery.		
			(101') SILTY SAND (SM); very pale brown (10YR 8/2), wet, loose, poorly graded, fine grained. (102') with 1/4 foot thick fat clay lenses.		-80
105	90		(105') Red (2.5YR 5/8).		-85
			(107.5') SAND (SP); red (2.5YR 5/8), wet, loose, poorly graded, fine grained.	PVC Centralizer	
110			(111') FAT CLAY (CH); red (2.5YR 5/8), moist, soft, medium plasticity.		-90
	100		(111.5') SILTY SAND (SM); red (2.5YR 5/8), wet, loose, poorly graded, fine-grained sand.		
			(113.5') CLAY (CH); mottled light reddish-brown (2.5YR 6/3), red (2.5YR 5/8) and brownish yellow (10YR 6/8), moist, firm, high plasticity.		

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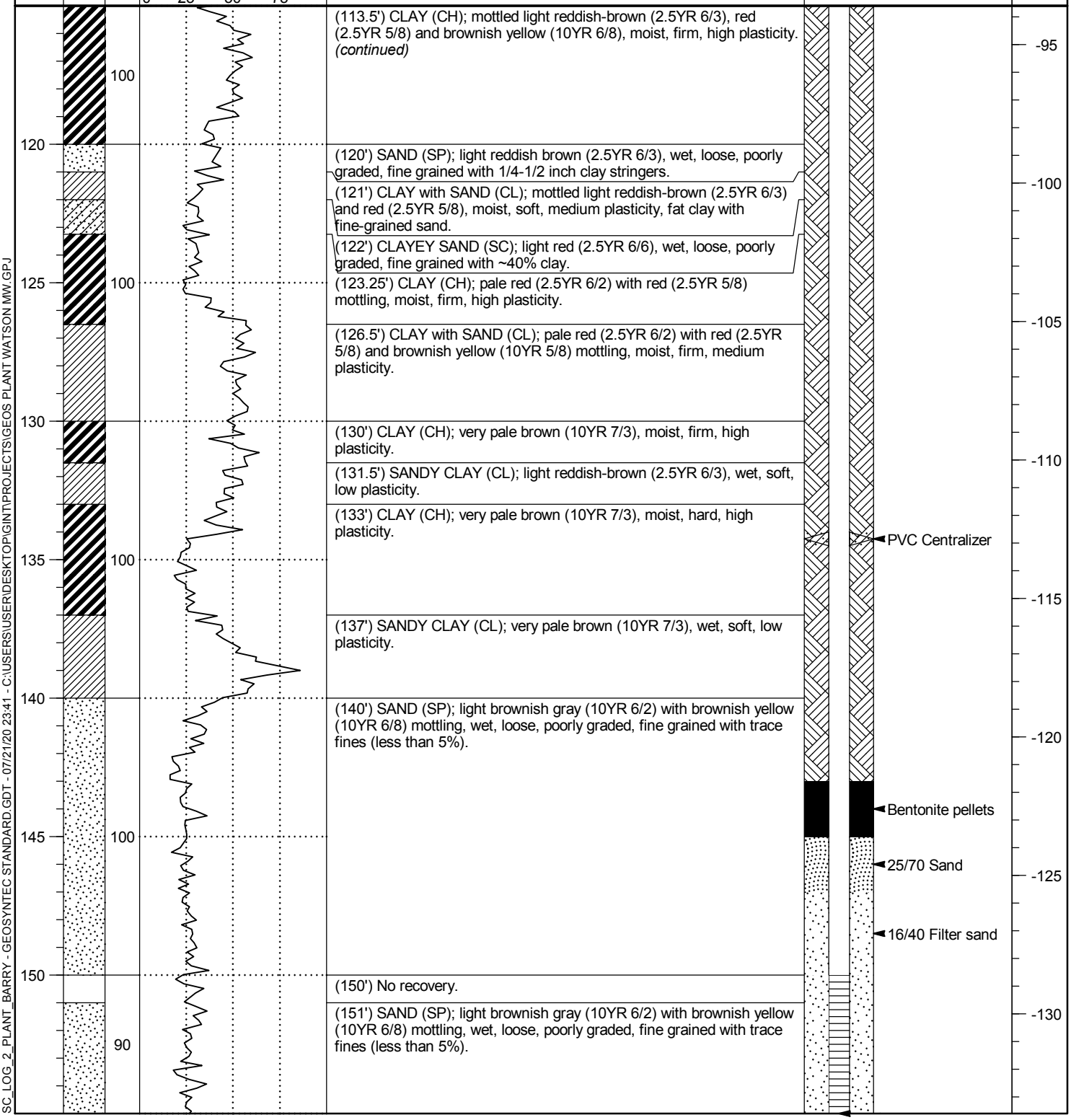
LOG OF TEST BORING

BORING APMW-2D

PROJECT Plant Watson

LOCATION Gulfport, MS



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LOG OF TEST BORING

BORING APMW-2D

PROJECT Plant Watson

LOCATION Gulfport, MS

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
160		90		(151') SAND (SP); light brownish gray (10YR 6/2) with brownish yellow (10YR 6/8) mottling, wet, loose, poorly graded, fine grained with trace fines (less than 5%). *(continued)*	2" Sch 40 PVC 0.010" U pack screen PVC Centralizer 2" Sch 40 PVC sump	-135
				Bottom of borehole at 160.3 feet.		-140
165						-145
170						-150
175						-155
180						-160
185						-165
190						-170

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BORING APMW-3D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 04/29/2020 **COMPLETED** 04/30/2020 **TOC ELEV.** 9.77 **SURF. ELEV.** 7.12 **COORDINATES** N: 338457.03 E: 926404.68

CONTRACTOR Cascade **EQUIPMENT** TS-150CC **DRILLING METHOD** Sonic

DRILLED BY T. Arido **LOGGED BY** T. Wilson **CHECKED BY** K. Carlton **BORING DEPTH** 185 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 3' x 3' concrete pad.

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
0		100		(0') SAND (SW); dark grayish brown (10YR 4/2), moist, loose, well-graded, fine-coarse grained with gravel, root material.	2" Sch 40 PVC riser (2.65' ags)	5
5				(5') No recovery.		
		60		(7') SILTY SAND (SM); yellowish-brown (10YR 5/6), moist, loose, poorly graded, fine grained, with root material.		0
				(8.25') SAND (SP); light gray (10YR 7/2), moist, loose, poorly graded, fine grained.		
10				(9.5') CLAYEY SAND (SC); dark brown (10YR 3/3), moist, dense, poorly graded, fine grained.		-5
				(10') SILTY SAND (SM); grayish brown (10YR 5/2), wet, dense, poorly graded, fine grained, with root material.		
				(12') SAND (SP); light gray (10YR 7/2), wet, loose, poorly graded, fine grained.		
15		100			PVC Centralizer 2" Sch 40 PVC riser	-10
20				(20') CLAYEY SAND (SC); dark brown (10YR 3/3), wet, dense, poorly graded, fine grained.	Bentonite-cement grout	
				(21') CLAY (CH); dark brown (10YR 3/3), wet, soft, high plasticity, with root material.		-15
25		100				
				(26') SAND (SW); layered brownish yellow (10YR 6/8) and gray (10YR 5/1), wet, loose, well-graded, fine-coarse grained with trace gravel and 1/4 inch fat clay stringers.		-20
30						
		100		(31') SANDY CLAY (CL); light grayish green (5GY 6/2), wet, soft, medium plasticity, fine-grained sand.		-25

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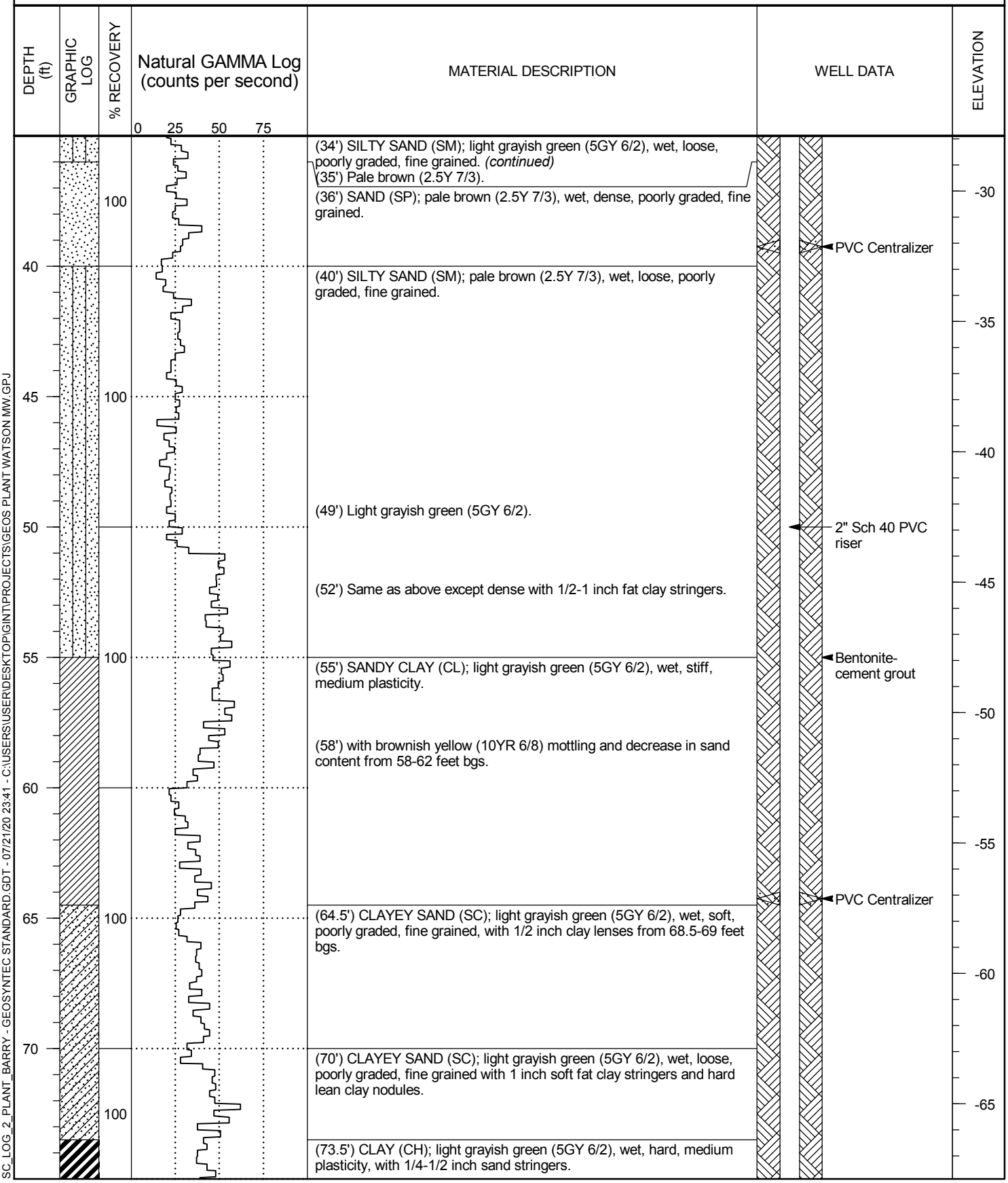
LOG OF TEST BORING

BORING APMW-3D

PROJECT Plant Watson

LOCATION Gulfport, MS



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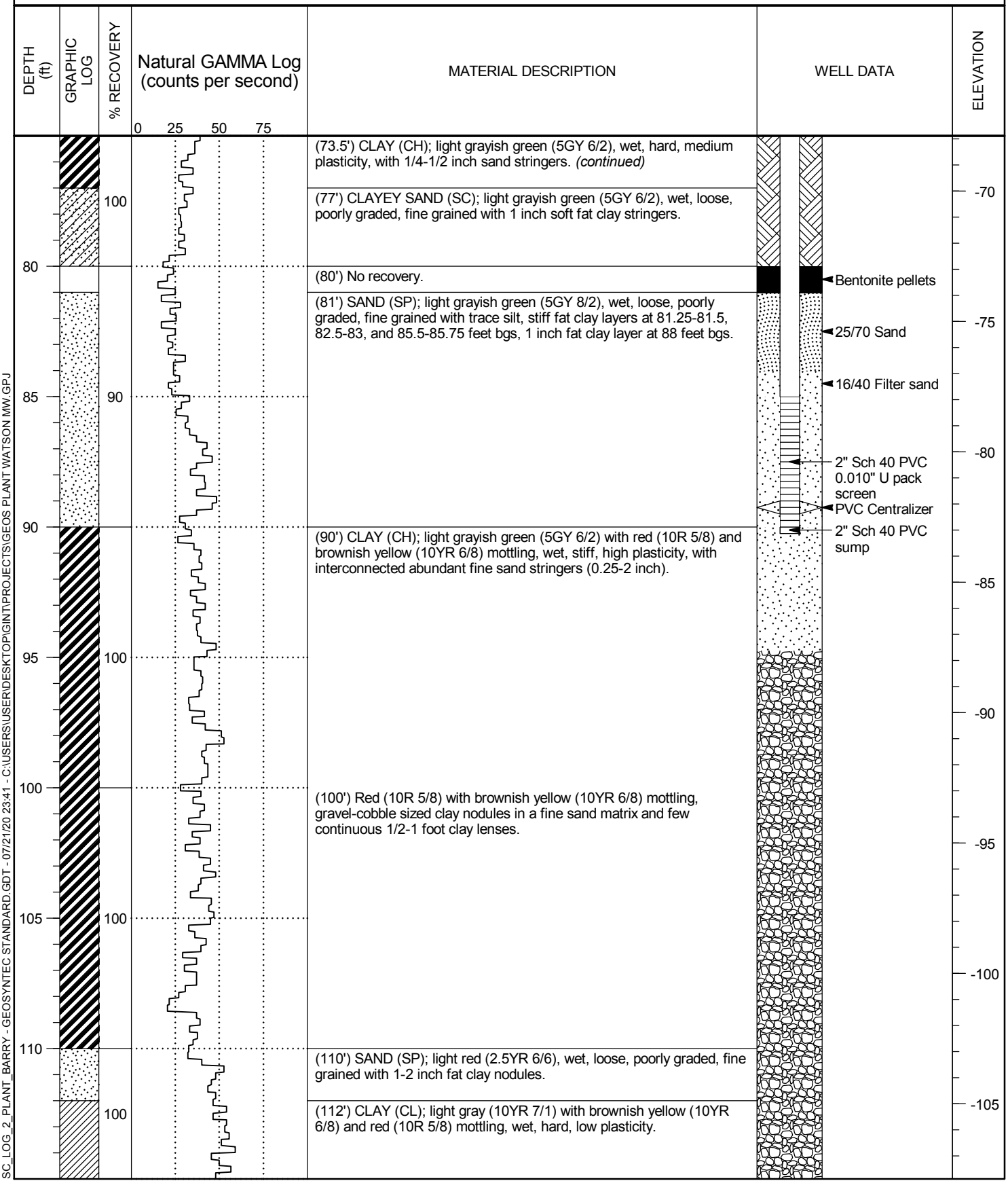
LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
120		100		(112') CLAY (CL); light gray (10YR 7/1) with brownish yellow (10YR 6/8) and red (10R 5/8) mottling, wet, hard, low plasticity. *(continued)*		-110
125		100		(124') CLAYEY SAND (SC); light gray (10YR 7/1), wet, dense, poorly graded, fine grained with decreasing clay content with depth.		-115 -120
130						-125
135		100		(134.5') CLAY (CL); light greenish gray (5GY 7/1), wet, hard, low plasticity.		-130
140				(140') SANDY CLAY (CL); grayish green (5G 5/2), wet, hard, low plasticity, increasing sand content with depth.	◄Bentonite + slough	-135
145		100				-140
150						
		100		(151.5') CLAY (CL); dark greenish gray (5GY 4/1), moist, hard, low plasticity, with brownish yellow (10YR 6/8) and black (10YR 2/1) iron concretions.		-145

(Continued Next Page)

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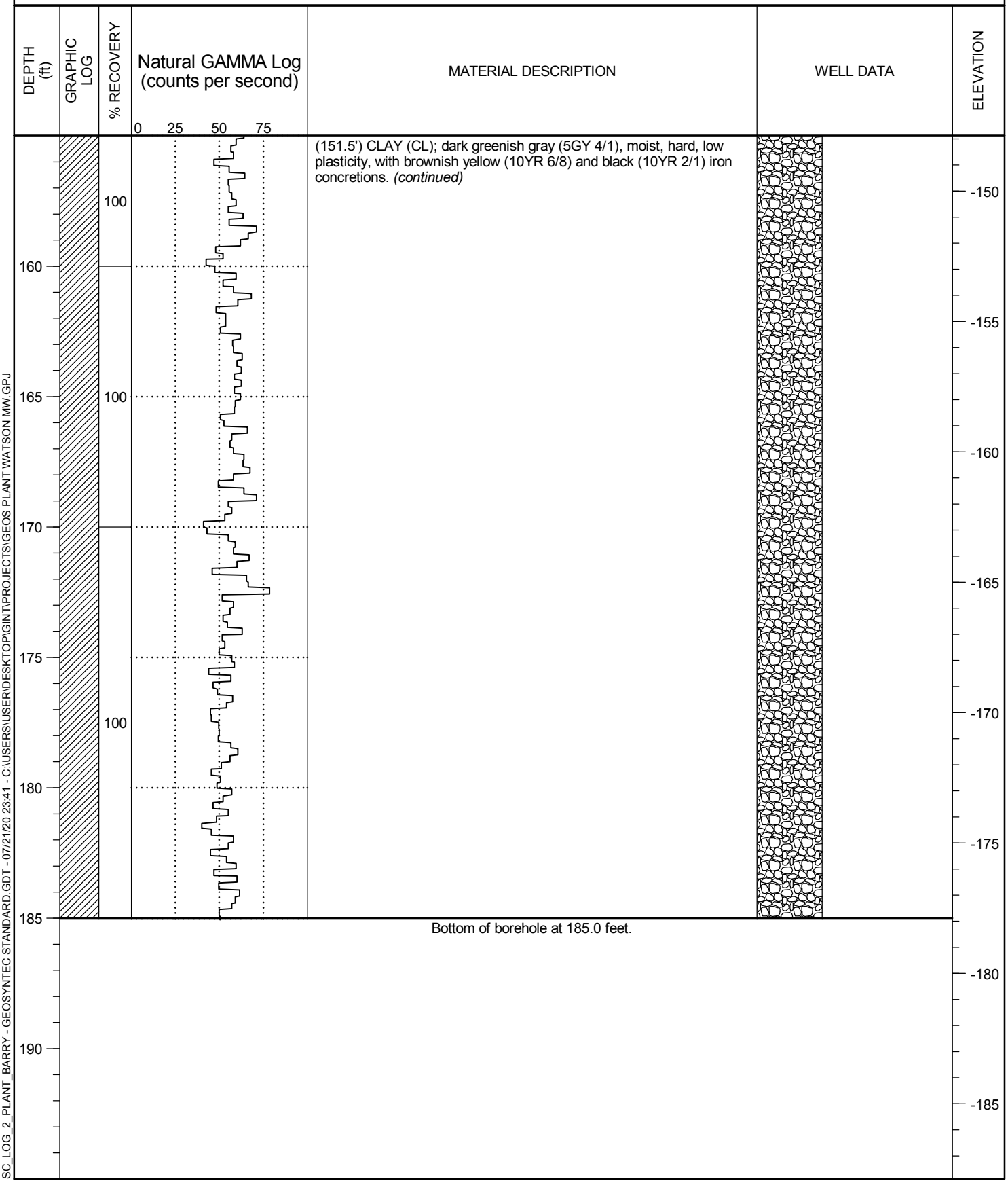
LOG OF TEST BORING

BORING APMW-3D

PROJECT Plant Watson

LOCATION Gulfport, MS



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BORING APMW-4D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 05/01/2020 **COMPLETED** 05/01/2020 **TOC ELEV.** 12.70 **SURF. ELEV.** 12.94 **COORDINATES** N: 338347.21 E: 926910.01

CONTRACTOR Cascade **EQUIPMENT** TS-150CC **DRILLING METHOD** Sonic

DRILLED BY T. Arido **LOGGED BY** T. Wilson **CHECKED BY** K. Carlton **BORING DEPTH** 100.25 ft BLS

NOTES Well completed with 8" manhole set in 3' x 3' concrete pad.

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
0		100		(0') SILTY SAND (SM); dark yellowish-brown (10YR 4/4), moist, loose, poorly graded, fine grained with gravel.	Flush mount well cover	10
5		100		(5') Same as above. (6') CLAYEY SAND (SC); grayish brown (10YR 5/2), moist, dense, poorly graded, fine grained with trace clay layers, woody material.		5
10		100		(10') GRAVEL (GP); grayish brown (10YR 5/2), wet, loose, well-graded, with clay and silt. (11') CLAYEY SAND (SC); dark yellowish-brown (10YR 4/4), wet, dense, poorly graded, fine grained, with woody material.		0
15		100		(15') ORGANIC SILT (OL); very dark brown (10YR 2/2), abundant woody material. (17') SILTY SAND (SM); dark grayish brown (10YR 4/2), wet, dense, well-graded, fine-coarse grained.	2" Sch 40 PVC riser	-5
20				(18') SAND (SW); light gray (10YR 7/1), wet, loose, well-graded, fine-coarse grained with trace gravel and shell fragments.	Bentonite-cement grout	-10
25		100			PVC Centralizer	-15
30				(30') No recovery.		
		80		(32') SAND (SW); light gray (10YR 7/1), wet, loose, well-graded, fine-coarse grained with trace gravel and shell fragments.		-20

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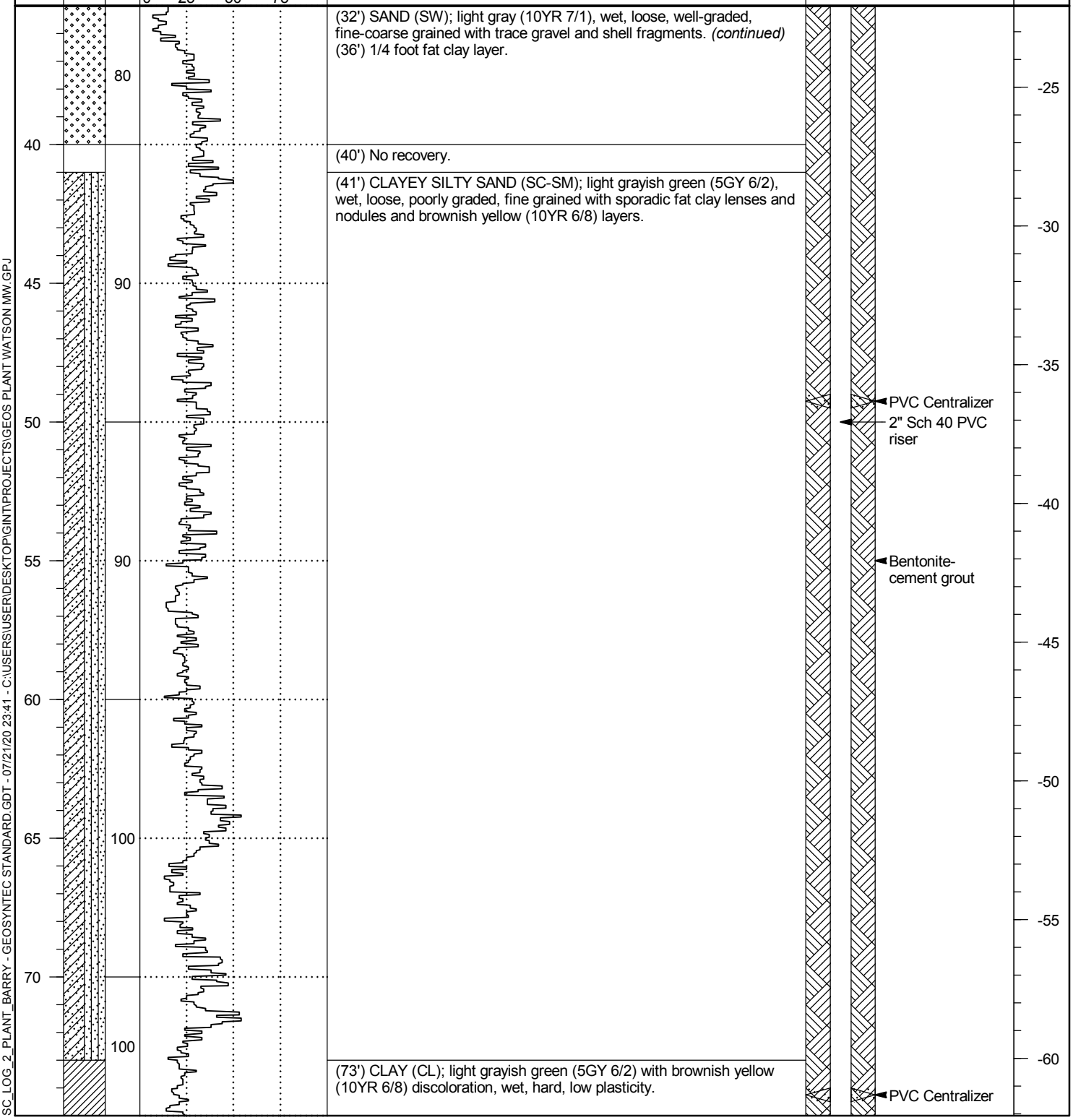
LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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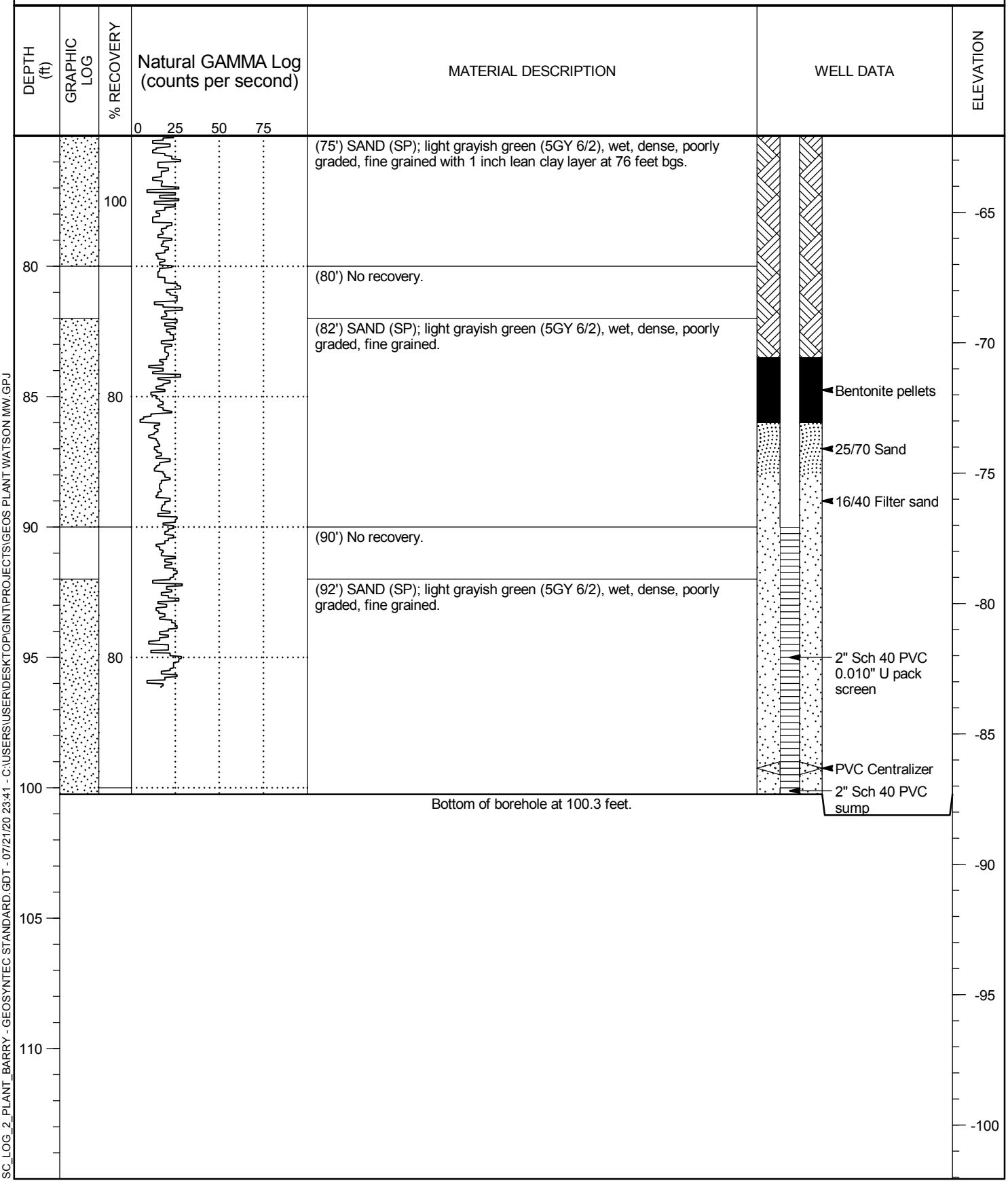
BORING APMW-4D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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BORING APMW-5D

LOG OF TEST BORING

PROJECT Plant Watson

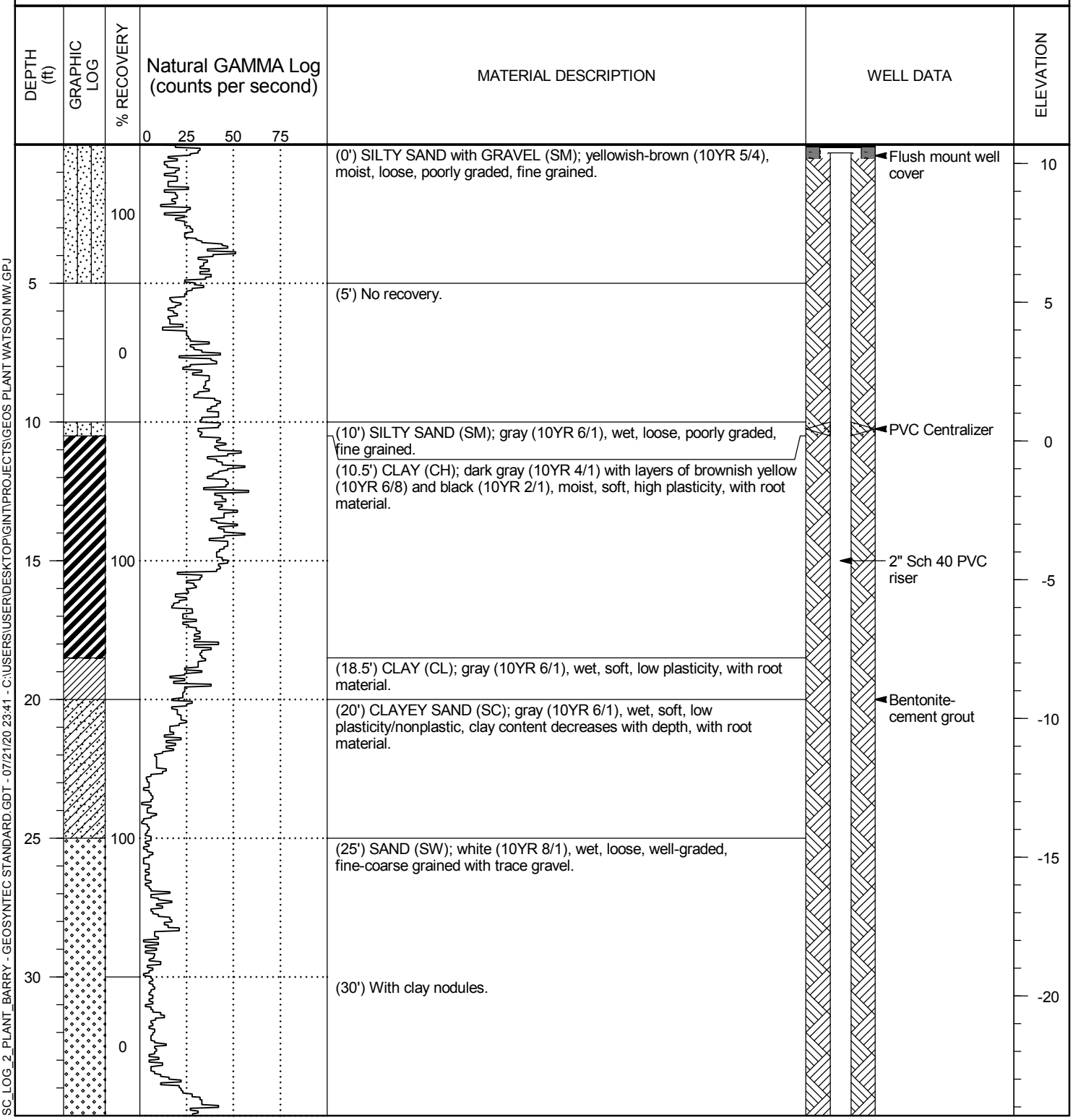
LOCATION Gulfport, MS

STARTED 05/02/2020 **COMPLETED** 05/02/2020 **TOC ELEV.** 10.30 **SURF. ELEV.** 10.69 **COORDINATES** N: 339099.81 E: 926933.66

CONTRACTOR Cascade **EQUIPMENT** TS-150CC **DRILLING METHOD** Sonic

DRILLED BY T. Arido **LOGGED BY** T. Wilson **CHECKED BY** K. Carlton **BORING DEPTH** 140 ft BLS

NOTES Well completed with 8" manhole set in 3' x 3' concrete pad.



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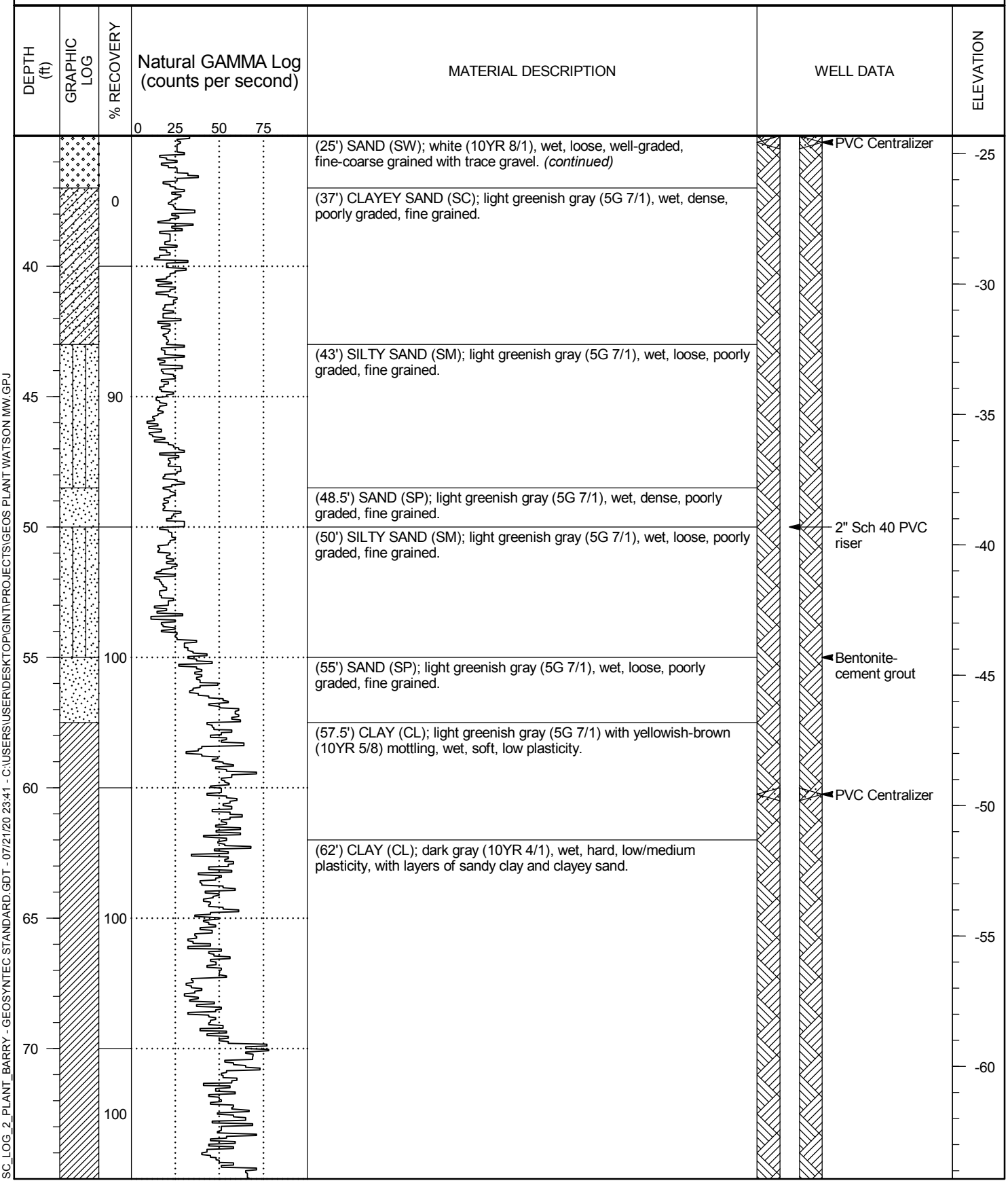
LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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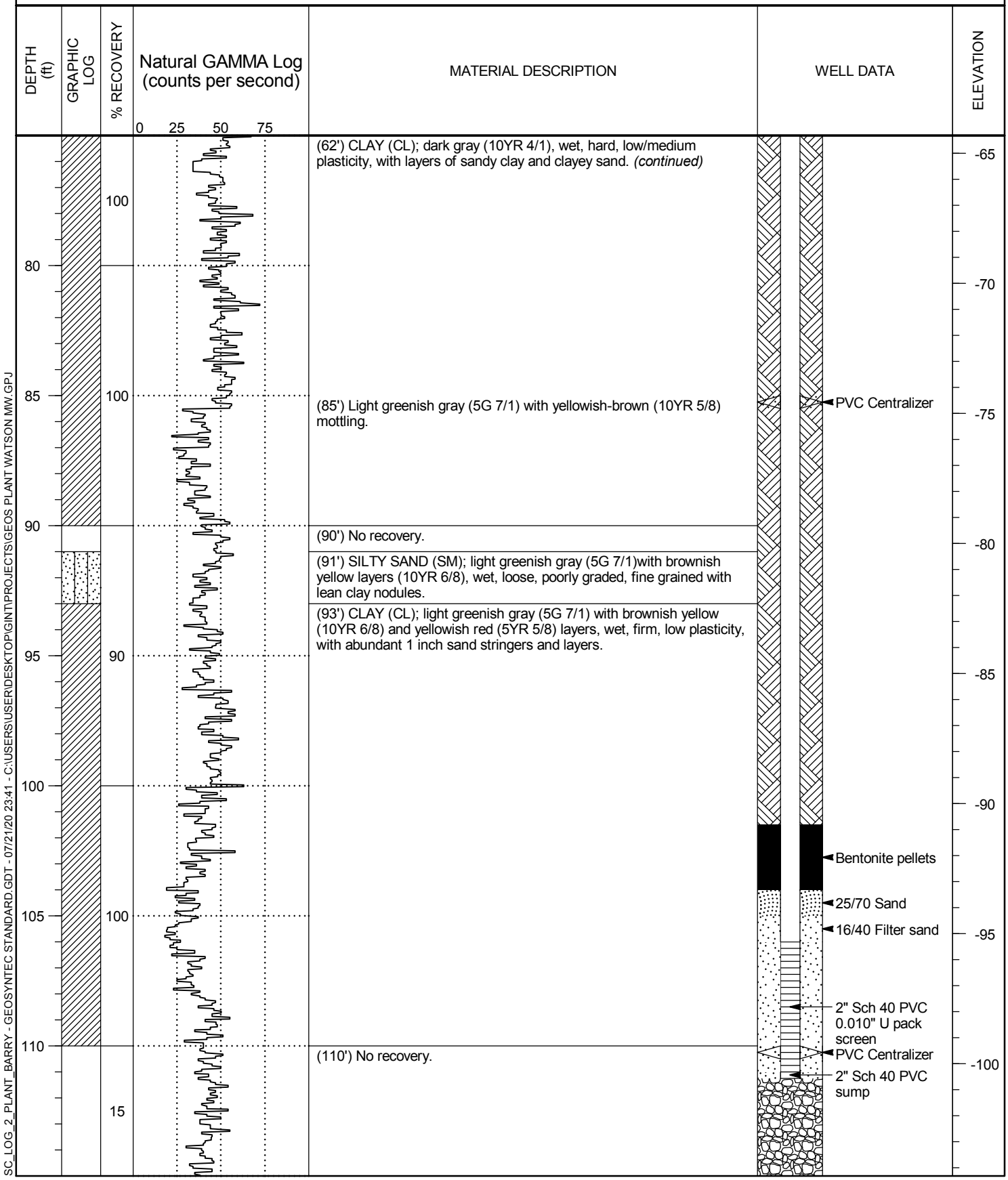
LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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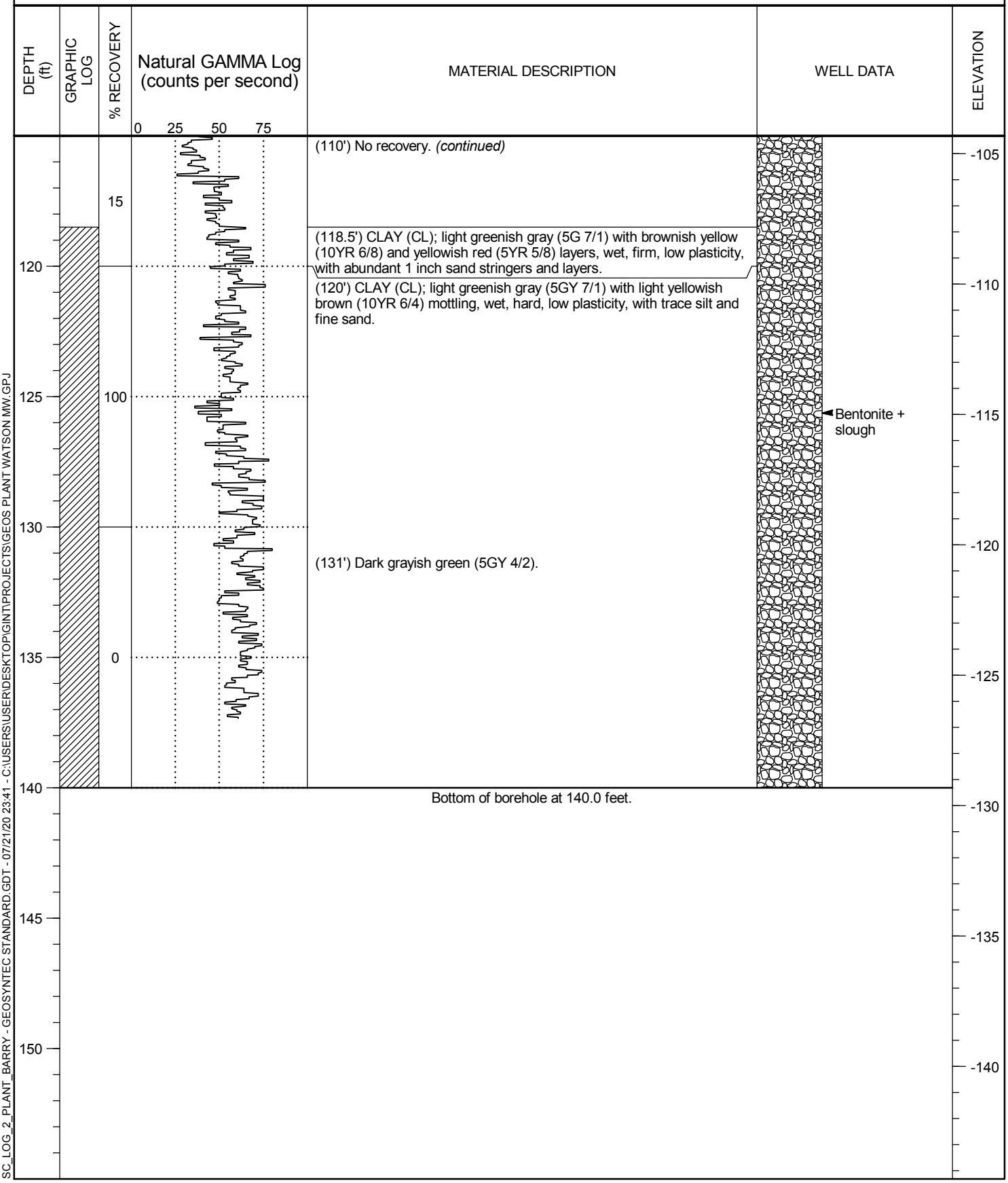
BORING APMW-5D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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BORING APMW-6D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 05/03/2020 **COMPLETED** 05/03/2020 **TOC ELEV.** 10.05 **SURF. ELEV.** 7.81 **COORDINATES** N: 340046.56 E: 926847.95

CONTRACTOR Cascade **EQUIPMENT** TS-150CC **DRILLING METHOD** Sonic

DRILLED BY T. Arido **LOGGED BY** T. Wilson **CHECKED BY** K. Carlton **BORING DEPTH** 120 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 3' x 3' concrete pad.

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
0		100		(0') SILTY SAND (SM); gray (10YR 5/1), moist, loose, poorly graded, fine grained with gravel.	2" Sch 40 PVC riser (2.24' ags)	5
5		0		(5') No recovery.		0
10				(10') CLAYEY SAND (SC); dark grayish brown (10YR 4/2), wet, dense, poorly graded, fine grained. (11') Gray (10YR 6/1).		-5
15		100		(14') SAND (SW); gray (10YR 6/1), wet, dense, well-graded, fine-coarse grained with trace gravel. (17') Very pale brown (10YR 7/3) and brownish yellow (10YR 6/8).	2" Sch 40 PVC riser	-10
20					Bentonite-cement grout	-15
25		100			PVC Centralizer	-20
30		100		(29.75') CLAYEY SILTY SAND (SC-SM); light grayish green (5GY 6/2), wet, loose, poorly graded, fine grained with abundant fat clay nodules.		-25

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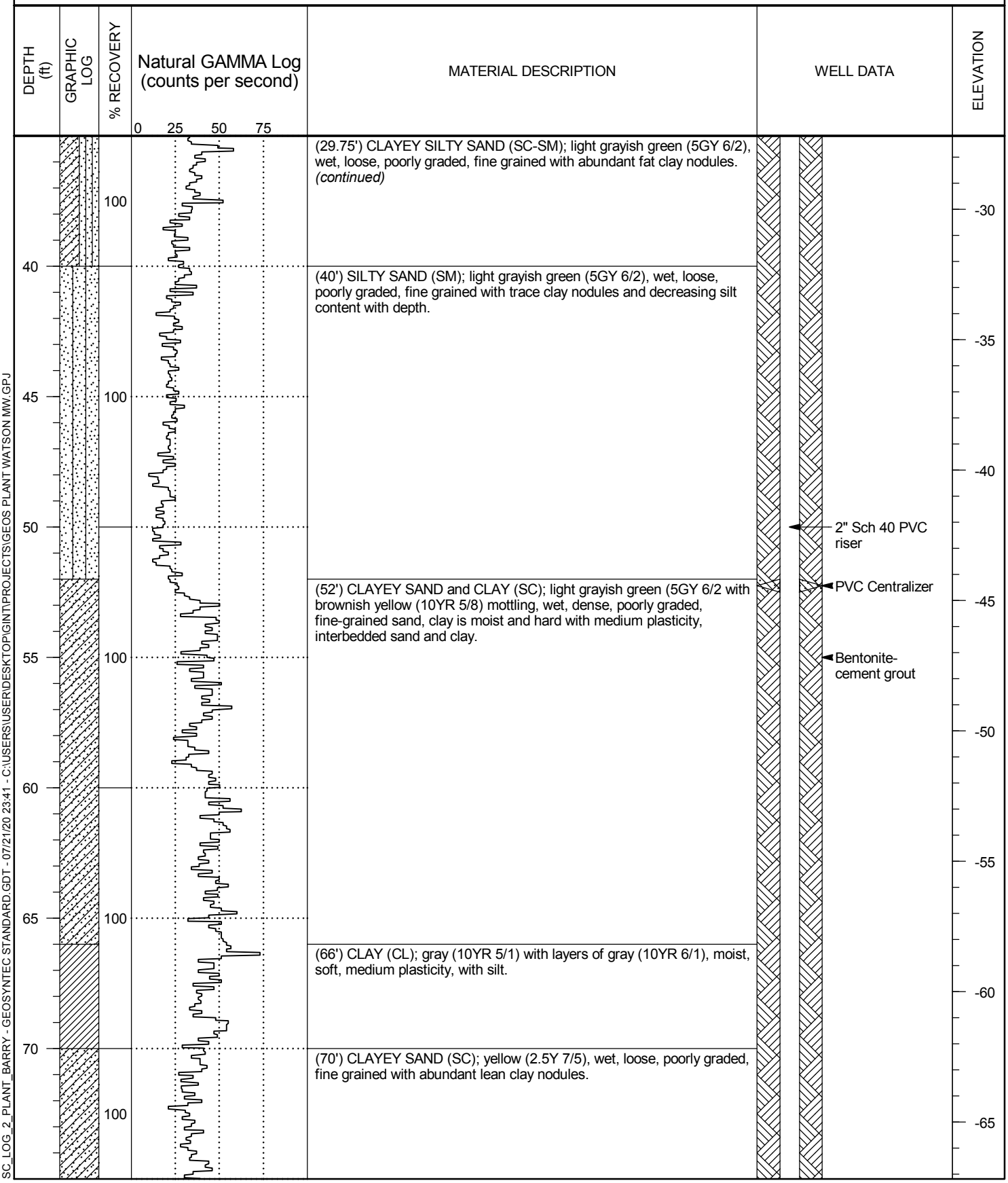
LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

DEPTH (ft)	% RECOVERY	MATERIAL DESCRIPTION
80	100	(70') CLAYEY SAND (SC); yellow (2.5Y 7/5), wet, loose, poorly graded, fine grained with abundant lean clay nodules. *(continued)*
		(78') CLAY (CL); light gray (10YR 7/1) with brownish yellow (10YR 6/8) mottling, moist, soft, medium plasticity, with sand and silt.
85	100	(80') SILTY and CLAYEY SAND (SM); light gray (10YR 7/1), wet, loose, poorly graded, fine grained.
90		(85') SILTY SAND (SM); very pale brown (10YR 7/4), wet, loose, poorly graded, fine grained with abundant gray (10YR 6/1) lean clay nodules.
95	0	(90') No recovery.
100		(100') SAND (SP); light gray (10YR 7/1), wet, loose, poorly graded, fine grained with trace silt.
105	100	(102') CLAY (CL); light gray (10YR 7/1) with brownish yellow (10Y 6/8) mottling, wet, hard, low plasticity, with trace sand and silt layers.
110	100	(110.5') Dark grayish green (5GY 3/2).

Natural GAMMA Log (counts per second): 0, 25, 50, 75

WELL DATA: PVC Centralizer; Bentonite pellets; 25/70 Sand; 16/40 Filter sand; 2" Sch 40 PVC 0.010" U pack screen; PVC Centralizer; 2" Sch 40 PVC sump; Bentonite + slough

ELEVATION: -70, -75, -80, -85, -90, -95, -100, -105

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LOG OF TEST BORING

BORING APMW-6D

PROJECT Plant Watson

LOCATION Gulfport, MS

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
110		100		(110.5') Dark grayish green (5GY 3/2). *(continued)*		-110
120				Bottom of borehole at 120.0 feet.		-115
125						-120
130						-125
135						-130
140						-135
145						-140
150						-145

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BORING APMW-8D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 05/12/2020 **COMPLETED** 05/12/2020 **TOC ELEV.** 22.23 **SURF. ELEV.** 19.77 **COORDINATES** N: 341077.32 E: 926559.91

CONTRACTOR Cascade **EQUIPMENT** TS-150CC **DRILLING METHOD** Sonic

DRILLED BY T. Arido **LOGGED BY** T. Wilson **CHECKED BY** K. Carlton **BORING DEPTH** 120 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 3' x 3' concrete pad.

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
0		100		(0') SILTY SAND (SM); dark grayish brown (10YR 4/2), moist, loose, poorly graded, fine grained.	2" Sch 40 PVC riser (2.46' ags)	15
5		100		(5') CLAYEY SAND (SC); brown (10YR 5/3), moist, loose, poorly graded, fine grained with silt and gravel.		10
10		100		(8.5') Gray (10YR 6/5).		5
15		100		(13') SANDY CLAY (CL); gray (10YR 6/1) with brownish yellow (10YR 6/8) and light yellowish-brown (10YR 6/4) and very dark grayish brown (10YR 3/2) mottling, wet, soft, low plasticity, with trace roots.	PVC Centralizer 2" Sch 40 PVC riser	0
20				(20') No recovery.	Bentonite-cement grout	-5
25		60		(24') SANDY CLAY (CL); gray (10YR 6/1) with brownish yellow (10YR 6/8) and light yellowish-brown (10YR 6/4) and very dark grayish brown (10YR 3/2) mottling, wet, soft, low plasticity, with trace roots. (25.25') CLAY (CL); gray (10YR 6/1) with brownish yellow mottling, wet, soft, low plasticity.		-10
30		100		(29.5') SAND (SW); light gray (10YR 7/1), wet, loose, well-graded, fine-coarse grained with gravel and increased silt content from 29.5-31 bgs.		-15

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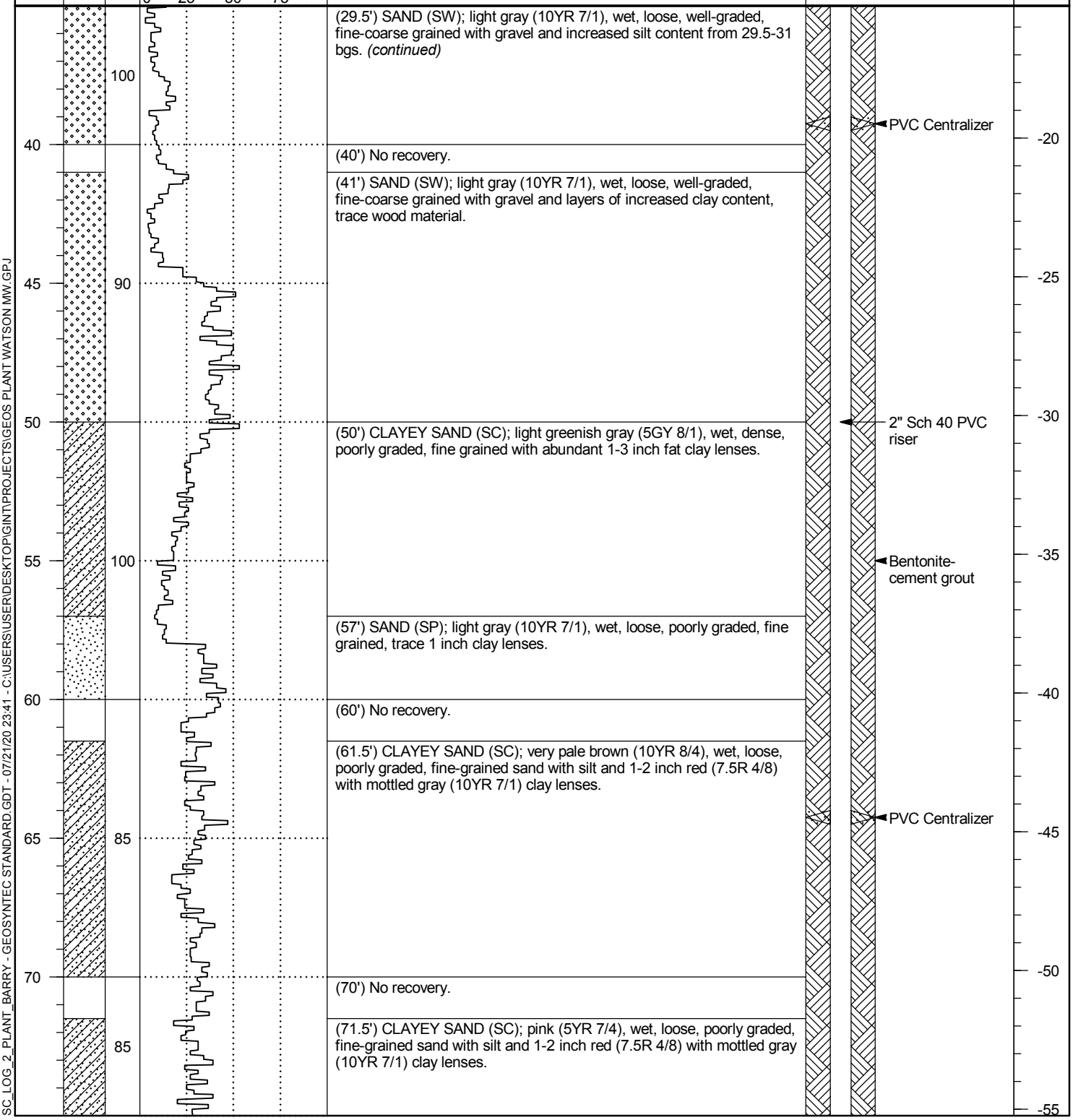
LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



(29.5') SAND (SW); light gray (10YR 7/1), wet, loose, well-graded, fine-coarse grained with gravel and increased silt content from 29.5-31 bgs. *(continued)*

(40') No recovery.

(41') SAND (SW); light gray (10YR 7/1), wet, loose, well-graded, fine-coarse grained with gravel and layers of increased clay content, trace wood material.

(50') CLAYEY SAND (SC); light greenish gray (5GY 8/1), wet, dense, poorly graded, fine grained with abundant 1-3 inch fat clay lenses.

(57') SAND (SP); light gray (10YR 7/1), wet, loose, poorly graded, fine grained, trace 1 inch clay lenses.

(60') No recovery.

(61.5') CLAYEY SAND (SC); very pale brown (10YR 8/4), wet, loose, poorly graded, fine-grained sand with silt and 1-2 inch red (7.5R 4/8) with mottled gray (10YR 7/1) clay lenses.

(70') No recovery.

(71.5') CLAYEY SAND (SC); pink (5YR 7/4), wet, loose, poorly graded, fine-grained sand with silt and 1-2 inch red (7.5R 4/8) with mottled gray (10YR 7/1) clay lenses.

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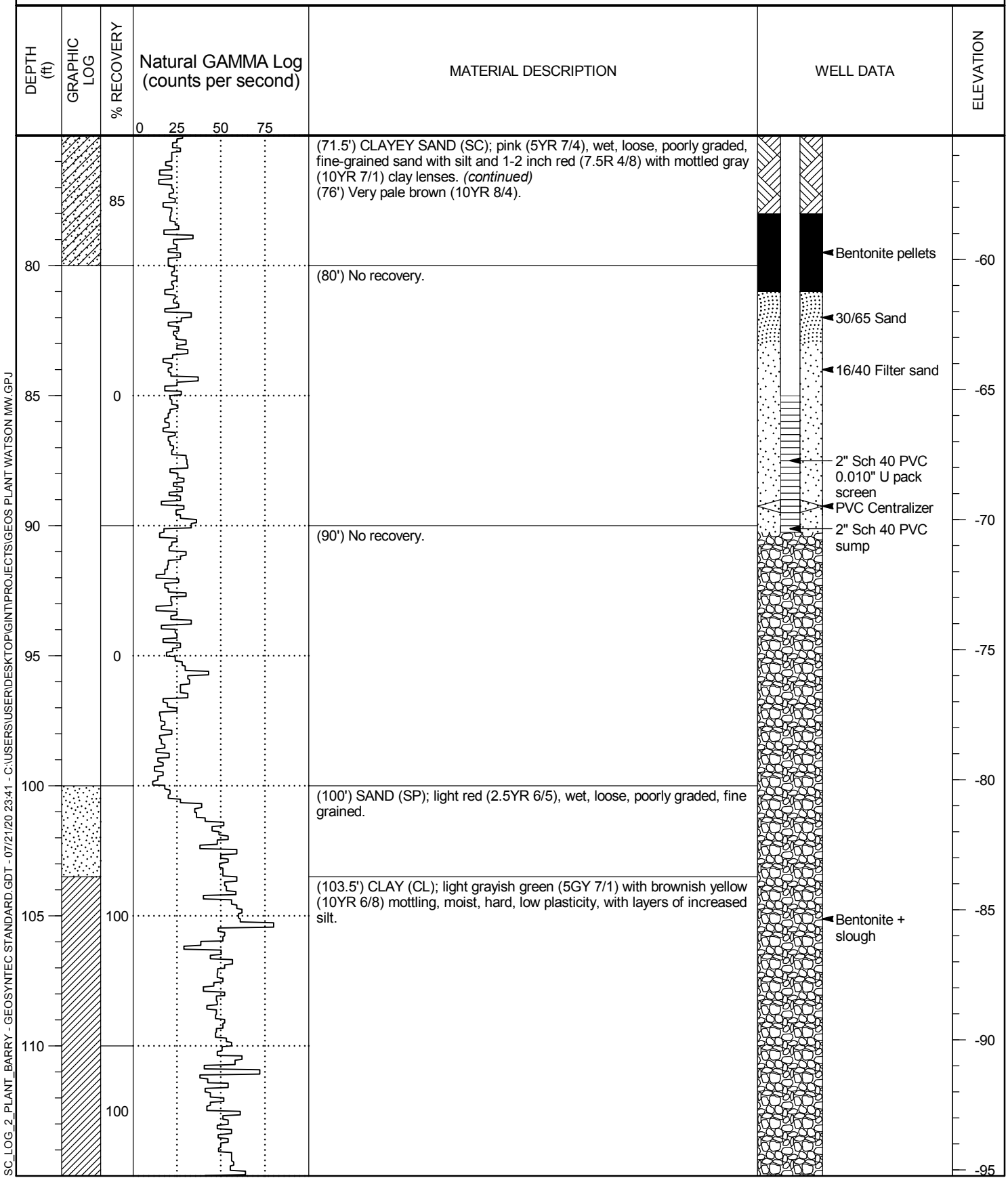
LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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LOG OF TEST BORING

BORING APMW-8D

PROJECT Plant Watson

LOCATION Gulfport, MS

DEPTH (ft)	GRAPHIC LOG	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
120		100		(103.5') CLAY (CL); light grayish green (5GY 7/1) with brownish yellow (10YR 6/8) mottling, moist, hard, low plasticity, with layers of increased silt. *(continued)*		-100
				Bottom of borehole at 120.0 feet.		
125						-105
130						-110
135						-115
140						-120
145						-125
150						-130
						-135

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BORING APMW-10D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

STARTED 05/13/2020 **COMPLETED** 05/14/2020 **TOC ELEV.** 21.68 **SURF. ELEV.** 19.06 **COORDINATES** N: 341077.51 E: 924031.34

CONTRACTOR Cascade **EQUIPMENT** TS-150CC **DRILLING METHOD** Sonic

DRILLED BY T. Arido **LOGGED BY** T. Wilson **CHECKED BY** K. Carlton **BORING DEPTH** 225 ft BLS

NOTES Well completed with 4" aluminum protective casing set in 3' x 3' concrete pad.

DEPTH (ft)	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
	100		(0') SILTY SAND (SM); dark brown (10YR 3/3), moist, loose, well-graded, fine-coarse grained with gravel.	2" Sch 40 PVC riser (2.62' ags)	15
5			(5') No recovery.		
	60		(7') SILTY SAND (SM); dark brown (10YR 3/3), moist, loose, well-graded, fine-coarse grained with gravel.		10
10			(9') CLAYEY SAND (SC); grayish brown (10YR 5/2), moist, loose, well-graded, fine-coarse grained with gravel. (10') Brown (10YR 4/3).		
	100		(12.5') SANDY CLAY (CL); dark grayish brown (10YR 4/2) with brownish yellow mottling, wet, soft, low plasticity, trace roots.	2" Sch 40 PVC riser	5
15					
			(18') Gray (10YR 6/1).	Bentonite-cement grout	0
20					
			(23.5') SAND (SW); light gray (10YR 7/1), wet, loose, well-graded, fine-coarse grained, trace woody material.		-5
25	90				
				PVC Centralizer	-10
30			(30') FAT CLAY (CH); dark gray (10YR 4/1), wet, soft, high plasticity.		
	100		(31') SAND (SW); light gray (10YR 7/1), wet, loose, well-graded, fine-coarse grained with gravel, woody material.		-15

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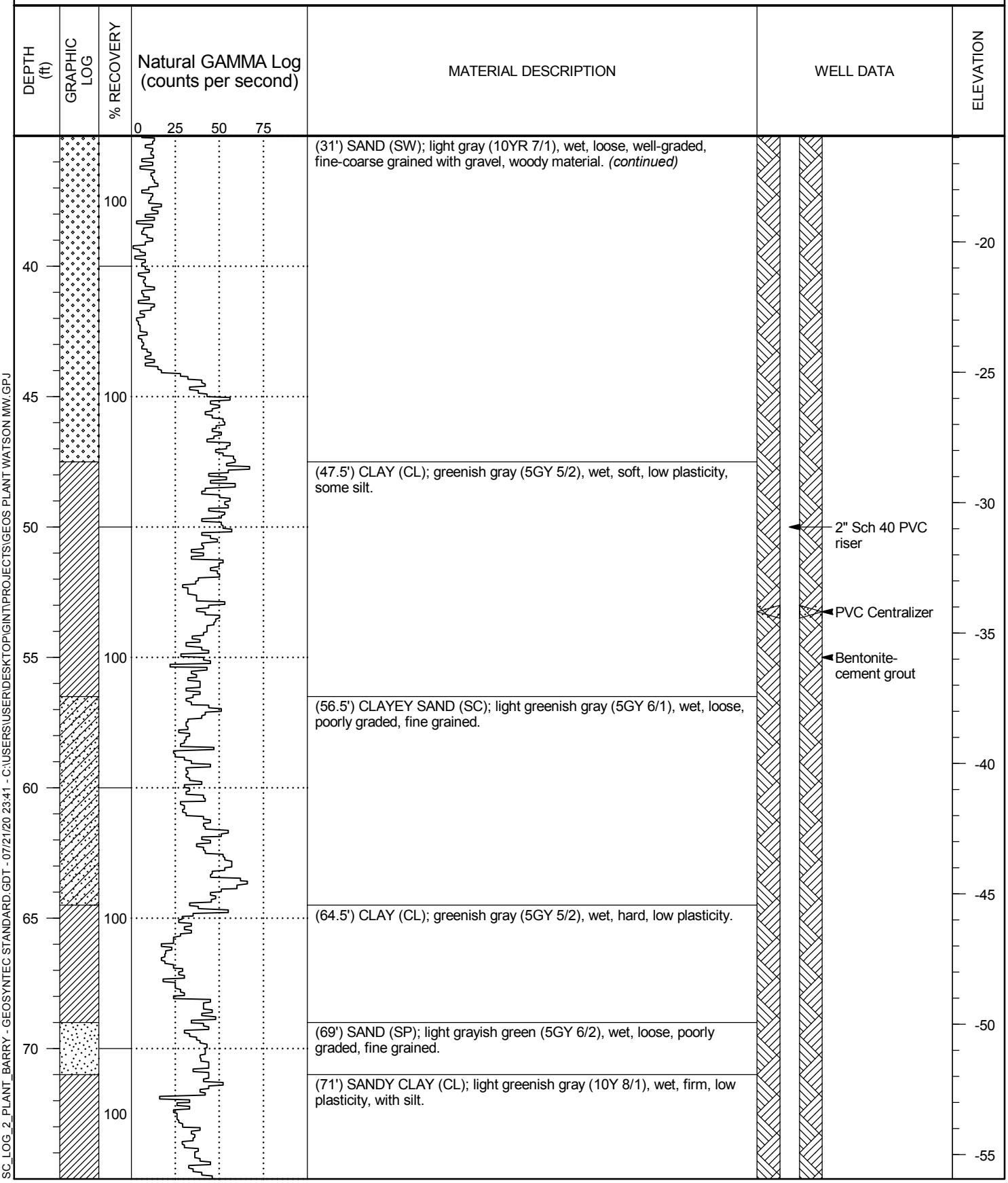
BORING APMW-10D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



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LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS

DEPTH (ft)	% RECOVERY	Natural GAMMA Log (counts per second) 0 25 50 75	MATERIAL DESCRIPTION	WELL DATA	ELEVATION
80	100		(71') SANDY CLAY (CL); light greenish gray (10Y 8/1), wet, firm, low plasticity, with silt. *(continued)*	PVC Centralizer	-60
85	100		(85.5') CLAY (CL); light greenish gray (10Y 7/1), wet, hard, low plasticity. (86.5') SANDY CLAY (CL); light greenish gray (10Y 7/1), wet, firm, nonplastic/low plasticity, with silt.		-65 -70
90	0		(90') No recovery - Clay (CL) based on drill cuttings from 100-110' Push.		-75 -80
100	100		(100') CLAY (CL); light gray (10YR 7/1) with brownish yellow (10YR 6/8) and black (10YR 2/1) mottling, wet, hard, low plasticity, with silt and very fine sand. (102') Light gray (10YR 7/1).	PVC Centralizer	-85
105	100		(106.5') SAND (SP); light gray (10YR 7/1), wet, loose, poorly graded, fine grained.		-90
110	100		(108.75') SAND with SILT (SP-SM); light gray (10YR 7/1), wet, very dense, poorly graded, fine-grained sand with trace clay. (110') SANDY CLAY (CL); light gray (10YR 7/1) with brownish yellow (10YR 6/8) and black (10YR 2/1) mottling, moist, firm, low plasticity. (112') CLAY (CL); light gray (10YR 7/1), moist, hard, low plasticity.		-95

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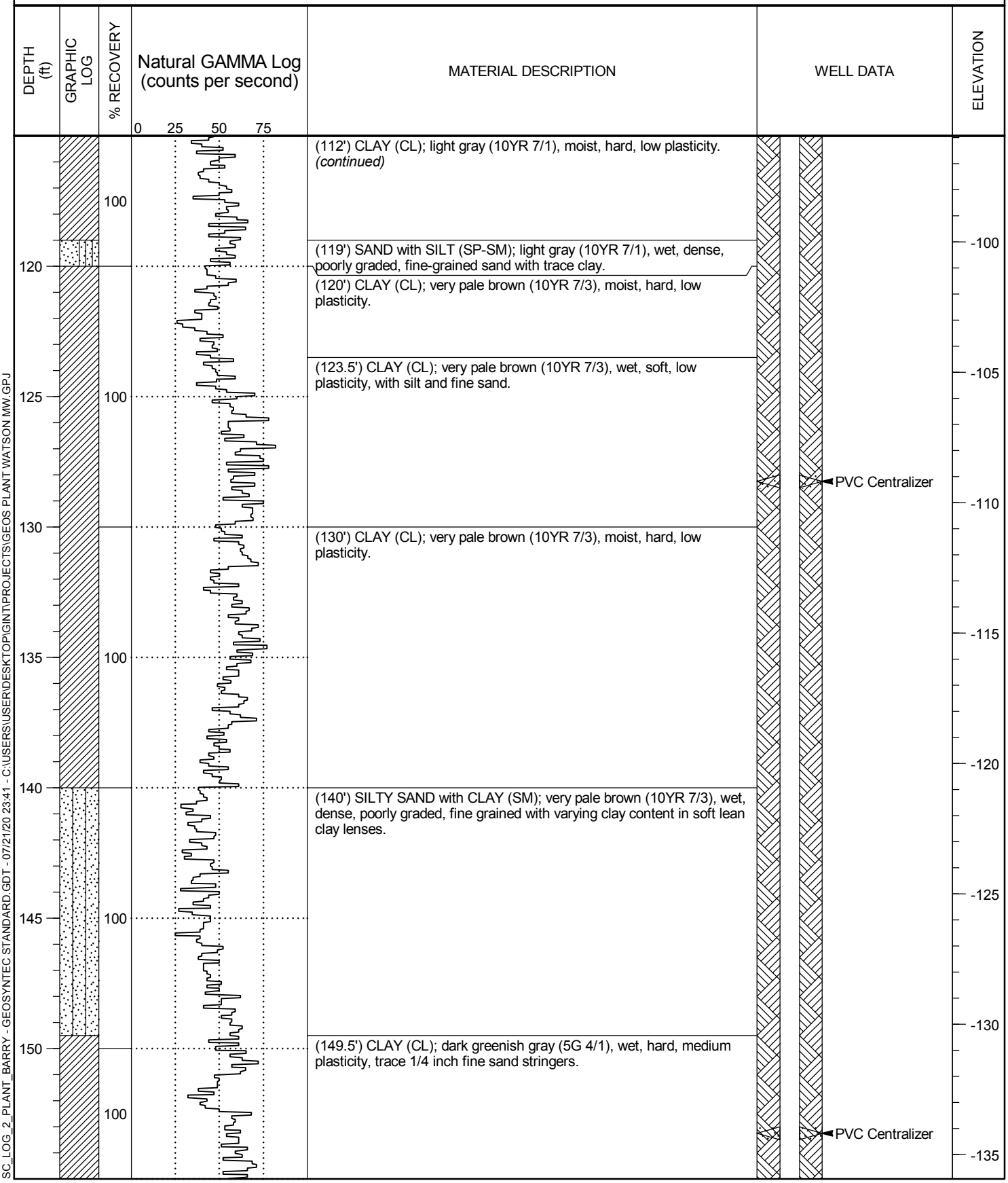
LOG OF TEST BORING

BORING APMW-10D

PROJECT Plant Watson

LOCATION Gulfport, MS



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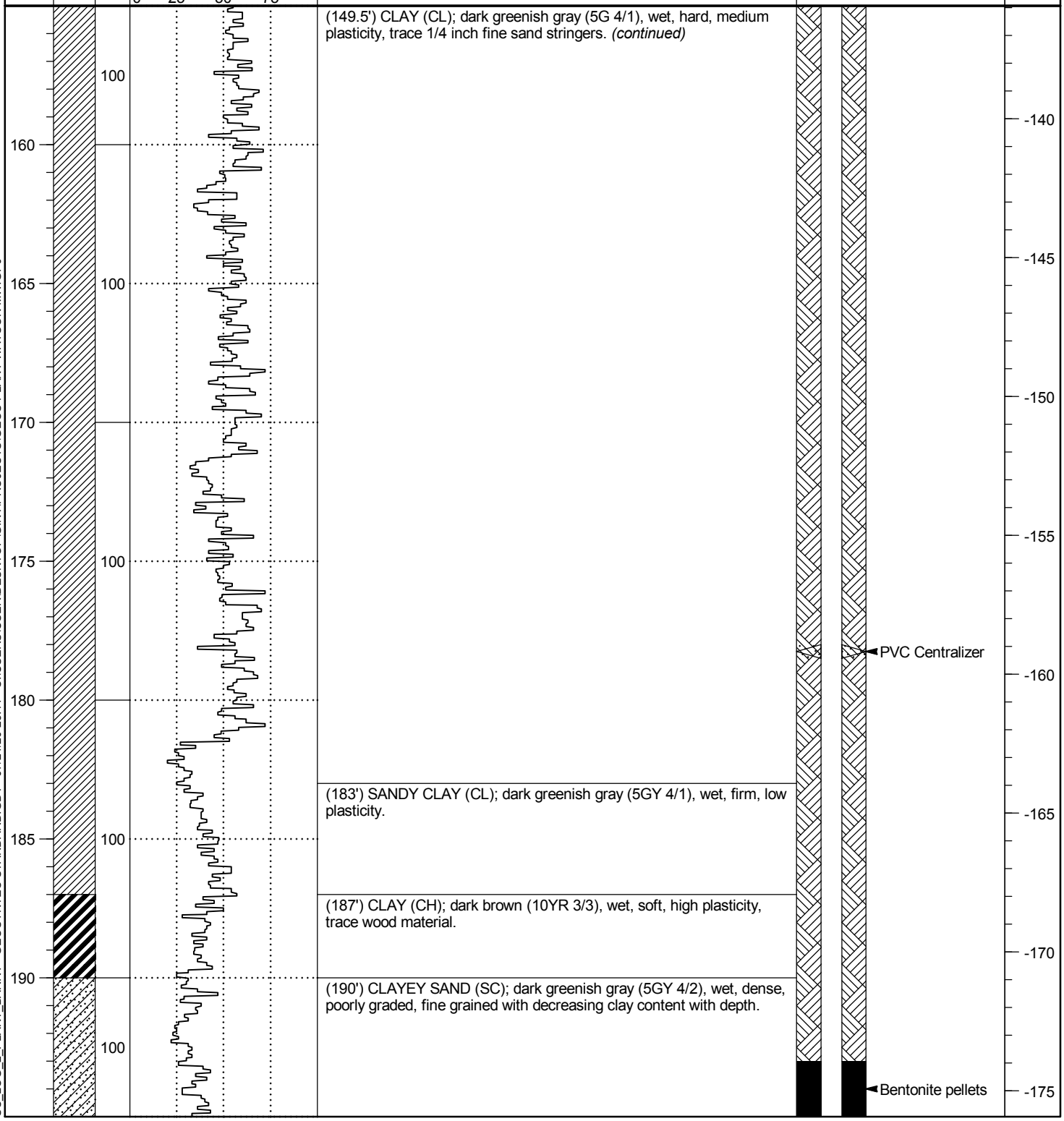
PROJECT Plant Watson

LOCATION Gulfport, MS



(149.5') CLAY (CL); dark greenish gray (5G 4/1), wet, hard, medium plasticity, trace 1/4 inch fine sand stringers. *(continued)*

(183') SANDY CLAY (CL); dark greenish gray (5GY 4/1), wet, firm, low plasticity.

(187') CLAY (CH); dark brown (10YR 3/3), wet, soft, high plasticity, trace wood material.

(190') CLAYEY SAND (SC); dark greenish gray (5GY 4/2), wet, dense, poorly graded, fine grained with decreasing clay content with depth.

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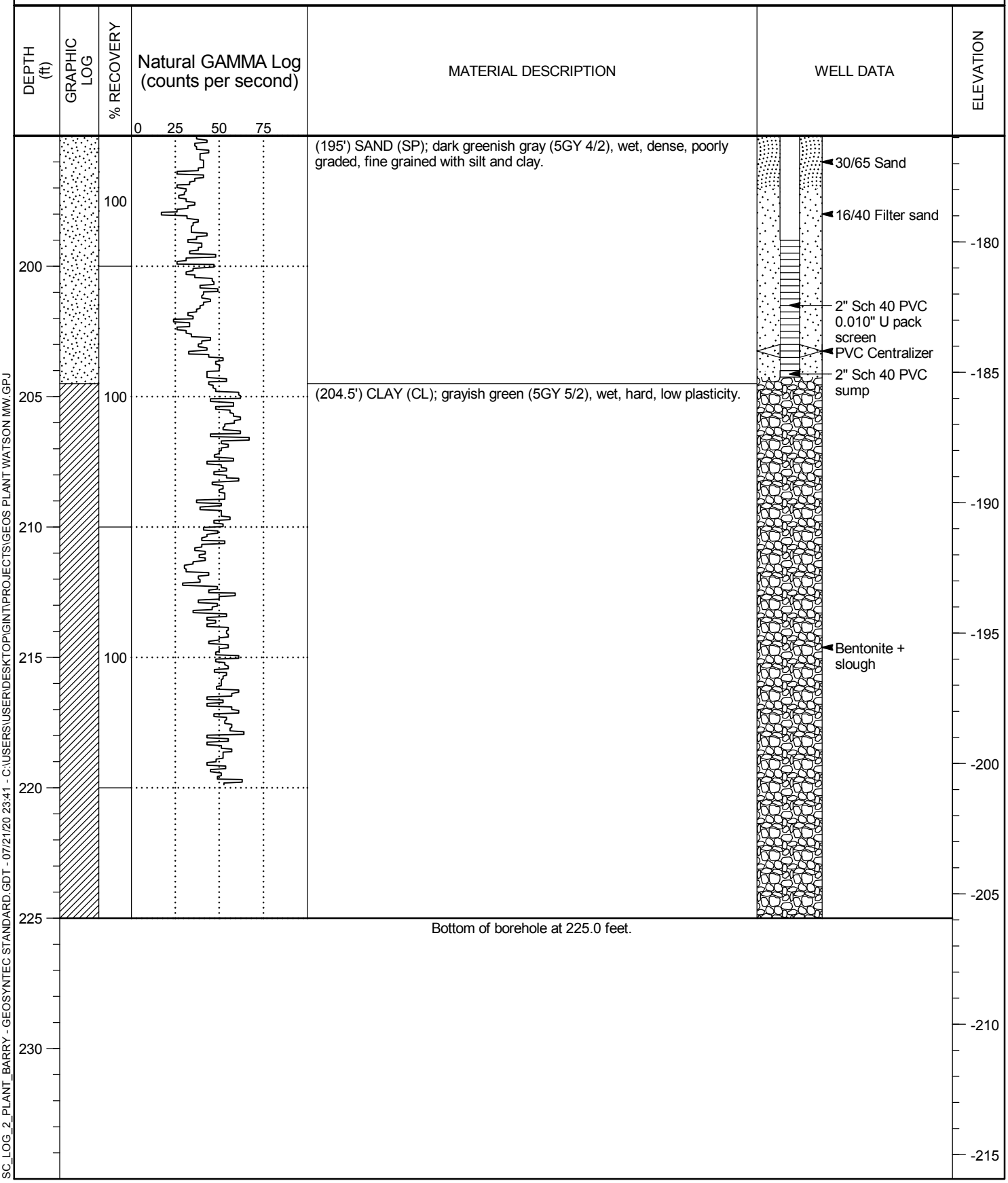
BORING APMW-10D

LOG OF TEST BORING

PROJECT Plant Watson

LOCATION Gulfport, MS



Appendix B
Groundwater Analytical Data

Initial Assessment Monitoring Event

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-93968-1
Client Project/Site: CCR - Plant Watson Special

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Authorized for release by:
8/26/2019 4:51:19 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Job ID: 180-93968-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-93968-1

Comments
No additional comments.

Receipt
The samples were received on 8/10/2019 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.8º C, 1.0º C, 1.3º C and 1.4º C.

GC Semi VOA
Method(s) 300.0: The continuing calibration verification (CCV) associated with batch 180-288735 recovered above the upper control limit for Fluoride. The samples associated with this CCV were non-detects or estimated value (J) for the affected analyte; therefore, the data have been reported.

Method(s) 300.0: The following samples were diluted due to the abundance of a non-target analyte (Chloride): APMW-1R (180-93968-3), APMW-2 (180-93968-4), APWM-10 (180-93968-8), APWM-9 (180-93968-9), APWM-3 (180-93968-10), APWM-5 (180-93968-12), APWM-6R (180-93968-13), APWM-7 (180-93968-14), APWM-8 (180-93968-15) and DUP-02 (180-93968-18). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Qualifiers

HPLC/IC

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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-93968-1
Project/Site: CCR - Plant Watson Special

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
Arkansas DEQ	State Program	88-0690	06-27-20
California	State	2891	04-30-20
California	State Program	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Connecticut	State Program	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Florida	NELAP	E871008	06-30-20
Illinois	NELAP	200005	06-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State Program	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Kentucky (WW)	State Program	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
Nevada	State Program	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	03-31-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State Program	434	12-31-19
North Dakota	State	R-227	04-30-20
North Dakota	State Program	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
Rhode Island	State Program	LAO00362	12-30-19
South Carolina	State Program	89014	04-30-20
Texas	NELAP	T104704528-15-2	03-31-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462015-4	05-31-20
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	460189	09-14-19
Virginia	NELAP	10043	09-14-19
West Virginia DEP	State	142	01-31-20
West Virginia DEP	State Program	142	01-31-20
Wisconsin	State	998027800	08-31-19
Wisconsin	State Program	998027800	08-31-19

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-93968-1	APMW-11	Water	08/08/19 12:35	08/10/19 09:30	
180-93968-2	APMW-12	Water	08/08/19 11:55	08/10/19 09:30	
180-93968-3	APMW-1R	Water	08/08/19 12:25	08/10/19 09:30	
180-93968-4	APMW-2	Water	08/08/19 14:10	08/10/19 09:30	
180-93968-5	EB-01	Water	08/08/19 12:00	08/10/19 09:30	
180-93968-6	DUP-01	Water	08/08/19 11:35	08/10/19 09:30	
180-93968-7	FB-01	Water	08/08/19 13:45	08/10/19 09:30	
180-93968-8	APWM-10	Water	08/08/19 13:48	08/10/19 09:30	
180-93968-9	APWM-9	Water	08/08/19 17:00	08/10/19 09:30	
180-93968-10	APWM-3	Water	08/08/19 16:25	08/10/19 09:30	
180-93968-11	APWM-4	Water	08/09/19 08:30	08/10/19 09:30	
180-93968-12	APWM-5	Water	08/09/19 10:10	08/10/19 09:30	
180-93968-13	APWM-6R	Water	08/09/19 08:10	08/10/19 09:30	
180-93968-14	APWM-7	Water	08/09/19 09:40	08/10/19 09:30	
180-93968-15	APWM-8	Water	08/09/19 11:20	08/10/19 09:30	
180-93968-16	EB-02	Water	08/09/19 08:15	08/10/19 09:30	
180-93968-17	FB-02	Water	08/09/19 09:35	08/10/19 09:30	
180-93968-18	DUP-02	Water	08/09/19 07:15	08/10/19 09:30	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

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

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

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Client Sample ID: APMW-11
Date Collected: 08/08/19 12:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			288735	08/21/19 20:19	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/23/19 22:51	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:43	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APMW-12
Date Collected: 08/08/19 11:55
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			288735	08/21/19 22:41	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/23/19 23:10	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:43	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APMW-1R
Date Collected: 08/08/19 12:25
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			288735	08/22/19 00:47	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/23/19 22:55	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:44	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APMW-2
Date Collected: 08/08/19 14:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			288735	08/22/19 01:03	MJH	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Client Sample ID: APMW-2
Date Collected: 08/08/19 14:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/23/19 23:33	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:45	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: EB-01
Date Collected: 08/08/19 12:00
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			288735	08/21/19 19:47	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/23/19 23:38	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:46	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: DUP-01
Date Collected: 08/08/19 11:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			288735	08/22/19 02:22	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/23/19 23:43	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:51	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: FB-01
Date Collected: 08/08/19 13:45
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			288735	08/21/19 20:03	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/23/19 23:48	WTR	TAL PIT
	Instrument ID: M									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Client Sample ID: FB-01
Date Collected: 08/08/19 13:45
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:52	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APWM-10
Date Collected: 08/08/19 13:48
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2.5			288735	08/22/19 02:06	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/23/19 23:52	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:53	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APWM-9
Date Collected: 08/08/19 17:00
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			288735	08/22/19 01:19	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 00:07	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:54	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APWM-3
Date Collected: 08/08/19 16:25
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		25			288735	08/21/19 22:09	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 00:11	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:55	RJR	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Client Sample ID: APWM-4

Date Collected: 08/09/19 08:30
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			288735	08/21/19 22:57	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 00:16	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:56	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APWM-5

Date Collected: 08/09/19 10:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		25			288735	08/21/19 22:25	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 00:21	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:57	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APWM-6R

Date Collected: 08/09/19 08:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			288735	08/21/19 23:44	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 00:26	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:58	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APWM-7

Date Collected: 08/09/19 09:40
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			288735	08/22/19 01:35	MJH	TAL PIT
	Instrument ID: CHICS2100B									

Client Sample ID: APWM-7

Lab Sample ID: 180-93968-14

Date Collected: 08/09/19 09:40

Matrix: Water

Date Received: 08/10/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	288071	08/14/19 12:14	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 00:30	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 09:59	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: APWM-8

Lab Sample ID: 180-93968-15

Date Collected: 08/09/19 11:20

Matrix: Water

Date Received: 08/10/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			288735	08/22/19 01:51	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288225	08/15/19 11:57	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 00:49	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 10:00	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: EB-02

Lab Sample ID: 180-93968-16

Date Collected: 08/09/19 08:15

Matrix: Water

Date Received: 08/10/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			288735	08/21/19 21:38	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288225	08/15/19 11:57	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 00:54	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 10:03	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: FB-02

Lab Sample ID: 180-93968-17

Date Collected: 08/09/19 09:35

Matrix: Water

Date Received: 08/10/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			288735	08/21/19 21:54	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288225	08/15/19 11:57	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 01:08	WTR	TAL PIT
	Instrument ID: M									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

Client Sample ID: FB-02

Date Collected: 08/09/19 09:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 10:04	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: DUP-02

Date Collected: 08/09/19 07:15
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			288735	08/22/19 00:00	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	288225	08/15/19 11:57	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	289234	08/24/19 01:12	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Prep	7470A			50 mL	50 mL	288767	08/21/19 08:32	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			288996	08/22/19 10:05	RJR	TAL PIT
	Instrument ID: HGZ									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KEM = Kimberly Mahoney
MM1 = Mary Beth Miller

Batch Type: Analysis

MJH = Matthew Hartman
RJR = Ron Rosenbaum
WTR = Bill Reinheimer

Client Sample ID: APMW-11

Lab Sample ID: 180-93968-1

Date Collected: 08/08/19 12:35

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.051**	**J**	0.20	0.026	mg/L			08/21/19 20:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 22:51	1
Barium	**0.053**		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 22:51	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 22:51	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 22:51	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 22:51	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 22:51	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 22:51	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 22:51	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 22:51	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 22:51	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 22:51	1
Lithium	**0.012**		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 22:51	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:43	1

Client Sample ID: APMW-12

Lab Sample ID: 180-93968-2

Date Collected: 08/08/19 11:55

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.072**	**J**	0.20	0.026	mg/L			08/21/19 22:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0010**		0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 23:10	1
Barium	**0.065**		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 23:10	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 23:10	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:10	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 23:10	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 23:10	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 23:10	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:10	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 23:10	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 23:10	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 23:10	1
Lithium	**0.016**		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 23:10	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:43	1

Client Sample ID: APMW-1R

Lab Sample ID: 180-93968-3

Date Collected: 08/08/19 12:25

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.21**	**J**	1.0	0.13	mg/L			08/22/19 00:47	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0012**		0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 22:55	1
Barium	**0.93**		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 22:55	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 22:55	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 22:55	1
Cobalt	**0.00017**	**J**	0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 22:55	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 22:55	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 22:55	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 22:55	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 22:55	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 22:55	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 22:55	1
Lithium	**0.012**		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 22:55	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:44	1

Client Sample ID: APMW-2

Lab Sample ID: 180-93968-4

Date Collected: 08/08/19 14:10

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.19**	**J**	1.0	0.13	mg/L			08/22/19 01:03	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00035**	**J**	0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 23:33	1
Barium	**3.2**		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 23:33	1
Beryllium	**0.00061**	**J**	0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 23:33	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:33	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 23:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 23:33	1
Molybdenum	**0.00079**	**J**	0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 23:33	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:33	1
Antimony	**0.0014**	**J**	0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 23:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 23:33	1
Thallium	**0.00084**	**J**	0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 23:33	1
Lithium	**0.031**		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 23:33	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:45	1

Client Sample ID: EB-01

Date Collected: 08/08/19 12:00
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-5
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.026**	**J**	0.20	0.026	mg/L			08/21/19 19:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 23:38	1
Barium	<0.0016		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 23:38	1
Beryllium	**0.00027**	**J**	0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 23:38	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:38	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 23:38	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 23:38	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 23:38	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:38	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 23:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 23:38	1
Thallium	**0.00031**	**J**	0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 23:38	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 23:38	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:46	1

Client Sample ID: DUP-01

Date Collected: 08/08/19 11:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-6
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.051**	**J**	0.20	0.026	mg/L			08/22/19 02:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 23:43	1
Barium	**0.048**		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 23:43	1
Beryllium	**0.00023**	**J**	0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 23:43	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:43	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 23:43	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 23:43	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 23:43	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:43	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 23:43	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 23:43	1
Thallium	**0.00025**	**J**	0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 23:43	1
Lithium	**0.010**		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 23:43	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:51	1

Client Sample ID: FB-01

Lab Sample ID: 180-93968-7

Date Collected: 08/08/19 13:45

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			08/21/19 20:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 23:48	1
Barium	<0.0016		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 23:48	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 23:48	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:48	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 23:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 23:48	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 23:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:48	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 23:48	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 23:48	1
Thallium	**0.00018**	**J**	0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 23:48	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 23:48	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:52	1

Client Sample ID: APWM-10

Lab Sample ID: 180-93968-8

Date Collected: 08/08/19 13:48

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.58**		0.50	0.066	mg/L			08/22/19 02:06	2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.11**		0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 23:52	1
Barium	**0.24**		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 23:52	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 23:52	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:52	1
Cobalt	**0.00012**	**J**	0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 23:52	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 23:52	1
Molybdenum	**0.11**		0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 23:52	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 23:52	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 23:52	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 23:52	1
Thallium	**0.00015**	**J**	0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 23:52	1
Lithium	**0.018**		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 23:52	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:53	1

Client Sample ID: APWM-9

Lab Sample ID: 180-93968-9

Date Collected: 08/08/19 17:00

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.20**	**J**	1.0	0.13	mg/L			08/22/19 01:19	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0012**		0.0010	0.00032	mg/L		08/14/19 12:14	08/24/19 00:07	1
Barium	**0.42**		0.010	0.0016	mg/L		08/14/19 12:14	08/24/19 00:07	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/24/19 00:07	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:07	1
Cobalt	**0.000084**	**J**	0.00050	0.000075	mg/L		08/14/19 12:14	08/24/19 00:07	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/24/19 00:07	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/24/19 00:07	1
Lead	**0.00013**	**J**	0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:07	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/24/19 00:07	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/24/19 00:07	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/24/19 00:07	1
Lithium	**0.0053**		0.0050	0.0034	mg/L		08/14/19 12:14	08/24/19 00:07	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:54	1

Client Sample ID: APWM-3

Lab Sample ID: 180-93968-10

Date Collected: 08/08/19 16:25

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.80**	**J**	5.0	0.66	mg/L			08/21/19 22:09	25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.074**		0.0010	0.00032	mg/L		08/14/19 12:14	08/24/19 00:11	1
Barium	**0.10**		0.010	0.0016	mg/L		08/14/19 12:14	08/24/19 00:11	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/24/19 00:11	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:11	1
Cobalt	**0.0019**		0.00050	0.000075	mg/L		08/14/19 12:14	08/24/19 00:11	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/24/19 00:11	1
Molybdenum	**0.073**		0.0050	0.00061	mg/L		08/14/19 12:14	08/24/19 00:11	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:11	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/24/19 00:11	1
Selenium	**0.0017**	**J**	0.0050	0.0015	mg/L		08/14/19 12:14	08/24/19 00:11	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/24/19 00:11	1
Lithium	**0.076**		0.0050	0.0034	mg/L		08/14/19 12:14	08/24/19 00:11	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:55	1

Client Sample ID: APWM-4

Lab Sample ID: 180-93968-11

Date Collected: 08/09/19 08:30

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.51**	**F1**	0.20	0.026	mg/L			08/21/19 22:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.018**		0.0010	0.00032	mg/L		08/14/19 12:14	08/24/19 00:16	1
Barium	**0.33**		0.010	0.0016	mg/L		08/14/19 12:14	08/24/19 00:16	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/24/19 00:16	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:16	1
Cobalt	**0.0034**		0.00050	0.000075	mg/L		08/14/19 12:14	08/24/19 00:16	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/24/19 00:16	1
Molybdenum	**0.012**		0.0050	0.00061	mg/L		08/14/19 12:14	08/24/19 00:16	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:16	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/24/19 00:16	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/24/19 00:16	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/24/19 00:16	1
Lithium	**0.061**		0.0050	0.0034	mg/L		08/14/19 12:14	08/24/19 00:16	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:56	1

Client Sample ID: APWM-5

Lab Sample ID: 180-93968-12

Date Collected: 08/09/19 10:10

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.66		5.0	0.66	mg/L			08/21/19 22:25	25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.24**		0.0010	0.00032	mg/L		08/14/19 12:14	08/24/19 00:21	1
Barium	**0.11**		0.010	0.0016	mg/L		08/14/19 12:14	08/24/19 00:21	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/24/19 00:21	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:21	1
Cobalt	**0.000075**	**J**	0.00050	0.000075	mg/L		08/14/19 12:14	08/24/19 00:21	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/24/19 00:21	1
Molybdenum	**0.15**		0.0050	0.00061	mg/L		08/14/19 12:14	08/24/19 00:21	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:21	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/24/19 00:21	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/24/19 00:21	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/24/19 00:21	1
Lithium	**0.049**		0.0050	0.0034	mg/L		08/14/19 12:14	08/24/19 00:21	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:57	1

Client Sample ID: APWM-6R

Lab Sample ID: 180-93968-13

Date Collected: 08/09/19 08:10

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.26		2.0	0.26	mg/L			08/21/19 23:44	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.16**		0.0010	0.00032	mg/L		08/14/19 12:14	08/24/19 00:26	1
Barium	**0.058**		0.010	0.0016	mg/L		08/14/19 12:14	08/24/19 00:26	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/24/19 00:26	1
Cadmium	**0.00014**	**J**	0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:26	1
Cobalt	**0.0022**		0.00050	0.000075	mg/L		08/14/19 12:14	08/24/19 00:26	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/24/19 00:26	1
Molybdenum	**0.48**		0.0050	0.00061	mg/L		08/14/19 12:14	08/24/19 00:26	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:26	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/24/19 00:26	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/24/19 00:26	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/24/19 00:26	1
Lithium	**0.063**		0.0050	0.0034	mg/L		08/14/19 12:14	08/24/19 00:26	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:58	1

Client Sample ID: APWM-7

Lab Sample ID: 180-93968-14

Date Collected: 08/09/19 09:40

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.22**	**J**	1.0	0.13	mg/L			08/22/19 01:35	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00053**	**J**	0.0010	0.00032	mg/L		08/14/19 12:14	08/24/19 00:30	1
Barium	**0.76**		0.010	0.0016	mg/L		08/14/19 12:14	08/24/19 00:30	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/24/19 00:30	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:30	1
Cobalt	**0.00025**	**J**	0.00050	0.000075	mg/L		08/14/19 12:14	08/24/19 00:30	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/24/19 00:30	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/24/19 00:30	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/24/19 00:30	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/24/19 00:30	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/24/19 00:30	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/24/19 00:30	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/14/19 12:14	08/24/19 00:30	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:59	1

Client Sample ID: APWM-8

Lab Sample ID: 180-93968-15

Date Collected: 08/09/19 11:20

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.90**	**J**	2.0	0.26	mg/L			08/22/19 01:51	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.052**		0.0010	0.00032	mg/L		08/15/19 11:57	08/24/19 00:49	1
Barium	**0.20**		0.010	0.0016	mg/L		08/15/19 11:57	08/24/19 00:49	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/15/19 11:57	08/24/19 00:49	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 00:49	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/15/19 11:57	08/24/19 00:49	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/15/19 11:57	08/24/19 00:49	1
Molybdenum	**0.12**		0.0050	0.00061	mg/L		08/15/19 11:57	08/24/19 00:49	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 00:49	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/15/19 11:57	08/24/19 00:49	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/15/19 11:57	08/24/19 00:49	1
Thallium	**0.00025**	**J B**	0.0010	0.00015	mg/L		08/15/19 11:57	08/24/19 00:49	1
Lithium	**0.086**		0.0050	0.0034	mg/L		08/15/19 11:57	08/24/19 00:49	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 10:00	1

Client Sample ID: EB-02

Lab Sample ID: 180-93968-16

Date Collected: 08/09/19 08:15

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			08/21/19 21:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		08/15/19 11:57	08/24/19 00:54	1
Barium	<0.0016		0.010	0.0016	mg/L		08/15/19 11:57	08/24/19 00:54	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/15/19 11:57	08/24/19 00:54	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 00:54	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/15/19 11:57	08/24/19 00:54	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/15/19 11:57	08/24/19 00:54	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/15/19 11:57	08/24/19 00:54	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 00:54	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/15/19 11:57	08/24/19 00:54	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/15/19 11:57	08/24/19 00:54	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/15/19 11:57	08/24/19 00:54	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/15/19 11:57	08/24/19 00:54	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 10:03	1

Client Sample ID: FB-02

Lab Sample ID: 180-93968-17

Date Collected: 08/09/19 09:35

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.030**	**J**	0.20	0.026	mg/L			08/21/19 21:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		08/15/19 11:57	08/24/19 01:08	1
Barium	<0.0016		0.010	0.0016	mg/L		08/15/19 11:57	08/24/19 01:08	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/15/19 11:57	08/24/19 01:08	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 01:08	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/15/19 11:57	08/24/19 01:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/15/19 11:57	08/24/19 01:08	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/15/19 11:57	08/24/19 01:08	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 01:08	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/15/19 11:57	08/24/19 01:08	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/15/19 11:57	08/24/19 01:08	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/15/19 11:57	08/24/19 01:08	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/15/19 11:57	08/24/19 01:08	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 10:04	1

Client Sample ID: DUP-02

Lab Sample ID: 180-93968-18

Date Collected: 08/09/19 07:15

Matrix: Water

Date Received: 08/10/19 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.26		2.0	0.26	mg/L			08/22/19 00:00	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.15**		0.0010	0.00032	mg/L		08/15/19 11:57	08/24/19 01:12	1
Barium	**0.053**		0.010	0.0016	mg/L		08/15/19 11:57	08/24/19 01:12	1
Beryllium	**0.00018**	**J**	0.0010	0.00018	mg/L		08/15/19 11:57	08/24/19 01:12	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 01:12	1
Cobalt	**0.0020**		0.00050	0.000075	mg/L		08/15/19 11:57	08/24/19 01:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/15/19 11:57	08/24/19 01:12	1
Molybdenum	**0.43**		0.0050	0.00061	mg/L		08/15/19 11:57	08/24/19 01:12	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 01:12	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/15/19 11:57	08/24/19 01:12	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/15/19 11:57	08/24/19 01:12	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/15/19 11:57	08/24/19 01:12	1
Lithium	**0.057**		0.0050	0.0034	mg/L		08/15/19 11:57	08/24/19 01:12	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 10:05	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-288735/58
Matrix: Water
Analysis Batch: 288735

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			08/21/19 19:31	1

Lab Sample ID: LCS 180-288735/57
Matrix: Water
Analysis Batch: 288735

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			1.25	1.31		mg/L		105	90 - 110		

Lab Sample ID: 180-93968-1 MS
Matrix: Water
Analysis Batch: 288735

Client Sample ID: APMW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.051	J	1.25	1.36		mg/L		105	80 - 120		

Lab Sample ID: 180-93968-1 MSD
Matrix: Water
Analysis Batch: 288735

Client Sample ID: APMW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.051	J	1.25	1.36		mg/L		104	80 - 120	0	20

Lab Sample ID: 180-93968-11 MS
Matrix: Water
Analysis Batch: 288735

Client Sample ID: APWM-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.51	F1	1.25	1.54		mg/L		83	80 - 120		

Lab Sample ID: 180-93968-11 MSD
Matrix: Water
Analysis Batch: 288735

Client Sample ID: APWM-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.51	F1	1.25	1.48	F1	mg/L		78	80 - 120	4	20

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-288071/1-A
Matrix: Water
Analysis Batch: 289234

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 288071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		08/14/19 12:14	08/23/19 22:13	1
Barium	<0.0016		0.010	0.0016	mg/L		08/14/19 12:14	08/23/19 22:13	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/14/19 12:14	08/23/19 22:13	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 22:13	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/14/19 12:14	08/23/19 22:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/14/19 12:14	08/23/19 22:13	1

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

Lab Sample ID: MB 180-288071/1-A
Matrix: Water
Analysis Batch: 289234

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 288071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/14/19 12:14	08/23/19 22:13	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/14/19 12:14	08/23/19 22:13	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/14/19 12:14	08/23/19 22:13	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/14/19 12:14	08/23/19 22:13	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/14/19 12:14	08/23/19 22:13	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/14/19 12:14	08/23/19 22:13	1

Lab Sample ID: LCS 180-288071/2-A
Matrix: Water
Analysis Batch: 289234

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 288071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.947		mg/L		95	80 - 120
Barium	1.00	0.923		mg/L		92	80 - 120
Beryllium	0.500	0.425		mg/L		85	80 - 120
Cadmium	0.500	0.525		mg/L		105	80 - 120
Cobalt	0.500	0.425		mg/L		85	80 - 120
Chromium	0.500	0.454		mg/L		91	80 - 120
Molybdenum	0.500	0.517		mg/L		103	80 - 120
Lead	0.500	0.528		mg/L		106	80 - 120
Antimony	0.250	0.241		mg/L		97	80 - 120
Selenium	1.00	0.849		mg/L		85	80 - 120
Thallium	1.00	1.08		mg/L		108	80 - 120
Lithium	0.500	0.518		mg/L		104	80 - 120

Lab Sample ID: 180-93968-2 MS
Matrix: Water
Analysis Batch: 289234

Client Sample ID: APMW-12
Prep Type: Total Recoverable
Prep Batch: 288071

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0010		1.00	0.886		mg/L		88	75 - 125
Barium	0.065		1.00	0.938		mg/L		87	75 - 125
Beryllium	<0.00018		0.500	0.427		mg/L		85	75 - 125
Cadmium	<0.00013		0.500	0.497		mg/L		99	75 - 125
Cobalt	<0.000075		0.500	0.394		mg/L		79	75 - 125
Chromium	<0.0015		0.500	0.440		mg/L		88	75 - 125
Molybdenum	<0.00061		0.500	0.494		mg/L		99	75 - 125
Lead	<0.00013		0.500	0.505		mg/L		101	75 - 125
Antimony	<0.00038		0.250	0.226		mg/L		90	75 - 125
Selenium	<0.0015		1.00	0.791		mg/L		79	75 - 125
Thallium	<0.00015		1.00	1.02		mg/L		102	75 - 125
Lithium	0.016		0.500	0.554		mg/L		108	75 - 125

Lab Sample ID: 180-93968-2 MSD
Matrix: Water
Analysis Batch: 289234

Client Sample ID: APMW-12
Prep Type: Total Recoverable
Prep Batch: 288071

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0010		1.00	0.906		mg/L		90	75 - 125	2	20

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

Lab Sample ID: 180-93968-2 MSD
Matrix: Water
Analysis Batch: 289234

Client Sample ID: APMW-12
Prep Type: Total Recoverable
Prep Batch: 288071

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	0.065		1.00	0.963		mg/L		90	75 - 125	3	20
Beryllium	<0.00018		0.500	0.429		mg/L		86	75 - 125	0	20
Cadmium	<0.00013		0.500	0.507		mg/L		101	75 - 125	2	20
Cobalt	<0.000075		0.500	0.396		mg/L		79	75 - 125	1	20
Chromium	<0.0015		0.500	0.436		mg/L		87	75 - 125	1	20
Molybdenum	<0.00061		0.500	0.509		mg/L		102	75 - 125	3	20
Lead	<0.00013		0.500	0.508		mg/L		102	75 - 125	1	20
Antimony	<0.00038		0.250	0.233		mg/L		93	75 - 125	3	20
Selenium	<0.0015		1.00	0.777		mg/L		78	75 - 125	2	20
Thallium	<0.00015		1.00	1.05		mg/L		105	75 - 125	3	20
Lithium	0.016		0.500	0.560		mg/L		109	75 - 125	1	20

Lab Sample ID: MB 180-288225/1-A
Matrix: Water
Analysis Batch: 289234

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 288225

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		08/15/19 11:57	08/24/19 00:44	1
Barium	<0.0016		0.010	0.0016	mg/L		08/15/19 11:57	08/24/19 00:44	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		08/15/19 11:57	08/24/19 00:44	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 00:44	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		08/15/19 11:57	08/24/19 00:44	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/15/19 11:57	08/24/19 00:44	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		08/15/19 11:57	08/24/19 00:44	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/15/19 11:57	08/24/19 00:44	1
Antimony	<0.00038		0.0020	0.00038	mg/L		08/15/19 11:57	08/24/19 00:44	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/15/19 11:57	08/24/19 00:44	1
Thallium	0.000344	J	0.0010	0.00015	mg/L		08/15/19 11:57	08/24/19 00:44	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/15/19 11:57	08/24/19 00:44	1

Lab Sample ID: LCS 180-288225/2-A
Matrix: Water
Analysis Batch: 289234

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 288225

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.922		mg/L		92	80 - 120
Barium	1.00	0.896		mg/L		90	80 - 120
Beryllium	0.500	0.492		mg/L		98	80 - 120
Cadmium	0.500	0.514		mg/L		103	80 - 120
Cobalt	0.500	0.495		mg/L		99	80 - 120
Chromium	0.500	0.473		mg/L		95	80 - 120
Molybdenum	0.500	0.503		mg/L		101	80 - 120
Lead	0.500	0.513		mg/L		103	80 - 120
Antimony	0.250	0.235		mg/L		94	80 - 120
Selenium	1.00	0.868		mg/L		87	80 - 120
Thallium	1.00	1.05		mg/L		105	80 - 120
Lithium	0.500	0.448		mg/L		90	80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-288767/1-A
Matrix: Water
Analysis Batch: 288996

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		08/21/19 08:32	08/22/19 09:41	1

Lab Sample ID: LCS 180-288767/2-A
Matrix: Water
Analysis Batch: 288996

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 288767

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00250	0.00265		mg/L		106	80 - 120		

Lab Sample ID: 180-93968-18 MS
Matrix: Water
Analysis Batch: 288996

Client Sample ID: DUP-02
Prep Type: Total/NA
Prep Batch: 288767

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.00010		0.00100	0.000941		mg/L		94	75 - 125		

Lab Sample ID: 180-93968-18 MSD
Matrix: Water
Analysis Batch: 288996

Client Sample ID: DUP-02
Prep Type: Total/NA
Prep Batch: 288767

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00010		0.00100	0.000922		mg/L		92	75 - 125	2	20

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-1

HPLC/IC

Analysis Batch: 288735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-1	APMW-11	Total/NA	Water	300.0	
180-93968-2	APMW-12	Total/NA	Water	300.0	
180-93968-3	APMW-1R	Total/NA	Water	300.0	
180-93968-4	APMW-2	Total/NA	Water	300.0	
180-93968-5	EB-01	Total/NA	Water	300.0	
180-93968-6	DUP-01	Total/NA	Water	300.0	
180-93968-7	FB-01	Total/NA	Water	300.0	
180-93968-8	APWM-10	Total/NA	Water	300.0	
180-93968-9	APWM-9	Total/NA	Water	300.0	
180-93968-10	APWM-3	Total/NA	Water	300.0	
180-93968-11	APWM-4	Total/NA	Water	300.0	
180-93968-12	APWM-5	Total/NA	Water	300.0	
180-93968-13	APWM-6R	Total/NA	Water	300.0	
180-93968-14	APWM-7	Total/NA	Water	300.0	
180-93968-15	APWM-8	Total/NA	Water	300.0	
180-93968-16	EB-02	Total/NA	Water	300.0	
180-93968-17	FB-02	Total/NA	Water	300.0	
180-93968-18	DUP-02	Total/NA	Water	300.0	
MB 180-288735/58	Method Blank	Total/NA	Water	300.0	
LCS 180-288735/57	Lab Control Sample	Total/NA	Water	300.0	
180-93968-1 MS	APMW-11	Total/NA	Water	300.0	
180-93968-1 MSD	APMW-11	Total/NA	Water	300.0	
180-93968-11 MS	APWM-4	Total/NA	Water	300.0	
180-93968-11 MSD	APWM-4	Total/NA	Water	300.0	

Metals

Prep Batch: 288071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-1	APMW-11	Total Recoverable	Water	3005A	
180-93968-2	APMW-12	Total Recoverable	Water	3005A	
180-93968-3	APMW-1R	Total Recoverable	Water	3005A	
180-93968-4	APMW-2	Total Recoverable	Water	3005A	
180-93968-5	EB-01	Total Recoverable	Water	3005A	
180-93968-6	DUP-01	Total Recoverable	Water	3005A	
180-93968-7	FB-01	Total Recoverable	Water	3005A	
180-93968-8	APWM-10	Total Recoverable	Water	3005A	
180-93968-9	APWM-9	Total Recoverable	Water	3005A	
180-93968-10	APWM-3	Total Recoverable	Water	3005A	
180-93968-11	APWM-4	Total Recoverable	Water	3005A	
180-93968-12	APWM-5	Total Recoverable	Water	3005A	
180-93968-13	APWM-6R	Total Recoverable	Water	3005A	
180-93968-14	APWM-7	Total Recoverable	Water	3005A	
MB 180-288071/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-288071/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-93968-2 MS	APMW-12	Total Recoverable	Water	3005A	
180-93968-2 MSD	APMW-12	Total Recoverable	Water	3005A	

Prep Batch: 288225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-15	APWM-8	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 288225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-16	EB-02	Total Recoverable	Water	3005A	
180-93968-17	FB-02	Total Recoverable	Water	3005A	
180-93968-18	DUP-02	Total Recoverable	Water	3005A	
MB 180-288225/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-288225/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 288767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-1	APMW-11	Total/NA	Water	7470A	
180-93968-2	APMW-12	Total/NA	Water	7470A	
180-93968-3	APMW-1R	Total/NA	Water	7470A	
180-93968-4	APMW-2	Total/NA	Water	7470A	
180-93968-5	EB-01	Total/NA	Water	7470A	
180-93968-6	DUP-01	Total/NA	Water	7470A	
180-93968-7	FB-01	Total/NA	Water	7470A	
180-93968-8	APWM-10	Total/NA	Water	7470A	
180-93968-9	APWM-9	Total/NA	Water	7470A	
180-93968-10	APWM-3	Total/NA	Water	7470A	
180-93968-11	APWM-4	Total/NA	Water	7470A	
180-93968-12	APWM-5	Total/NA	Water	7470A	
180-93968-13	APWM-6R	Total/NA	Water	7470A	
180-93968-14	APWM-7	Total/NA	Water	7470A	
180-93968-15	APWM-8	Total/NA	Water	7470A	
180-93968-16	EB-02	Total/NA	Water	7470A	
180-93968-17	FB-02	Total/NA	Water	7470A	
180-93968-18	DUP-02	Total/NA	Water	7470A	
MB 180-288767/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-288767/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-93968-18 MS	DUP-02	Total/NA	Water	7470A	
180-93968-18 MSD	DUP-02	Total/NA	Water	7470A	

Analysis Batch: 288996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-1	APMW-11	Total/NA	Water	EPA 7470A	288767
180-93968-2	APMW-12	Total/NA	Water	EPA 7470A	288767
180-93968-3	APMW-1R	Total/NA	Water	EPA 7470A	288767
180-93968-4	APMW-2	Total/NA	Water	EPA 7470A	288767
180-93968-5	EB-01	Total/NA	Water	EPA 7470A	288767
180-93968-6	DUP-01	Total/NA	Water	EPA 7470A	288767
180-93968-7	FB-01	Total/NA	Water	EPA 7470A	288767
180-93968-8	APWM-10	Total/NA	Water	EPA 7470A	288767
180-93968-9	APWM-9	Total/NA	Water	EPA 7470A	288767
180-93968-10	APWM-3	Total/NA	Water	EPA 7470A	288767
180-93968-11	APWM-4	Total/NA	Water	EPA 7470A	288767
180-93968-12	APWM-5	Total/NA	Water	EPA 7470A	288767
180-93968-13	APWM-6R	Total/NA	Water	EPA 7470A	288767
180-93968-14	APWM-7	Total/NA	Water	EPA 7470A	288767
180-93968-15	APWM-8	Total/NA	Water	EPA 7470A	288767
180-93968-16	EB-02	Total/NA	Water	EPA 7470A	288767
180-93968-17	FB-02	Total/NA	Water	EPA 7470A	288767
180-93968-18	DUP-02	Total/NA	Water	EPA 7470A	288767

Metals (Continued)

Analysis Batch: 288996 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-288767/1-A	Method Blank	Total/NA	Water	EPA 7470A	288767
LCS 180-288767/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	288767
180-93968-18 MS	DUP-02	Total/NA	Water	EPA 7470A	288767
180-93968-18 MSD	DUP-02	Total/NA	Water	EPA 7470A	288767

Analysis Batch: 289234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-1	APMW-11	Total Recoverable	Water	EPA 6020	288071
180-93968-2	APMW-12	Total Recoverable	Water	EPA 6020	288071
180-93968-3	APMW-1R	Total Recoverable	Water	EPA 6020	288071
180-93968-4	APMW-2	Total Recoverable	Water	EPA 6020	288071
180-93968-5	EB-01	Total Recoverable	Water	EPA 6020	288071
180-93968-6	DUP-01	Total Recoverable	Water	EPA 6020	288071
180-93968-7	FB-01	Total Recoverable	Water	EPA 6020	288071
180-93968-8	APWM-10	Total Recoverable	Water	EPA 6020	288071
180-93968-9	APWM-9	Total Recoverable	Water	EPA 6020	288071
180-93968-10	APWM-3	Total Recoverable	Water	EPA 6020	288071
180-93968-11	APWM-4	Total Recoverable	Water	EPA 6020	288071
180-93968-12	APWM-5	Total Recoverable	Water	EPA 6020	288071
180-93968-13	APWM-6R	Total Recoverable	Water	EPA 6020	288071
180-93968-14	APWM-7	Total Recoverable	Water	EPA 6020	288071
180-93968-15	APWM-8	Total Recoverable	Water	EPA 6020	288225
180-93968-16	EB-02	Total Recoverable	Water	EPA 6020	288225
180-93968-17	FB-02	Total Recoverable	Water	EPA 6020	288225
180-93968-18	DUP-02	Total Recoverable	Water	EPA 6020	288225
MB 180-288071/1-A	Method Blank	Total Recoverable	Water	EPA 6020	288071
MB 180-288225/1-A	Method Blank	Total Recoverable	Water	EPA 6020	288225
LCS 180-288071/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	288071
LCS 180-288225/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	288225
180-93968-2 MS	APMW-12	Total Recoverable	Water	EPA 6020	288071
180-93968-2 MSD	APMW-12	Total Recoverable	Water	EPA 6020	288071

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Philip Evans / Trevor Braddock	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-53452-11171.1
Client Contact: Rick Hagendorfer	Phone: 850-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: RDH Environmental Services Inc				Job #:

Address: 5720 Dove Drive	Due Date Requested:	Analysis Requested
City: Pace	TAT Requested (days): Hold until further instruction	
State, Zip: FL, 32571		
Phone: 205-992-5417(Tel)	PO #: SCS10382606	
Email: rickhagendorfer@gmail.com	WO #:	
Project Name: CCR - Plant Watson Special	Project #: 18020186	
Site:	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	300_ORGFM_28D - Fluoride,	6020, 7470A	Total Number of containers	Note:
			Preservation Code:				D	N	D		
APMW-11	8/8/19	1235	G	Water			X	X	X		
APMW-12		1155		Water							
APMW-1R		1225		Water							
APMW-2		1410		Water							
EB-01		1200		Water							
DUP-01		1135		Water							
FB-01		1345		Water							
APMW-10		1348		Water							
APMW-9		1700		Water							
APMW-3	8/8/19	1625	G	Water			X	X	X		
				Water							

180-93968 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/9/19 1200	RDH		8-10-19	TAL H
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 930	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Philip Evans / Trevor Braddock	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-53452-11171.2
Client Contact: Rick Hagendorfer	Phone: 850-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: RDH Environmental Services Inc				Job #:

Address: 5720 Dove Drive	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Pace	TAT Requested (days): Hold until further instruction		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: FL, 32571			
Phone: 205-992-5417(Tel)	PO #: SCS10382606		Other:
Email: rickhagendorfer@gmail.com	WO #:		
Project Name: CCR - Plant Watson Special	Project #: 18020186		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	300_ORGFM_28D - Fluoride,	6020, 7470A	Total Number of containers	Special Instructions/Note:
				Preservation Code:			D	N	D		
APMW-4	8/9/19	0930	G	Water			X	X	X		
APMW-5		1010		Water							
APMW-6R		0810		Water							
APMW-7		0940		Water							
APMW-8		1120		Water							
EB-02		0815		Water							
FB-02		0935		Water							
DUP-02	8/9/19	0715	G	Water			X	X	X		
				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/9/19 1200	Company: RDH	Received by:	Date/Time: 8-10-19	Company: TAPLA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 9:30	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

180-93968 Waybill

RT 639 5 12:00
ST 9

Uncorrected temp
Thermometer ID
CF Initials
PT-WI-SR-001 effective 11/8/18

XO AGCA
15238 PIT
PA-US

MPS# 7890 3064 3407
0263
Mstr# 7890 3064 3381
0201
3 of 4

SATURDAY 12:00P
PRIORITY OVERNIGHT

FedEx Express

SAMPLE RECEIVING
TEST AMERICA PITTSBURGH
301 ALPHA DR
RETURNS
PITTSBURGH PA 15238
(412) 963-7068

o Not Lift Using This Ta

ORIGIN ID (350) 336-0192
RICK HAC
DH
720

SHIP DATE: 09AUG19
ACTWGT: 71.70 LB
CAD: 006993800/SSFE2010
DIMS: 24x14x14 IN
BILL TH RD PARTY

S CEIVING
TE A ICA PITTSBURGH
DR
GH PA 15238
REF
DEPT:

FedEx
Express
E
J192019062401uv

567J3/E3E7/05A2
Part # 156297-435 RRDB2 EXP 12/19

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0201 7890 3664 3381
MASTER
XO AGCA

15238
PA-US PIT

Uncorrected temp 1.9 °C
Thermometer ID 12
CF -0.6 Initials JJ
PT-WI-SR-001 effective 11/8/18

56297-435 RRDB2 EXP 12/19

5673J/E9E7/05A2

PRIORITY

AMERICA PITTSBURGH
301 ALPHA DR
RETURNS
PITTSBURGH PA 15238
(412) 963-7068 REF:
INV:
PO: DEPT:

FedEx Express

JJ92019062401 AR

2 of 4
MPS# 7890 3064 3392
0263
Mstr# 7890 3064 3381

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PA-US PIT

Uncorrected temp 16 °C
Thermometer ID 12
CF 0.0 Initials R

PT-WI-SR-001 effective 11/8/18

Do Not Lift Using This Tag

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH
5720 DOVE DR
PACE, FL 32571
UNITED STATES US

SHIP DATE: 09AUG19
ACTWGT: 60.60 LB
CAD: 006993800/SSFE2010
DIMS: 24x14x14 IN
BILL THIRD PARTY

SAMPLE RECEIVING
TEST AMERICA PITTSBURGH
301 ALPHA DR
RETURNS
PITTSBURGH PA 15238

(412) 963-7058 REF:
INV:
PO:
DEPT:

FedEx Express

SATURDAY 12:00P
PRIORITY OVERNIGHT

4 of 4
MPS# 7899 3064 3418
0263
Mstr# 7899 3064 3381
0201

XO AGCA

15238
PIT
PA-US

Uncorrected temp
Thermometer ID
CF -0.6
Initials TJ
PT-WI-SR-001 effective 11/8/18

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-370968.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-93968-1
Address: 13715 Rider Trail North,	Due Date Requested: 8/22/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson Special	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APMW-11 (180-93968-1)	8/8/19	12:35 Eastern		Water			X	X	X	2	
APMW-12 (180-93968-2)	8/8/19	11:55 Eastern		Water			X	X	X	2	
APMW-1R (180-93968-3)	8/8/19	12:25 Eastern		Water			X	X	X	2	
APMW-2 (180-93968-4)	8/8/19	14:10 Eastern		Water			X	X	X	2	
EB-01 (180-93968-5)	8/8/19	12:00 Eastern		Water			X	X	X	2	
DUP-01 (180-93968-6)	8/8/19	11:35 Eastern		Water			X	X	X	2	
FB-01 (180-93968-7)	8/8/19	13:45 Eastern		Water			X	X	X	2	
APWM-10 (180-93968-8)	8/8/19	13:48 Eastern		Water			X	X	X	2	
APWM-9 (180-93968-9)	8/8/19	17:00 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time:

Method of Shipment:

Relinquished by:	Date/Time: 8/13/19 1730	Company	Received by: Michael Hum	Date/Time: 8-14-19 0900	Company TA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-370968.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-93968-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/22/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson Special	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APWM-3 (180-93968-10)	8/8/19	16:25 Eastern		Water			X	X	X	2	
APWM-4 (180-93968-11)	8/9/19	08:30 Eastern		Water			X	X	X	2	
APWM-5 (180-93968-12)	8/9/19	10:10 Eastern		Water			X	X	X	2	
APWM-6R (180-93968-13)	8/9/19	08:10 Eastern		Water			X	X	X	2	
APWM-7 (180-93968-14)	8/9/19	09:40 Eastern		Water			X	X	X	2	
APWM-8 (180-93968-15)	8/9/19	11:20 Eastern		Water			X	X	X	2	
EB-02 (180-93968-16)	8/9/19	08:15 Eastern		Water			X	X	X	2	
FB-02 (180-93968-17)	8/9/19	09:35 Eastern		Water			X	X	X	2	
DUP-02 (180-93968-18)	8/9/19	07:15 Eastern		Water			X	X	X	2	

180-93968-01 Chain of Custody

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/13/19 1700	DAT		8-14-19 09:00	TAL
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-93968-1

Login Number: 93968
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

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

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-93968-2
Client Project/Site: CCR - Plant Watson Special

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
9/30/2019 1:23:16 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

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

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

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-93968-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-93968-2

Comments
No additional comments.

Receipt
The samples were received on 8/10/2019 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.8º C, 1.0º C, 1.3º C and 1.4º C.

RAD
Method(s) 903.0, 9315: Radium-228 Prep Batch 160-439605

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

APMW-11 (180-93968-1), APMW-12 (180-93968-2), APMW-1R (180-93968-3), APMW-2 (180-93968-4), EB-01 (180-93968-5), DUP-01 (180-93968-6), FB-01 (180-93968-7), APWM-10 (180-93968-8), APWM-9 (180-93968-9), APWM-3 (180-93968-10), APWM-4 (180-93968-11), APWM-5 (180-93968-12), APWM-6R (180-93968-13), APWM-7 (180-93968-14), APWM-8 (180-93968-15), EB-02 (180-93968-16), FB-02 (180-93968-17), DUP-02 (180-93968-18), (LCS 160-439605/1-A), (MB 160-439605/22-A), (160-35315-A-1-A) and (160-35315-B-1-A DU)

Method(s) 903.0, 9315: Ra-226 Prep Batch 160-439605

The following samples exhibited a negative result greater in magnitude than the 3 sigma TPU. This occurrence was evaluated and determined to be random in nature. Sporadic occurrences such as this are statistically expected. No further action is required.

FB-01 (180-93968-7) and (160-35315-A-1-A)

Method(s) 904.0, 9320: Ra-228 Prep Batch 160-439618

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

APMW-11 (180-93968-1), APMW-12 (180-93968-2), APMW-1R (180-93968-3), APMW-2 (180-93968-4), EB-01 (180-93968-5), DUP-01 (180-93968-6), FB-01 (180-93968-7), APWM-10 (180-93968-8), APWM-9 (180-93968-9), APWM-3 (180-93968-10), APWM-4 (180-93968-11), APWM-5 (180-93968-12), APWM-6R (180-93968-13), APWM-7 (180-93968-14), APWM-8 (180-93968-15), EB-02 (180-93968-16), FB-02 (180-93968-17), DUP-02 (180-93968-18), (LCS 160-439618/1-A), (MB 160-439618/22-A), (160-35315-A-1-B) and (160-35315-B-1-B DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Qualifiers

Rad

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

Glossary

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

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-93968-2
Project/Site: CCR - Plant Watson Special

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
Arkansas DEQ	State Program	88-0690	06-27-20
California	State	2891	04-30-20
California	State Program	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Connecticut	State Program	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Florida	NELAP	E871008	06-30-20
Illinois	NELAP	200005	06-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (UST)	State Program	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Kentucky (WW)	State Program	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
Nevada	State Program	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	03-31-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State Program	434	12-31-19
North Dakota	State	R-227	04-30-20
North Dakota	State Program	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
Rhode Island	State Program	LAO00362	12-30-19
South Carolina	State Program	89014	04-30-20
Texas	NELAP	T104704528-15-2	03-31-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462015-4	05-31-20
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	460189	09-14-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
West Virginia DEP	State Program	142	01-31-20
Wisconsin	State	998027800	08-31-20
Wisconsin	State Program	998027800	08-31-20

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-93968-2
Project/Site: CCR - Plant Watson Special

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	DoD	L2305	04-06-22
ANAB	DOE	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-19
Arizona	State Program	AZ0813	12-08-19 *
California	State	2886	06-30-20
California	State Program	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Connecticut	State Program	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
Florida	NELAP	E87689	06-30-20
Hawaii	State Program	NA	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	200023	11-30-19
Illinois	NELAP	004553	11-30-19
Iowa	State Program	373	12-01-20
Kansas	NELAP	E-10236	10-31-19 *
Kentucky (DW)	State	KY90125	12-31-19
Kentucky (DW)	State Program	KY90125	12-31-19
Louisiana	NELAP	04080	06-30-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	NELAP	LA011	12-31-19
Louisiana (DW)	State	LA011	12-31-19
Maryland	State	310	09-30-20
Maryland	State Program	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Michigan	State Program	9005	06-30-20
Missouri	State	780	06-30-22
Missouri	State Program	780	06-30-20
Nevada	State	MO000542020-1	07-31-20
Nevada	State Program	MO000542018-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	03-31-20
New York	NELAP	11616	04-01-20
North Dakota	State	R-207	06-30-20
North Dakota	State Program	R207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Oklahoma	State Program	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-20
Pennsylvania	NELAP	68-00540	02-28-20
South Carolina	State	85002001	06-30-20
South Carolina	State Program	85002001	06-30-20
Texas	NELAP	T104704193-19-14	07-31-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	Federal	058448	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-93968-2
Project/Site: CCR - Plant Watson Special

Laboratory: Eurofins TestAmerica, St. Louis (Continued)

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

Authority	Program	Identification Number	Expiration Date
USDA	Federal	P330-17-0028	02-02-20
USDA	US Federal Programs	P330-17-00028	02-02-20
Utah	NELAP	MO000542019-11	07-31-20
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	460230	06-14-20
Virginia	NELAP	10310	06-14-20
Washington	State Program	C592	08-30-19 *
West Virginia DEP	State Program	381	10-31-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-93968-1	APMW-11	Water	08/08/19 12:35	08/10/19 09:30	
180-93968-2	APMW-12	Water	08/08/19 11:55	08/10/19 09:30	
180-93968-3	APMW-1R	Water	08/08/19 12:25	08/10/19 09:30	
180-93968-4	APMW-2	Water	08/08/19 14:10	08/10/19 09:30	
180-93968-5	EB-01	Water	08/08/19 12:00	08/10/19 09:30	
180-93968-6	DUP-01	Water	08/08/19 11:35	08/10/19 09:30	
180-93968-7	FB-01	Water	08/08/19 13:45	08/10/19 09:30	
180-93968-8	APWM-10	Water	08/08/19 13:48	08/10/19 09:30	
180-93968-9	APWM-9	Water	08/08/19 17:00	08/10/19 09:30	
180-93968-10	APWM-3	Water	08/08/19 16:25	08/10/19 09:30	
180-93968-11	APWM-4	Water	08/09/19 08:30	08/10/19 09:30	
180-93968-12	APWM-5	Water	08/09/19 10:10	08/10/19 09:30	
180-93968-13	APWM-6R	Water	08/09/19 08:10	08/10/19 09:30	
180-93968-14	APWM-7	Water	08/09/19 09:40	08/10/19 09:30	
180-93968-15	APWM-8	Water	08/09/19 11:20	08/10/19 09:30	
180-93968-16	EB-02	Water	08/09/19 08:15	08/10/19 09:30	
180-93968-17	FB-02	Water	08/09/19 09:35	08/10/19 09:30	
180-93968-18	DUP-02	Water	08/09/19 07:15	08/10/19 09:30	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Client Sample ID: APMW-11
Date Collected: 08/08/19 12:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.01 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 16:06	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.01 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:00	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-12
Date Collected: 08/08/19 11:55
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.26 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 16:06	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.26 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:00	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-1R
Date Collected: 08/08/19 12:25
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.07 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 16:06	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.07 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:01	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-2
Date Collected: 08/08/19 14:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.52 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 16:07	CJQ	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Client Sample ID: APMW-2
Date Collected: 08/08/19 14:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.52 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:01	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-01
Date Collected: 08/08/19 12:00
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.37 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 16:07	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.37 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:01	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-01
Date Collected: 08/08/19 11:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.27 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 16:07	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.27 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:01	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-01
Date Collected: 08/08/19 13:45
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.58 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 16:07	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.58 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:02	CDR	TAL SL
	Instrument ID: GFPCORANGE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Client Sample ID: FB-01
Date Collected: 08/08/19 13:45
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL

Client Sample ID: APWM-10
Date Collected: 08/08/19 13:48
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.14 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 16:07	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.14 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:02	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APWM-9
Date Collected: 08/08/19 17:00
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.17 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442833	09/13/19 16:08	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APWM-3
Date Collected: 08/08/19 16:25
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.30 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442833	09/13/19 16:08	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.30 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Client Sample ID: APWM-4
Date Collected: 08/09/19 08:30
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.37 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 18:02	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.37 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APWM-5
Date Collected: 08/09/19 10:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.40 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 18:02	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.40 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APWM-6R
Date Collected: 08/09/19 08:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.17 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 18:02	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APWM-7
Date Collected: 08/09/19 09:40
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.13 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 18:02	CJQ	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Client Sample ID: APWM-7
Date Collected: 08/09/19 09:40
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.13 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APWM-8
Date Collected: 08/09/19 11:20
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.12 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 18:02	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.12 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-02
Date Collected: 08/09/19 08:15
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.69 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 18:02	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.69 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442563	09/10/19 13:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-02
Date Collected: 08/09/19 09:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.76 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 18:02	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.76 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442559	09/10/19 13:05	CDR	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Client Sample ID: FB-02
Date Collected: 08/09/19 09:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL

Client Sample ID: DUP-02
Date Collected: 08/09/19 07:15
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.58 mL	1.0 g	439605	08/15/19 08:51	KAW	TAL SL
Total/NA	Analysis	9315		1			442834	09/13/19 18:03	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.58 mL	1.0 g	439618	08/15/19 09:51	KAW	TAL SL
Total/NA	Analysis	9320		1			442559	09/10/19 13:06	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			443515	09/20/19 08:54	SMP	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

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

Analyst References:

Lab: TAL SL

Batch Type: Prep

KAW = Kayla Walker

Batch Type: Analysis

CDR = Conrad Reuscher
CJQ = Caleb Quinn
KLS = Kody Saulters
SMP = Siobhan Perry

Client Sample ID: APMW-11

Date Collected: 08/08/19 12:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-1
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.108	U	0.116	0.116	1.00	0.185	pCi/L	08/15/19 08:51	09/13/19 16:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.2*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.428	U	0.326	0.329	1.00	0.518	pCi/L	08/15/19 09:51	09/10/19 13:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.2*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:00*	*1*
Y Carrier	*86.0*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.535**		0.346	0.349	5.00	0.518	pCi/L		09/20/19 08:54	1

Client Sample ID: APMW-12

Date Collected: 08/08/19 11:55
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-2
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.149	U	0.117	0.118	1.00	0.169	pCi/L	08/15/19 08:51	09/13/19 16:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.113	U	0.301	0.302	1.00	0.519	pCi/L	08/15/19 09:51	09/10/19 13:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:00*	*1*
Y Carrier	*82.6*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:00*	*1*

Client Sample ID: APMW-12

Lab Sample ID: 180-93968-2
Matrix: Water
Date Collected: 08/08/19 11:55
Date Received: 08/10/19 09:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.262	U	0.323	0.324	5.00	0.519	pCi/L		09/20/19 08:54	1

Client Sample ID: APMW-1R

Lab Sample ID: 180-93968-3
Matrix: Water
Date Collected: 08/08/19 12:25
Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**3.84**		0.458	0.574	1.00	0.205	pCi/L	08/15/19 08:51	09/13/19 16:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**3.68**		0.500	0.604	1.00	0.496	pCi/L	08/15/19 09:51	09/10/19 13:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:01*	*1*
Y Carrier	*95.3*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:01*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**7.52**		0.678	0.833	5.00	0.496	pCi/L		09/20/19 08:54	1

Client Sample ID: APMW-2

Lab Sample ID: 180-93968-4
Matrix: Water
Date Collected: 08/08/19 14:10
Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**12.7**		0.719	1.35	1.00	0.170	pCi/L	08/15/19 08:51	09/13/19 16:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:07*	*1*

Client Sample ID: APMW-2

Lab Sample ID: 180-93968-4

Date Collected: 08/08/19 14:10

Matrix: Water

Date Received: 08/10/19 09:30

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.98		0.542	0.772	1.00	0.381	pCi/L	08/15/19 09:51	09/10/19 13:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:01*	*1*
Y Carrier	*89.0*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:01*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	18.7		0.900	1.56	5.00	0.381	pCi/L		09/20/19 08:54	1

Client Sample ID: EB-01

Lab Sample ID: 180-93968-5

Date Collected: 08/08/19 12:00

Matrix: Water

Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0336	U	0.0931	0.0931	1.00	0.176	pCi/L	08/15/19 08:51	09/13/19 16:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:07*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0754	U	0.249	0.249	1.00	0.457	pCi/L	08/15/19 09:51	09/10/19 13:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:01*	*1*
Y Carrier	*91.2*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:01*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0418	U	0.266	0.266	5.00	0.457	pCi/L		09/20/19 08:54	1

Client Sample ID: DUP-01

Date Collected: 08/08/19 11:35
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-6

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.183		0.126	0.127	1.00	0.175	pCi/L	08/15/19 08:51	09/13/19 16:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:07*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.363	U	0.298	0.299	1.00	0.577	pCi/L	08/15/19 09:51	09/10/19 13:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:01*	*1*
Y Carrier	*83.4*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:01*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.180	U	0.324	0.325	5.00	0.577	pCi/L		09/20/19 08:54	1

Client Sample ID: FB-01

Date Collected: 08/08/19 13:45
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-7

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.152	U	0.0671	0.0685	1.00	0.214	pCi/L	08/15/19 08:51	09/13/19 16:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:07*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.128	U	0.274	0.274	1.00	0.504	pCi/L	08/15/19 09:51	09/10/19 13:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:02*	*1*
Y Carrier	*93.5*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:02*	*1*

Client Sample ID: FB-01

Lab Sample ID: 180-93968-7
Date Collected: 08/08/19 13:45
Matrix: Water
Date Received: 08/10/19 09:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.280	U	0.282	0.282	5.00	0.504	pCi/L		09/20/19 08:54	1

Client Sample ID: APWM-10

Lab Sample ID: 180-93968-8
Date Collected: 08/08/19 13:48
Matrix: Water
Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.03		0.254	0.270	1.00	0.232	pCi/L	08/15/19 08:51	09/13/19 16:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.9*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:07*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.13		0.428	0.440	1.00	0.596	pCi/L	08/15/19 09:51	09/10/19 13:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.9*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:02*	*1*
Y Carrier	*68.8*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.16		0.498	0.516	5.00	0.596	pCi/L		09/20/19 08:54	1

Client Sample ID: APWM-9

Lab Sample ID: 180-93968-9
Date Collected: 08/08/19 17:00
Matrix: Water
Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.24		0.349	0.403	1.00	0.216	pCi/L	08/15/19 08:51	09/13/19 16:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.3*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:08*	*1*

Client Sample ID: APWM-9

Date Collected: 08/08/19 17:00
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-9
Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.47		0.576	0.708	1.00	0.540	pCi/L	08/15/19 09:51	09/10/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.3*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*
Y Carrier	*88.6*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.71		0.673	0.815	5.00	0.540	pCi/L		09/20/19 08:54	1

Client Sample ID: APWM-3

Date Collected: 08/08/19 16:25
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-10
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.286		0.167	0.169	1.00	0.231	pCi/L	08/15/19 08:51	09/13/19 16:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*08/15/19 08:51*	*09/13/19 16:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.13		0.612	0.832	1.00	0.460	pCi/L	08/15/19 09:51	09/10/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*
Y Carrier	*87.9*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.41		0.634	0.849	5.00	0.460	pCi/L		09/20/19 08:54	1

Client Sample ID: APWM-4

Date Collected: 08/09/19 08:30
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-11
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.677		0.221	0.229	1.00	0.239	pCi/L	08/15/19 08:51	09/13/19 18:02	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	74.9		40 - 110	08/15/19 08:51	09/13/19 18:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.41		0.374	0.396	1.00	0.453	pCi/L	08/15/19 09:51	09/10/19 13:03	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	74.9		40 - 110	08/15/19 09:51	09/10/19 13:03	1
Y Carrier	88.6		40 - 110	08/15/19 09:51	09/10/19 13:03	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.09		0.434	0.457	5.00	0.453	pCi/L		09/20/19 08:54	1

Client Sample ID: APWM-5

Date Collected: 08/09/19 10:10
Date Received: 08/10/19 09:30

Lab Sample ID: 180-93968-12
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.462		0.181	0.186	1.00	0.207	pCi/L	08/15/19 08:51	09/13/19 18:02	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		40 - 110	08/15/19 08:51	09/13/19 18:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.35		0.448	0.543	1.00	0.393	pCi/L	08/15/19 09:51	09/10/19 13:03	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		40 - 110	08/15/19 09:51	09/10/19 13:03	1
Y Carrier	96.8		40 - 110	08/15/19 09:51	09/10/19 13:03	1

Client Sample ID: APWM-5

Lab Sample ID: 180-93968-12

Date Collected: 08/09/19 10:10

Matrix: Water

Date Received: 08/10/19 09:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.81		0.483	0.574	5.00	0.393	pCi/L		09/20/19 08:54	1

Client Sample ID: APWM-6R

Lab Sample ID: 180-93968-13

Date Collected: 08/09/19 08:10

Matrix: Water

Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.634		0.202	0.210	1.00	0.200	pCi/L	08/15/19 08:51	09/13/19 18:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*08/15/19 08:51*	*09/13/19 18:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.51		0.437	0.495	1.00	0.466	pCi/L	08/15/19 09:51	09/10/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*
Y Carrier	*90.1*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.14		0.481	0.538	5.00	0.466	pCi/L		09/20/19 08:54	1

Client Sample ID: APWM-7

Lab Sample ID: 180-93968-14

Date Collected: 08/09/19 09:40

Matrix: Water

Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.07		0.394	0.481	1.00	0.193	pCi/L	08/15/19 08:51	09/13/19 18:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.9*		*40 - 110*	*08/15/19 08:51*	*09/13/19 18:02*	*1*

Client Sample ID: APWM-7

Lab Sample ID: 180-93968-14

Date Collected: 08/09/19 09:40
Matrix: Water
Date Received: 08/10/19 09:30

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.79		0.495	0.606	1.00	0.418	pCi/L	08/15/19 09:51	09/10/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.9*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*
Y Carrier	*86.7*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.86		0.633	0.774	5.00	0.418	pCi/L		09/20/19 08:54	1

Client Sample ID: APWM-8

Lab Sample ID: 180-93968-15

Date Collected: 08/09/19 11:20
Matrix: Water
Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.06		0.252	0.270	1.00	0.223	pCi/L	08/15/19 08:51	09/13/19 18:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 08:51*	*09/13/19 18:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.46		0.440	0.495	1.00	0.460	pCi/L	08/15/19 09:51	09/10/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*
Y Carrier	*85.6*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.52		0.507	0.564	5.00	0.460	pCi/L		09/20/19 08:54	1

Client Sample ID: EB-02

Lab Sample ID: 180-93968-16

Date Collected: 08/09/19 08:15

Matrix: Water

Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0175	U	0.0852	0.0852	1.00	0.183	pCi/L	08/15/19 08:51	09/13/19 18:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*08/15/19 08:51*	*09/13/19 18:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.165	U	0.250	0.250	1.00	0.420	pCi/L	08/15/19 09:51	09/10/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*
Y Carrier	*92.7*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.148	U	0.264	0.264	5.00	0.420	pCi/L		09/20/19 08:54	1

Client Sample ID: FB-02

Lab Sample ID: 180-93968-17

Date Collected: 08/09/19 09:35

Matrix: Water

Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0226	U	0.0917	0.0918	1.00	0.198	pCi/L	08/15/19 08:51	09/13/19 18:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*40 - 110*	*08/15/19 08:51*	*09/13/19 18:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0183	U	0.265	0.265	1.00	0.472	pCi/L	08/15/19 09:51	09/10/19 13:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:05*	*1*
Y Carrier	*89.0*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:05*	*1*

Client Sample ID: FB-02

Lab Sample ID: 180-93968-17

Date Collected: 08/09/19 09:35

Matrix: Water

Date Received: 08/10/19 09:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.00431	U	0.280	0.280	5.00	0.472	pCi/L		09/20/19 08:54	1

Client Sample ID: DUP-02

Lab Sample ID: 180-93968-18

Date Collected: 08/09/19 07:15

Matrix: Water

Date Received: 08/10/19 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.490**		0.170	0.175	1.00	0.164	pCi/L	08/15/19 08:51	09/13/19 18:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*08/15/19 08:51*	*09/13/19 18:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.97**		0.416	0.453	1.00	0.474	pCi/L	08/15/19 09:51	09/10/19 13:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:06*	*1*
Y Carrier	*83.0*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:06*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.46**		0.449	0.486	5.00	0.474	pCi/L		09/20/19 08:54	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-439605/22-A
Matrix: Water
Analysis Batch: 442834

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439605

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.09977	U	0.142	0.143	1.00	0.242	pCi/L	08/15/19 08:51	09/13/19 18:03	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.4*		*40 - 110*	*08/15/19 08:51*	*09/13/19 18:03*	*1*

Lab Sample ID: LCS 160-439605/1-A
Matrix: Water
Analysis Batch: 442834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439605

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	12.00		1.32	1.00	0.188	pCi/L	106	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*81.1*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-439618/22-A
Matrix: Water
Analysis Batch: 442559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439618

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.06562	U	0.265	0.265	1.00	0.464	pCi/L	08/15/19 09:51	09/10/19 13:06	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.4*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:06*	*1*
Y Carrier	*88.6*		*40 - 110*	*08/15/19 09:51*	*09/10/19 13:06*	*1*

Lab Sample ID: LCS 160-439618/1-A
Matrix: Water
Analysis Batch: 442563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439618

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.60	9.417		1.16	1.00	0.541	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*81.1*		*40 - 110*
Y Carrier	*80.7*		*40 - 110*

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant Watson Special

Job ID: 180-93968-2

Rad

Prep Batch: 439605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-1	APMW-11	Total/NA	Water	PrecSep-21	
180-93968-2	APMW-12	Total/NA	Water	PrecSep-21	
180-93968-3	APMW-1R	Total/NA	Water	PrecSep-21	
180-93968-4	APMW-2	Total/NA	Water	PrecSep-21	
180-93968-5	EB-01	Total/NA	Water	PrecSep-21	
180-93968-6	DUP-01	Total/NA	Water	PrecSep-21	
180-93968-7	FB-01	Total/NA	Water	PrecSep-21	
180-93968-8	APWM-10	Total/NA	Water	PrecSep-21	
180-93968-9	APWM-9	Total/NA	Water	PrecSep-21	
180-93968-10	APWM-3	Total/NA	Water	PrecSep-21	
180-93968-11	APWM-4	Total/NA	Water	PrecSep-21	
180-93968-12	APWM-5	Total/NA	Water	PrecSep-21	
180-93968-13	APWM-6R	Total/NA	Water	PrecSep-21	
180-93968-14	APWM-7	Total/NA	Water	PrecSep-21	
180-93968-15	APWM-8	Total/NA	Water	PrecSep-21	
180-93968-16	EB-02	Total/NA	Water	PrecSep-21	
180-93968-17	FB-02	Total/NA	Water	PrecSep-21	
180-93968-18	DUP-02	Total/NA	Water	PrecSep-21	
MB 160-439605/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-439605/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 439618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-93968-1	APMW-11	Total/NA	Water	PrecSep_0	
180-93968-2	APMW-12	Total/NA	Water	PrecSep_0	
180-93968-3	APMW-1R	Total/NA	Water	PrecSep_0	
180-93968-4	APMW-2	Total/NA	Water	PrecSep_0	
180-93968-5	EB-01	Total/NA	Water	PrecSep_0	
180-93968-6	DUP-01	Total/NA	Water	PrecSep_0	
180-93968-7	FB-01	Total/NA	Water	PrecSep_0	
180-93968-8	APWM-10	Total/NA	Water	PrecSep_0	
180-93968-9	APWM-9	Total/NA	Water	PrecSep_0	
180-93968-10	APWM-3	Total/NA	Water	PrecSep_0	
180-93968-11	APWM-4	Total/NA	Water	PrecSep_0	
180-93968-12	APWM-5	Total/NA	Water	PrecSep_0	
180-93968-13	APWM-6R	Total/NA	Water	PrecSep_0	
180-93968-14	APWM-7	Total/NA	Water	PrecSep_0	
180-93968-15	APWM-8	Total/NA	Water	PrecSep_0	
180-93968-16	EB-02	Total/NA	Water	PrecSep_0	
180-93968-17	FB-02	Total/NA	Water	PrecSep_0	
180-93968-18	DUP-02	Total/NA	Water	PrecSep_0	
MB 160-439618/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-439618/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Philip Evans / Trevor Braddock	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-53452-11171.1
Client Contact: Rick Hagendorfer	Phone: 850-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: RDH Environmental Services Inc				Job #:

Address: 5720 Dove Drive	Due Date Requested:	Analysis Requested
City: Pace	TAT Requested (days): Hold until further instruction	
State, Zip: FL, 32571		
Phone: 205-992-5417(Tel)	PO #: SCS10382606	
Email: rickhagendorfer@gmail.com	WO #:	
Project Name: CCR - Plant Watson Special	Project #: 18020186	
Site:	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	300_ORGFM_28D - Fluoride,	6020, 7470A	Total Number of containers	Note:
			Preservation Code:				D	N	D		
APMW-11	8/8/19	1235	G	Water			X	X	X		
APMW-12		1155		Water							
APMW-1R		1225		Water							
APMW-2		1410		Water							
EB-01		1200		Water							
DUP-01		1135		Water							
FB-01		1345		Water							
APMW-10		1348		Water							
APMW-9		1700		Water							
APMW-3	8/8/19	1625	G	Water			X	X	X		
				Water							

180-93968 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/9/19 1200	RDH		8-10-19	TAL H
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 930	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Philip Evans / Trevor Braddock	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-53452-11171.2
Client Contact: Rick Hagendorfer	Phone: 850-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: RDH Environmental Services Inc				Job #:

Address: 5720 Dove Drive	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Pace	TAT Requested (days): Hold until further instruction		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: FL, 32571			
Phone: 205-992-5417(Tel)	PO #: SCS10382606		Other:
Email: rickhagendorfer@gmail.com	WO #:		
Project Name: CCR - Plant Watson Special	Project #: 18020186		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	300_ORGFM_28D - Fluoride,	6020, 7470A	Total Number of containers	Special Instructions/Note:
				Preservation Code:			D	N	D		
APMW-4	8/9/19	0930	G	Water			X	X	X		
APMW-5		1010		Water							
APMW-6R		0810		Water							
APMW-7		0940		Water							
APMW-8		1120		Water							
EB-02		0815		Water							
FB-02		0935		Water							
DUP-02	8/9/19	0715	G	Water			X	X	X		
				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/9/19 1200	Company: RDH	Received by:	Date/Time: 8-10-19	Company: TAPIT
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 9:30	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

180-93968 Waybill

RT 639 5 12:00
ST 9

Uncorrected temp
Thermometer ID
CF Initials
PT-WI-SR-001 effective 11/8/18

XO AGCA
15238
PA-US PIT

MPS# 7890 3064 3407
0263
Mstr# 7890 3064 3381
0201
3 of 4

SATURDAY 12:00P
PRIORITY OVERNIGHT

FedEx Express

SAMPLE RECEIVING
TEST AMERICA PITTSBURGH
301 ALPHA DR
RETURNS
PITTSBURGH PA 15238
(412) 963-7068

Do Not Lift Using This Tag
ORIGIN ID
RICK HAC
DH
(350) 336-0192
SHIP DATE: 09AUG19
ACTWGT: 71.70 LB
CAD: 0069938800/SSFE2010
DIMS: 24x14x14 IN
BILL TH RD FARTY
ICA PITTSBURGH
DR
5H PA 15238
DEPT:
FedEx Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
TRK# 0201 7890 3564 3381
MASTER
XO AGCA
15238 PIT
PA-US
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18

56297-435 RRDB2 EXP 12/19

5673J/E9E7/05A2

PRIORITY

AMERICA PITTSBURGH
301 ALPHA DR
RETURNS
PITTSBURGH PA 15238
(412) 963-7068 REF:
INV:
PO: DEPT:

FedEx Express

J19201906240 1 AR

2 of 4
MPS# 7890 3064 3392
0263
Mstr# 7890 3064 3381

0201

XO AGCA

SATURDAY 12:00P
PRIORITY OVERNIGHT

15238
PA-US PIT

Uncorrected temp °C
Thermometer ID
CF Initials

PT-WI-SR-001 effective 11/8/18

Do Not Lift Using This Tag

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH
5720 DOVE DR
PACE, FL 32571
UNITED STATES US

SHIP DATE: 09AUG19
ACTWGT: 60.60 LB
CAD: 006993800/SSFE2010
DIMS: 24x14x14 IN
BILL THIRD PARTY

SAMPLE RECEIVING
TEST AMERICA PITTSBURGH
301 ALPHA DR
RETURNS
PITTSBURGH PA 15238

(412) 963-7058 REF:
INV:
PO:
DEPT:

FedEx Express

SATURDAY 12:00P
PRIORITY OVERNIGHT

4 of 4
MPS# 7809 3064 3418
0263
Mstr# 7809 3064 3381
0201

XO AGCA

15238
PIT
PA-US

Uncorrected temp
Thermometer ID
CF -0.6
Initials TJ
PT-WI-SR-001 effective 11/8/18

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-93968-2

Login Number: 93968
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-93968-2

Login Number: 93968
List Number: 2
Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/14/19 12:28 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	20.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Product Name: Low-Flow System

Date: 2019-08-08 12:25:48

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	46 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	36.1 ft

Well Information:		Pumping Information:	
Well ID	APMW-1 RDH	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2953174 L
Well Total Depth	38.6 ft	Calculated Sample Rate	300 sec
Screen Length	5 ft	Stabilization Drawdown	7.2 in
Depth to Water	24.70 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	12:02:39	900.02	24.97	6.63	7587.90	5.85	25.19	0.07	-138.45
Last 5	12:07:39	1200.01	24.46	6.66	7588.96	2.65	25.22	0.06	-139.09
Last 5	12:12:39	1500.01	24.10	6.67	7628.65	0.76	25.25	0.07	-139.83
Last 5	12:17:39	1800.00	24.13	6.67	7656.24	1.51	25.27	0.06	-140.92
Last 5	12:22:39	2100.00	24.13	6.68	7677.47	0.48	25.30	0.06	-141.09
Variance 0			-0.36	0.01	39.70			0.01	-0.74
Variance 1			0.03	0.00	27.59			-0.00	-1.09
Variance 2			0.00	0.01	21.22			-0.00	-0.17

Notes

Sample time 1225 cloudy 90.

Grab Samples

Low-Flow
Date: ########
Operator N Trevor Braddock
Pump Mod PP
Company N RDH Environmental
Tubing Typ PE
Project Nar Watson CCR
Site Name: Plant Watson
Latitude: 0Â° 0' 0"
Longitude: 0Â° 0' 0"
Tubing Diar .17in
Tubing Len 46 ft
Sonde SN: 625126
Turbidity M 2100q
Pump place 36.1 ft
Well ID: APMW-1T
Well diame 2 in
Well Total I 38.6 ft
Screen Len 5 ft
Depth to W 24.70 ft
Final Pump 400 mL/min
Total Syste 0.2953174 L
Calculated 300 sec
Stabilizatio 7.2 in
Total Volur 14 L

Time	pH	ORP	Conductivi	DO	Temperatı	Turbidity	DTW
300.0927	6.43	-120.7	7590.9	0.1	25.12	6.18	25.17
600.0146	6.57	-134.9	7606.5	0.07	25.04	6.29	25.18
900.015	6.63	-138.4	7587.9	0.07	24.97	5.85	25.19
1200.014	6.66	-139.1	7589	0.06	24.46	2.65	25.22
1500.015	6.67	-139.8	7628.7	0.07	24.1	0.76	25.25
1800.003	6.67	-140.9	7656.2	0.06	24.13	1.51	25.27
2100.001	6.68	-141.1	7677.5	0.06	24.13	0.48	25.3

Product Name: Low-Flow System

Date: 2019-08-08 11:54:04

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	56 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	49.1 ft

Well Information:		Pumping Information:	
Well ID	APMW-12	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.3399517 L
Well Total Depth	54.1 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.16 in
Depth to Water	16.62 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	11:40:49	300.07	25.53	6.03	165.97	2.03	16.80	0.23	-44.34
Last 5	11:45:49	600.02	25.51	6.09	162.00	1.78	16.80	0.21	-47.96
Last 5	11:50:49	900.02	25.51	6.12	161.72	1.71	16.80	0.24	-51.66
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.02	0.06	-3.97			-0.02	-3.62
Variance 2			0.00	0.03	-0.28			0.03	-3.70

Notes

Sample time @ 1155. Sunny 95. EB-01 @ 1200.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-08 12:36:24

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	51 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	46.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-11	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.3176346 L
Well Total Depth	51.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	18.95 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	12:22:02	300.02	25.96	6.24	126.48	2.10	19.05	1.26	-60.95
Last 5	12:27:02	600.02	25.78	6.27	126.51	1.65	19.05	1.18	-66.61
Last 5	12:32:02	900.02	25.87	6.29	125.06	1.59	19.05	1.38	-69.06
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.18	0.03	0.03			-0.08	-5.65
Variance 2			0.09	0.02	-1.45			0.20	-2.46

Notes

Sample time @ 1235. Sunny 95. DUP-01 @ 1135.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-08 13:47:40

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	27.9 ft

Well Information:		Pumping Information:	
Well ID	APMW-10	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.6585369 L
Well Total Depth	32.9 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.64 in
Depth to Water	20.20 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:24:41	300.04	26.14	6.57	3741.31	2.55	20.42	0.16	-95.18
Last 5	13:29:41	600.02	26.14	6.68	3803.68	2.20	20.42	0.15	-104.48
Last 5	13:34:41	900.02	26.40	6.75	3850.23	1.88	20.42	0.14	-110.64
Last 5	13:39:41	1200.02	26.31	6.80	3856.64	1.74	20.42	0.14	-114.69
Last 5	13:44:41	1500.02	26.43	6.84	3865.92	1.72	20.42	0.13	-117.50
Variance 0			0.26	0.07	46.55			-0.00	-6.16
Variance 1			-0.09	0.05	6.42			-0.01	-4.05
Variance 2			0.12	0.03	9.28			-0.00	-2.82

Notes

Sample time @ 1348. PC 93. FB-01@ 1345.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-08 14:10:07

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	37.9 ft

Well Information:		Pumping Information:	
Well ID	APMW-2	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	42.9 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.5 in
Depth to Water	22.5 ft	Total Volume Pumped	24 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:47:33	2400.00	23.88	6.03	9059.14	8.34	22.75	0.16	-42.40
Last 5	13:52:33	2700.00	23.69	6.03	9045.94	3.86	22.78	0.16	-42.20
Last 5	13:57:33	3000.01	23.55	6.03	9035.78	3.03	22.78	0.15	-42.11
Last 5	14:02:33	3299.99	23.51	6.03	9057.23	2.32	22.78	0.15	-42.55
Last 5	14:07:33	3599.99	23.51	6.03	9034.80	1.95	22.78	0.14	-43.10
Variance 0			-0.15	0.00	-10.16			-0.01	0.09
Variance 1			-0.04	0.00	21.45			0.00	-0.44
Variance 2			-0.00	-0.00	-22.43			-0.00	-0.55

Notes

Sample time 1410. Cloudy 90

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-08 16:24:47

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	31.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-3	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	36.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	18 in
Depth to Water	7.23 ft	Total Volume Pumped	40 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	16:02:16	4806.98	23.52	6.70	32864.32	3.28	8.75	0.12	-65.99
Last 5	16:07:16	5106.98	23.54	6.70	32856.64	2.81	8.75	0.11	-66.41
Last 5	16:12:16	5406.98	23.68	6.70	32866.80	2.66	8.75	0.11	-66.83
Last 5	16:17:16	5706.97	23.68	6.70	32911.02	2.21	8.75	0.11	-66.60
Last 5	16:22:16	6006.97	23.75	6.70	32842.21	1.99	8.75	0.12	-66.74
Variance 0			0.15	0.00	10.16			0.00	-0.42
Variance 1			-0.00	0.00	44.22			-0.00	0.22
Variance 2			0.07	0.00	-68.80			0.00	-0.14

Notes

Sample time 1625. Cloudy 90

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-08 16:54:02

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	37.5 ft

Well Information:		Pumping Information:	
Well ID	APMW-9	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.680854 L
Well Total Depth	42.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.6 in
Depth to Water	22.75 ft	Total Volume Pumped	62 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	16:31:47	8129.02	25.98	6.23	8113.01	2.32	23.05	0.13	-49.19
Last 5	16:36:49	8431.02	25.78	6.23	8126.82	2.20	23.05	0.12	-48.98
Last 5	16:41:49	8731.02	25.86	6.23	8107.07	2.04	23.05	0.12	-49.30
Last 5	16:46:49	9031.02	25.85	6.23	8117.12	1.90	23.05	0.12	-49.31
Last 5	16:51:50	9332.02	25.84	6.23	8109.16	1.95	23.05	0.12	-49.52
Variance 0			0.08	-0.00	-19.75			-0.00	-0.32
Variance 1			-0.01	-0.00	10.06			0.00	-0.02
Variance 2			-0.01	0.00	-7.96			-0.00	-0.21

Notes

Sample time @ 1700. PC 93.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-09 08:09:35

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	60 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	46.85 ft

Well Information:		Pumping Information:	
Well ID	APMW-6R	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.3578054 L
Well Total Depth	51.85 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	36.6 in
Depth to Water	6.60 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	07:45:15	900.02	24.42	5.95	11827.01	1.26	9.65	0.10	-75.03
Last 5	07:50:15	1200.01	24.42	5.96	12530.74	1.20	9.65	0.09	-80.49
Last 5	07:55:15	1500.02	24.42	5.95	13220.72	1.18	9.65	0.09	-72.77
Last 5	08:00:15	1800.02	24.36	6.00	13222.93	1.09	9.65	0.09	-72.65
Last 5	08:05:15	2100.01	24.41	6.03	13189.33	1.05	9.65	0.09	-72.35
Variance 0			0.00	-0.01	689.99			-0.00	7.71
Variance 1			-0.06	0.05	2.21			-0.00	0.13
Variance 2			0.05	0.03	-33.61			-0.00	0.29

Notes

Sample time @ 0810. Sunny 85. EB-02@0815. DUP-02@ 0710

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-09 08:27:27

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	32.05 ft

Well Information:		Pumping Information:	
Well ID	APMW-4	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	37.05 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	12.27 ft	Total Volume Pumped	26 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	08:04:40	2699.99	23.16	6.68	12804.70	3.65	12.56	0.06	-198.42
Last 5	08:09:40	2999.99	23.18	6.68	12795.70	3.24	12.56	0.06	-200.26
Last 5	08:14:40	3299.99	23.24	6.68	12798.66	2.58	12.56	0.06	-201.95
Last 5	08:19:40	3599.99	23.23	6.69	12814.06	2.36	12.56	0.05	-203.90
Last 5	08:24:40	3899.99	23.25	6.69	12780.86	1.92	12.56	0.05	-206.10
Variance 0			0.05	0.01	2.96			0.00	-1.69
Variance 1			-0.01	0.00	15.40			-0.00	-1.96
Variance 2			0.02	0.00	-33.20			-0.00	-2.20

Notes

Sample time 0830. Cloudy 82

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-09 09:39:19

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	32.4 ft

Well Information:		Pumping Information:	
Well ID	APMW-7	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.6585369 L
Well Total Depth	37.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	12.00 ft	Total Volume Pumped	20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:16:35	1801.02	25.69	6.36	12769.32	1.60	12.25	0.13	-231.58
Last 5	09:21:35	2101.02	25.92	6.35	12805.36	1.44	12.25	0.12	-240.80
Last 5	09:26:35	2401.02	25.74	6.35	12788.04	1.38	12.25	0.13	-246.63
Last 5	09:31:35	2701.02	25.80	6.35	12851.85	1.37	12.25	0.12	-251.71
Last 5	09:36:35	3001.02	25.78	6.34	12874.06	1.31	12.25	0.12	-255.13
Variance 0			-0.18	-0.00	-17.33			0.00	-5.83
Variance 1			0.06	-0.00	63.81			-0.00	-5.08
Variance 2			-0.02	-0.00	22.21			0.00	-3.42

Notes

Sample time @ 0940. Sunny 90. FB-02@ 0935.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-09 10:01:35

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	31.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-5	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	36.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	8.61 ft	Total Volume Pumped	24 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:39:14	2400.06	22.87	6.43	28526.64	3.64	7.75	0.10	-92.10
Last 5	09:44:14	2700.03	22.87	6.43	28534.60	3.04	7.75	0.10	-91.41
Last 5	09:49:14	2999.99	22.87	6.43	28451.30	2.79	7.75	0.10	-90.77
Last 5	09:54:14	3299.99	22.87	6.42	28481.63	2.32	7.75	0.10	-90.17
Last 5	09:59:14	3599.99	22.84	6.42	28474.14	1.92	7.75	0.10	-89.28
Variance 0			-0.00	-0.00	-83.30			-0.00	0.64
Variance 1			-0.01	-0.00	30.33			0.00	0.61
Variance 2			-0.03	-0.00	-7.48			0.00	0.88

Notes

Sample time 1010. Cloudy 82

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-09 11:17:05

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	50 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	37.8 ft

Well Information:		Pumping Information:	
Well ID	APMW-8	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.7031711 L
Well Total Depth	42.8 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.23 in
Depth to Water	20.52 ft	Total Volume Pumped	26 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	10:54:27	2700.02	25.51	6.74	11880.96	2.22	20.75	0.18	-156.71
Last 5	10:59:27	3000.02	25.73	6.74	11891.69	2.15	20.75	0.18	-157.89
Last 5	11:04:28	3301.02	25.52	6.74	11865.09	1.93	20.75	0.18	-157.18
Last 5	11:09:28	3601.02	25.49	6.74	11884.58	1.89	20.75	0.17	-157.26
Last 5	11:14:28	3901.02	25.55	6.74	11909.74	1.84	20.75	0.17	-157.76
Variance 0			-0.21	0.00	-26.60			0.00	0.72
Variance 1			-0.03	-0.00	19.50			-0.00	-0.08
Variance 2			0.06	-0.00	25.16			-0.00	-0.49

Notes

Sample time @ 1120. Sunny 93.

Grab Samples

Semiannual Assessment Monitoring Event 1

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-95068-1
Client Project/Site: CCR - Plant Watson

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Authorized for release by:
9/30/2019 1:22:34 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

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

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

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Job ID: 180-95068-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-95068-1

Comments
No additional comments.

Receipt
The samples were received on 8/31/2019 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.8º C, 1.0º C, 1.1º C, 1.6º C and 1.6º C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 290439 were outside control limits calcium. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Qualifiers

HPLC/IC

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

Metals

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

Glossary

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
Arkansas DEQ	State Program	88-0690	06-27-20
California	State	2891	04-30-20
California	State Program	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Connecticut	State Program	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Florida	NELAP	E871008	06-30-20
Illinois	NELAP	200005	06-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (UST)	State Program	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Kentucky (WW)	State Program	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
Nevada	State Program	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	03-31-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State Program	434	12-31-19
North Dakota	State	R-227	04-30-20
North Dakota	State Program	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
Rhode Island	State Program	LAO00362	12-30-19
South Carolina	State Program	89014	04-30-20
Texas	NELAP	T104704528-15-2	03-31-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462015-4	05-31-20
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	460189	09-14-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
West Virginia DEP	State Program	142	01-31-20
Wisconsin	State	998027800	08-31-20
Wisconsin	State Program	998027800	08-31-20

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-95068-1	APMW-1R	Water	08/30/19 08:45	08/31/19 10:15	
180-95068-2	APMW-2	Water	08/30/19 10:10	08/31/19 10:15	
180-95068-3	APMW-3	Water	08/30/19 11:00	08/31/19 10:15	
180-95068-4	APMW-4	Water	08/30/19 12:10	08/31/19 10:15	
180-95068-5	APMW-5	Water	08/30/19 13:00	08/31/19 10:15	
180-95068-6	APMW-6R	Water	08/30/19 09:13	08/31/19 10:15	
180-95068-7	APMW-7	Water	08/30/19 10:54	08/31/19 10:15	
180-95068-8	APMW-8	Water	08/30/19 11:50	08/31/19 10:15	
180-95068-9	APMW-9	Water	08/30/19 13:39	08/31/19 10:15	
180-95068-10	APMW-10	Water	08/30/19 14:30	08/31/19 10:15	
180-95068-11	DUP-01	Water	08/29/19 08:00	08/31/19 10:15	
180-95068-12	DUP-02	Water	08/30/19 07:00	08/31/19 10:15	
180-95068-13	APMW-11	Water	08/29/19 16:51	08/31/19 10:15	
180-95068-14	APMW-12	Water	08/29/19 18:40	08/31/19 10:15	
180-95068-15	EB-01	Water	08/30/19 07:42	08/31/19 10:15	
180-95068-16	FB-01	Water	08/30/19 07:50	08/31/19 10:15	
180-95068-17	EB-02	Water	08/30/19 12:07	08/31/19 10:15	
180-95068-18	FB-02	Water	08/30/19 12:17	08/31/19 10:15	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Client Sample ID: APMW-1R
Date Collected: 08/30/19 08:45
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			291017	09/12/19 08:10	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		50			291017	09/12/19 08:26	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290438	09/06/19 10:20	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	290991	09/11/19 02:47	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-2
Date Collected: 08/30/19 10:10
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			291017	09/12/19 08:42	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		50			291017	09/12/19 08:57	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290438	09/06/19 10:20	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	290991	09/11/19 03:01	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-3
Date Collected: 08/30/19 11:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		25			291017	09/12/19 14:45	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		250			291017	09/12/19 15:01	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290438	09/06/19 10:20	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	290991	09/11/19 03:06	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Client Sample ID: APMW-4

Date Collected: 08/30/19 12:10
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			291017	09/12/19 11:20	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		100			291017	09/12/19 11:35	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290438	09/06/19 10:20	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	290991	09/11/19 03:11	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-5

Date Collected: 08/30/19 13:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		25			291017	09/12/19 15:17	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		250			291017	09/12/19 15:33	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290438	09/06/19 10:20	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	290991	09/11/19 03:15	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-6R

Date Collected: 08/30/19 09:13
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			291017	09/12/19 11:51	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		100			291017	09/12/19 12:07	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290438	09/06/19 10:20	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	290991	09/11/19 03:20	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Client Sample ID: APMW-7
Date Collected: 08/30/19 10:54
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			291017	09/12/19 12:23	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		100			291017	09/12/19 12:39	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 19:32	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-8
Date Collected: 08/30/19 11:50
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			291017	09/12/19 12:54	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		100			291017	09/12/19 13:10	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 19:17	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-9
Date Collected: 08/30/19 13:39
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			291017	09/12/19 09:13	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		50			291017	09/12/19 09:29	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 19:50	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Client Sample ID: APMW-10

Date Collected: 08/30/19 14:30
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2.5			291017	09/12/19 07:07	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		25			291017	09/12/19 07:23	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 19:55	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-01

Date Collected: 08/29/19 08:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			291017	09/12/19 10:32	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 20:00	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	290308	09/05/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-02

Date Collected: 08/30/19 07:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			291017	09/12/19 13:26	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	300.0		100			291017	09/12/19 13:42	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 20:05	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-11

Date Collected: 08/29/19 16:51
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			291163	09/13/19 08:04	MJH	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Client Sample ID: APMW-11
Date Collected: 08/29/19 16:51
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 20:09	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	290308	09/05/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-12
Date Collected: 08/29/19 18:40
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			291017	09/12/19 09:45	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 20:14	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	290308	09/05/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-01
Date Collected: 08/30/19 07:42
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			291017	09/12/19 05:32	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 20:28	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-01
Date Collected: 08/30/19 07:50
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			291017	09/12/19 05:48	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 20:33	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Client Sample ID: EB-02

Lab Sample ID: 180-95068-17

Date Collected: 08/30/19 12:07

Matrix: Water

Date Received: 08/31/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			291017	09/12/19 14:29	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 20:38	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-02

Lab Sample ID: 180-95068-18

Date Collected: 08/30/19 12:17

Matrix: Water

Date Received: 08/31/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			291017	09/12/19 06:03	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	290439	09/06/19 10:25	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			291679	09/16/19 20:43	WTR	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	290427	09/06/19 10:00	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KEM = Kimberly Mahoney

Batch Type: Analysis

AVS = Abbey Smith

MJH = Matthew Hartman

WTR = Bill Reinheimer

Client Sample ID: APMW-1R

Lab Sample ID: 180-95068-1

Date Collected: 08/30/19 08:45

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.21	J	1.0	0.13	mg/L			09/12/19 08:10	5
Chloride	2100		50	36	mg/L			09/12/19 08:26	50
Sulfate	13		5.0	1.9	mg/L			09/12/19 08:10	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0011		0.0010	0.00032	mg/L		09/06/19 10:20	09/11/19 02:47	1
Barium	0.91		0.010	0.0016	mg/L		09/06/19 10:20	09/11/19 02:47	1
Beryllium	0.00019	J	0.0010	0.00018	mg/L		09/06/19 10:20	09/11/19 02:47	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 02:47	1
Cobalt	0.00017	J	0.00050	0.000075	mg/L		09/06/19 10:20	09/11/19 02:47	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:20	09/11/19 02:47	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 02:47	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:20	09/11/19 02:47	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:20	09/11/19 02:47	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:20	09/11/19 02:47	1
Lithium	0.011		0.0050	0.0034	mg/L		09/06/19 10:20	09/11/19 02:47	1
Calcium	160		0.50	0.13	mg/L		09/06/19 10:20	09/11/19 02:47	1
Boron	6.2		0.080	0.039	mg/L		09/06/19 10:20	09/11/19 02:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3500		40	40	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-2

Lab Sample ID: 180-95068-2

Date Collected: 08/30/19 10:10

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.17	J	1.0	0.13	mg/L			09/12/19 08:42	5
Chloride	2500		50	36	mg/L			09/12/19 08:57	50
Sulfate	8.4		5.0	1.9	mg/L			09/12/19 08:42	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/06/19 10:20	09/11/19 03:01	1
Barium	2.7		0.010	0.0016	mg/L		09/06/19 10:20	09/11/19 03:01	1
Beryllium	0.00023	J	0.0010	0.00018	mg/L		09/06/19 10:20	09/11/19 03:01	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:01	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:20	09/11/19 03:01	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:20	09/11/19 03:01	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:01	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:20	09/11/19 03:01	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:20	09/11/19 03:01	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:20	09/11/19 03:01	1
Lithium	0.022		0.0050	0.0034	mg/L		09/06/19 10:20	09/11/19 03:01	1
Calcium	340		0.50	0.13	mg/L		09/06/19 10:20	09/11/19 03:01	1
Boron	3.7		0.080	0.039	mg/L		09/06/19 10:20	09/11/19 03:01	1

Client Sample ID: APMW-2

Lab Sample ID: 180-95068-2

Date Collected: 08/30/19 10:10

Matrix: Water

Date Received: 08/31/19 10:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4400**		50	50	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-3

Lab Sample ID: 180-95068-3

Date Collected: 08/30/19 11:00

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.66		5.0	0.66	mg/L			09/12/19 14:45	25
Chloride	**9800**		250	180	mg/L			09/12/19 15:01	250
Sulfate	**1100**		25	9.5	mg/L			09/12/19 14:45	25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.070**		0.0010	0.00032	mg/L		09/06/19 10:20	09/11/19 03:06	1
Barium	**0.10**		0.010	0.0016	mg/L		09/06/19 10:20	09/11/19 03:06	1
Beryllium	**0.00018**	**J**	0.0010	0.00018	mg/L		09/06/19 10:20	09/11/19 03:06	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:06	1
Cobalt	**0.0025**		0.00050	0.000075	mg/L		09/06/19 10:20	09/11/19 03:06	1
Molybdenum	**0.065**		0.0050	0.00061	mg/L		09/06/19 10:20	09/11/19 03:06	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:06	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:20	09/11/19 03:06	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:20	09/11/19 03:06	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:20	09/11/19 03:06	1
Lithium	**0.072**		0.0050	0.0034	mg/L		09/06/19 10:20	09/11/19 03:06	1
Calcium	**320**		0.50	0.13	mg/L		09/06/19 10:20	09/11/19 03:06	1
Boron	**5.0**		0.080	0.039	mg/L		09/06/19 10:20	09/11/19 03:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**18000**		200	200	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-4

Lab Sample ID: 180-95068-4

Date Collected: 08/30/19 12:10

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.54**	**J**	2.0	0.26	mg/L			09/12/19 11:20	10
Chloride	**3600**		100	71	mg/L			09/12/19 11:35	100
Sulfate	**330**		10	3.8	mg/L			09/12/19 11:20	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.016**		0.0010	0.00032	mg/L		09/06/19 10:20	09/11/19 03:11	1
Barium	**0.29**		0.010	0.0016	mg/L		09/06/19 10:20	09/11/19 03:11	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/06/19 10:20	09/11/19 03:11	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:11	1
Cobalt	**0.0034**		0.00050	0.000075	mg/L		09/06/19 10:20	09/11/19 03:11	1
Molybdenum	**0.011**		0.0050	0.00061	mg/L		09/06/19 10:20	09/11/19 03:11	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:11	1

Client Sample ID: APMW-4

Lab Sample ID: 180-95068-4

Date Collected: 08/30/19 12:10

Matrix: Water

Date Received: 08/31/19 10:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:20	09/11/19 03:11	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:20	09/11/19 03:11	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:20	09/11/19 03:11	1
Lithium	**0.052**		0.0050	0.0034	mg/L		09/06/19 10:20	09/11/19 03:11	1
Calcium	**170**		0.50	0.13	mg/L		09/06/19 10:20	09/11/19 03:11	1
Boron	**1.6**		0.080	0.039	mg/L		09/06/19 10:20	09/11/19 03:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5800**		67	67	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-5

Lab Sample ID: 180-95068-5

Date Collected: 08/30/19 13:00

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.66		5.0	0.66	mg/L			09/12/19 15:17	25
Chloride	**8700**		250	180	mg/L			09/12/19 15:33	250
Sulfate	**940**		25	9.5	mg/L			09/12/19 15:17	25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.20**		0.0010	0.00032	mg/L		09/06/19 10:20	09/11/19 03:15	1
Barium	**0.086**		0.010	0.0016	mg/L		09/06/19 10:20	09/11/19 03:15	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/06/19 10:20	09/11/19 03:15	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:15	1
Cobalt	**0.000079**	**J**	0.00050	0.000075	mg/L		09/06/19 10:20	09/11/19 03:15	1
Molybdenum	**0.088**		0.0050	0.00061	mg/L		09/06/19 10:20	09/11/19 03:15	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:15	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:20	09/11/19 03:15	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:20	09/11/19 03:15	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:20	09/11/19 03:15	1
Lithium	**0.044**		0.0050	0.0034	mg/L		09/06/19 10:20	09/11/19 03:15	1
Calcium	**320**		0.50	0.13	mg/L		09/06/19 10:20	09/11/19 03:15	1
Boron	**6.1**		0.080	0.039	mg/L		09/06/19 10:20	09/11/19 03:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**16000**		200	200	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-6R

Lab Sample ID: 180-95068-6

Date Collected: 08/30/19 09:13

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.27**	**J**	2.0	0.26	mg/L			09/12/19 11:51	10
Chloride	**4100**		100	71	mg/L			09/12/19 12:07	100
Sulfate	**800**		10	3.8	mg/L			09/12/19 11:51	10

Client Sample ID: APMW-6R

Lab Sample ID: 180-95068-6

Date Collected: 08/30/19 09:13

Matrix: Water

Date Received: 08/31/19 10:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.17		0.0010	0.00032	mg/L		09/06/19 10:20	09/11/19 03:20	1
Barium	0.052		0.010	0.0016	mg/L		09/06/19 10:20	09/11/19 03:20	1
Beryllium	0.00036	J	0.0010	0.00018	mg/L		09/06/19 10:20	09/11/19 03:20	1
Cadmium	0.00026	J	0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:20	1
Cobalt	0.0039		0.00050	0.000075	mg/L		09/06/19 10:20	09/11/19 03:20	1
Molybdenum	0.42		0.0050	0.00061	mg/L		09/06/19 10:20	09/11/19 03:20	1
Lead	0.00032	J	0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 03:20	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:20	09/11/19 03:20	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:20	09/11/19 03:20	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:20	09/11/19 03:20	1
Lithium	0.059		0.0050	0.0034	mg/L		09/06/19 10:20	09/11/19 03:20	1
Calcium	460		0.50	0.13	mg/L		09/06/19 10:20	09/11/19 03:20	1
Boron	11		0.080	0.039	mg/L		09/06/19 10:20	09/11/19 03:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6600		67	67	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-7

Lab Sample ID: 180-95068-7

Date Collected: 08/30/19 10:54

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.41	J	2.0	0.26	mg/L			09/12/19 12:23	10
Chloride	4000		100	71	mg/L			09/12/19 12:39	100
Sulfate	83		10	3.8	mg/L			09/12/19 12:23	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00044	J	0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 19:32	1
Barium	0.56		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 19:32	1
Beryllium	0.00025	J	0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 19:32	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 19:32	1
Cobalt	0.00023	J	0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 19:32	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 19:32	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 19:32	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 19:32	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 19:32	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 19:32	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 19:32	1
Calcium	90	F1	0.50	0.13	mg/L		09/06/19 10:25	09/16/19 19:32	1
Boron	0.88		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 19:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6900		67	67	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-8

Lab Sample ID: 180-95068-8

Date Collected: 08/30/19 11:50

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.85	J	2.0	0.26	mg/L			09/12/19 12:54	10
Chloride	3400		100	71	mg/L			09/12/19 13:10	100
Sulfate	620		10	3.8	mg/L			09/12/19 12:54	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 19:17	1
Barium	0.20		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 19:17	1
Beryllium	0.00038	J	0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 19:17	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 19:17	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 19:17	1
Molybdenum	0.11		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 19:17	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 19:17	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 19:17	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 19:17	1
Thallium	0.0013		0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 19:17	1
Lithium	0.068		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 19:17	1
Calcium	460		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 19:17	1
Boron	19		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 19:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6300		67	67	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-9

Lab Sample ID: 180-95068-9

Date Collected: 08/30/19 13:39

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.18	J	1.0	0.13	mg/L			09/12/19 09:13	5
Chloride	2800		50	36	mg/L			09/12/19 09:29	50
Sulfate	280		5.0	1.9	mg/L			09/12/19 09:13	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0011		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 19:50	1
Barium	0.42		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 19:50	1
Beryllium	0.00049	J	0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 19:50	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 19:50	1
Cobalt	0.000089	J	0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 19:50	1
Molybdenum	0.00093	J	0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 19:50	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 19:50	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 19:50	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 19:50	1
Thallium	0.0016		0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 19:50	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 19:50	1
Calcium	310		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 19:50	1
Boron	7.1		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 19:50	1

Client Sample ID: APMW-9

Lab Sample ID: 180-95068-9

Date Collected: 08/30/19 13:39

Matrix: Water

Date Received: 08/31/19 10:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	4900		50	50	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-10

Lab Sample ID: 180-95068-10

Date Collected: 08/30/19 14:30

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.50		0.50	0.066	mg/L			09/12/19 07:07	2.5
Chloride	1200		25	18	mg/L			09/12/19 07:23	25
Sulfate	160		2.5	0.95	mg/L			09/12/19 07:07	2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.079		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 19:55	1
Barium	0.20		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 19:55	1
Beryllium	0.00043	J	0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 19:55	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 19:55	1
Cobalt	0.000082	J	0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 19:55	1
Molybdenum	0.078		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 19:55	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 19:55	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 19:55	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 19:55	1
Thallium	0.00058	J	0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 19:55	1
Lithium	0.010		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 19:55	1
Calcium	53		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 19:55	1
Boron	1.9		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2200		40	40	mg/L			09/06/19 10:00	1

Client Sample ID: DUP-01

Lab Sample ID: 180-95068-11

Date Collected: 08/29/19 08:00

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	J	0.20	0.026	mg/L			09/12/19 10:32	1
Chloride	14		1.0	0.71	mg/L			09/12/19 10:32	1
Sulfate	1.0		1.0	0.38	mg/L			09/12/19 10:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00034	J	0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 20:00	1
Barium	0.069		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 20:00	1
Beryllium	0.00019	J	0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 20:00	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:00	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 20:00	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 20:00	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:00	1

Client Sample ID: DUP-01

Lab Sample ID: 180-95068-11
Matrix: Water
Date Collected: 08/29/19 08:00
Date Received: 08/31/19 10:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 20:00	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 20:00	1
Thallium	**0.00031**	**J**	0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 20:00	1
Lithium	**0.0090**		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 20:00	1
Calcium	**12**		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 20:00	1
Boron	**0.043**	**J**	0.080	0.039	mg/L		09/06/19 10:25	09/16/19 20:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**120**		10	10	mg/L			09/05/19 11:21	1

Client Sample ID: DUP-02

Lab Sample ID: 180-95068-12
Matrix: Water
Date Collected: 08/30/19 07:00
Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.38**	**J**	2.0	0.26	mg/L			09/12/19 13:26	10
Chloride	**4200**		100	71	mg/L			09/12/19 13:42	100
Sulfate	**79**		10	3.8	mg/L			09/12/19 13:26	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00040**	**J**	0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 20:05	1
Barium	**0.56**		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 20:05	1
Beryllium	**0.00040**	**J**	0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 20:05	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:05	1
Cobalt	**0.00021**	**J**	0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 20:05	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 20:05	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:05	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 20:05	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 20:05	1
Thallium	**0.00024**	**J**	0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 20:05	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 20:05	1
Calcium	**94**		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 20:05	1
Boron	**0.94**		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 20:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6900**		67	67	mg/L			09/06/19 10:00	1

Client Sample ID: APMW-11

Lab Sample ID: 180-95068-13
Matrix: Water
Date Collected: 08/29/19 16:51
Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.061**	**J**	0.20	0.026	mg/L			09/13/19 08:04	1
Chloride	**8.1**		1.0	0.71	mg/L			09/13/19 08:04	1
Sulfate	**2.3**		1.0	0.38	mg/L			09/13/19 08:04	1

Client Sample ID: APMW-11

Lab Sample ID: 180-95068-13

Date Collected: 08/29/19 16:51

Matrix: Water

Date Received: 08/31/19 10:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 20:09	1
Barium	**0.043**		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 20:09	1
Beryllium	**0.00020**	**J**	0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 20:09	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:09	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 20:09	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 20:09	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:09	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 20:09	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 20:09	1
Thallium	**0.00015**	**J**	0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 20:09	1
Lithium	**0.0067**		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 20:09	1
Calcium	**9.4**		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 20:09	1
Boron	<0.039		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 20:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**73**		10	10	mg/L			09/05/19 11:21	1

Client Sample ID: APMW-12

Lab Sample ID: 180-95068-14

Date Collected: 08/29/19 18:40

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.065**	**J**	0.20	0.026	mg/L			09/12/19 09:45	1
Chloride	**14**		1.0	0.71	mg/L			09/12/19 09:45	1
Sulfate	**1.1**		1.0	0.38	mg/L			09/12/19 09:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00041**	**J**	0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 20:14	1
Barium	**0.071**		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 20:14	1
Beryllium	**0.00023**	**J**	0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 20:14	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:14	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 20:14	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 20:14	1
Lead	**0.00017**	**J**	0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:14	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 20:14	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 20:14	1
Thallium	**0.00017**	**J**	0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 20:14	1
Lithium	**0.011**		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 20:14	1
Calcium	**12**		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 20:14	1
Boron	<0.039		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 20:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**110**		10	10	mg/L			09/05/19 11:21	1

Client Sample ID: EB-01

Lab Sample ID: 180-95068-15

Date Collected: 08/30/19 07:42

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.029**	**J**	0.20	0.026	mg/L			09/12/19 05:32	1
Chloride	<0.71		1.0	0.71	mg/L			09/12/19 05:32	1
Sulfate	<0.38		1.0	0.38	mg/L			09/12/19 05:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 20:28	1
Barium	<0.0016		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 20:28	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 20:28	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:28	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 20:28	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 20:28	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:28	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 20:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 20:28	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 20:28	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 20:28	1
Calcium	<0.13		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 20:28	1
Boron	<0.039		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 20:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/06/19 10:00	1

Client Sample ID: FB-01

Lab Sample ID: 180-95068-16

Date Collected: 08/30/19 07:50

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.031**	**J**	0.20	0.026	mg/L			09/12/19 05:48	1
Chloride	<0.71		1.0	0.71	mg/L			09/12/19 05:48	1
Sulfate	**0.43**	**J**	1.0	0.38	mg/L			09/12/19 05:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 20:33	1
Barium	**0.0024**	**J**	0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 20:33	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 20:33	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:33	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 20:33	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 20:33	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:33	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 20:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 20:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 20:33	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 20:33	1
Calcium	**0.40**	**J**	0.50	0.13	mg/L		09/06/19 10:25	09/16/19 20:33	1
Boron	<0.039		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 20:33	1

Client Sample ID: FB-01

Lab Sample ID: 180-95068-16

Date Collected: 08/30/19 07:50

Matrix: Water

Date Received: 08/31/19 10:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/06/19 10:00	1

Client Sample ID: EB-02

Lab Sample ID: 180-95068-17

Date Collected: 08/30/19 12:07

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.027**	**J**	0.20	0.026	mg/L			09/12/19 14:29	1
Chloride	<0.71		1.0	0.71	mg/L			09/12/19 14:29	1
Sulfate	<0.38		1.0	0.38	mg/L			09/12/19 14:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 20:38	1
Barium	<0.0016		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 20:38	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 20:38	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:38	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 20:38	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 20:38	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:38	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 20:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 20:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 20:38	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 20:38	1
Calcium	<0.13		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 20:38	1
Boron	<0.039		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 20:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/06/19 10:00	1

Client Sample ID: FB-02

Lab Sample ID: 180-95068-18

Date Collected: 08/30/19 12:17

Matrix: Water

Date Received: 08/31/19 10:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.031**	**J**	0.20	0.026	mg/L			09/12/19 06:03	1
Chloride	<0.71		1.0	0.71	mg/L			09/12/19 06:03	1
Sulfate	**0.39**	**J**	1.0	0.38	mg/L			09/12/19 06:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 20:43	1
Barium	<0.0016		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 20:43	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 20:43	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:43	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 20:43	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 20:43	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 20:43	1

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

Client Sample ID: FB-02
Date Collected: 08/30/19 12:17
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 20:43	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 20:43	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 20:43	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 20:43	1
Calcium	<0.13		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 20:43	1
Boron	<0.039		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 20:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/06/19 10:00	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-291017/6
Matrix: Water
Analysis Batch: 291017

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			09/12/19 05:16	1
Chloride	<0.71		1.0	0.71	mg/L			09/12/19 05:16	1
Sulfate	<0.38		1.0	0.38	mg/L			09/12/19 05:16	1

Lab Sample ID: LCS 180-291017/5
Matrix: Water
Analysis Batch: 291017

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.25	1.23		mg/L		99	90 - 110
Chloride	25.0	25.2		mg/L		101	90 - 110
Sulfate	25.0	25.0		mg/L		100	90 - 110

Lab Sample ID: 180-95068-14 MS
Matrix: Water
Analysis Batch: 291017

Client Sample ID: APMW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.065	J	1.25	1.34		mg/L		102	80 - 120
Chloride	14		25.0	38.3		mg/L		99	80 - 120
Sulfate	1.1		25.0	25.5		mg/L		98	80 - 120

Lab Sample ID: 180-95068-14 MSD
Matrix: Water
Analysis Batch: 291017

Client Sample ID: APMW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.065	J	1.25	1.33		mg/L		101	80 - 120	0	20
Chloride	14		25.0	38.2		mg/L		98	80 - 120	0	20
Sulfate	1.1		25.0	25.5		mg/L		98	80 - 120	0	20

Lab Sample ID: MB 180-291163/6
Matrix: Water
Analysis Batch: 291163

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			09/13/19 05:41	1
Chloride	<0.71		1.0	0.71	mg/L			09/13/19 05:41	1
Sulfate	<0.38		1.0	0.38	mg/L			09/13/19 05:41	1

Lab Sample ID: LCS 180-291163/5
Matrix: Water
Analysis Batch: 291163

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.25	1.26		mg/L		101	90 - 110
Chloride	25.0	25.7		mg/L		103	90 - 110
Sulfate	25.0	25.4		mg/L		102	90 - 110

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-290438/1-A
Matrix: Water
Analysis Batch: 290991

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 290438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/06/19 10:20	09/11/19 00:58	1
Barium	<0.0016		0.010	0.0016	mg/L		09/06/19 10:20	09/11/19 00:58	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/06/19 10:20	09/11/19 00:58	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 00:58	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:20	09/11/19 00:58	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:20	09/11/19 00:58	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:20	09/11/19 00:58	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:20	09/11/19 00:58	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:20	09/11/19 00:58	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:20	09/11/19 00:58	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:20	09/11/19 00:58	1
Calcium	<0.13		0.50	0.13	mg/L		09/06/19 10:20	09/11/19 00:58	1
Boron	<0.039		0.080	0.039	mg/L		09/06/19 10:20	09/11/19 00:58	1

Lab Sample ID: LCS 180-290438/2-A
Matrix: Water
Analysis Batch: 290991

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 290438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.900		mg/L		90	80 - 120
Barium	1.00	0.882		mg/L		88	80 - 120
Beryllium	0.500	0.509		mg/L		102	80 - 120
Cadmium	0.500	0.471		mg/L		94	80 - 120
Cobalt	0.500	0.478		mg/L		96	80 - 120
Molybdenum	0.500	0.472		mg/L		94	80 - 120
Lead	0.500	0.484		mg/L		97	80 - 120
Antimony	0.250	0.221		mg/L		89	80 - 120
Selenium	1.00	0.817		mg/L		82	80 - 120
Thallium	1.00	1.03		mg/L		103	80 - 120
Lithium	0.500	0.445		mg/L		89	80 - 120
Calcium	25.0	26.0		mg/L		104	80 - 120
Boron	1.25	1.17		mg/L		94	80 - 120

Lab Sample ID: MB 180-290439/1-A
Matrix: Water
Analysis Batch: 291679

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 290439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/06/19 10:25	09/16/19 18:35	1
Barium	<0.0016		0.010	0.0016	mg/L		09/06/19 10:25	09/16/19 18:35	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/06/19 10:25	09/16/19 18:35	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 18:35	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/06/19 10:25	09/16/19 18:35	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		09/06/19 10:25	09/16/19 18:35	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/06/19 10:25	09/16/19 18:35	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/06/19 10:25	09/16/19 18:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/06/19 10:25	09/16/19 18:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/06/19 10:25	09/16/19 18:35	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/06/19 10:25	09/16/19 18:35	1

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

Lab Sample ID: MB 180-290439/1-A
Matrix: Water
Analysis Batch: 291679

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 290439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.50	0.13	mg/L		09/06/19 10:25	09/16/19 18:35	1
Boron	<0.039		0.080	0.039	mg/L		09/06/19 10:25	09/16/19 18:35	1

Lab Sample ID: LCS 180-290439/2-A
Matrix: Water
Analysis Batch: 291679

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 290439

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.869		mg/L		87	80 - 120
Barium	1.00	0.857		mg/L		86	80 - 120
Beryllium	0.500	0.475		mg/L		95	80 - 120
Cadmium	0.500	0.487		mg/L		97	80 - 120
Cobalt	0.500	0.489		mg/L		98	80 - 120
Molybdenum	0.500	0.487		mg/L		97	80 - 120
Lead	0.500	0.513		mg/L		103	80 - 120
Antimony	0.250	0.203		mg/L		81	80 - 120
Selenium	1.00	0.953		mg/L		95	80 - 120
Thallium	1.00	1.04		mg/L		104	80 - 120
Lithium	0.500	0.421		mg/L		84	80 - 120
Calcium	25.0	23.3		mg/L		93	80 - 120
Boron	1.25	1.17		mg/L		94	80 - 120

Lab Sample ID: 180-95068-7 MS
Matrix: Water
Analysis Batch: 291679

Client Sample ID: APMW-7
Prep Type: Total Recoverable
Prep Batch: 290439

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00044	J	1.00	0.878		mg/L		88	75 - 125
Barium	0.56		1.00	1.44		mg/L		89	75 - 125
Beryllium	0.00025	J	0.500	0.528		mg/L		106	75 - 125
Cadmium	<0.00013		0.500	0.492		mg/L		98	75 - 125
Cobalt	0.00023	J	0.500	0.494		mg/L		99	75 - 125
Molybdenum	<0.00061		0.500	0.510		mg/L		102	75 - 125
Lead	<0.00013		0.500	0.521		mg/L		104	75 - 125
Antimony	<0.00038		0.250	0.223		mg/L		89	75 - 125
Selenium	<0.0015		1.00	0.933		mg/L		93	75 - 125
Thallium	<0.00015		1.00	1.02		mg/L		102	75 - 125
Lithium	<0.0034		0.500	0.442		mg/L		88	75 - 125
Calcium	90	F1	25.0	123	F1	mg/L		129	75 - 125
Boron	0.88		1.25	2.29		mg/L		114	75 - 125

Lab Sample ID: 180-95068-7 MSD
Matrix: Water
Analysis Batch: 291679

Client Sample ID: APMW-7
Prep Type: Total Recoverable
Prep Batch: 290439

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00044	J	1.00	0.848		mg/L		85	75 - 125	3	20
Barium	0.56		1.00	1.41		mg/L		86	75 - 125	2	20
Beryllium	0.00025	J	0.500	0.509		mg/L		102	75 - 125	4	20

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

Lab Sample ID: 180-95068-7 MSD
Matrix: Water
Analysis Batch: 291679

Client Sample ID: APMW-7
Prep Type: Total Recoverable
Prep Batch: 290439

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	<0.00013		0.500	0.484		mg/L		97	75 - 125	1	20
Cobalt	0.00023	J	0.500	0.461		mg/L		92	75 - 125	7	20
Molybdenum	<0.00061		0.500	0.501		mg/L		100	75 - 125	2	20
Lead	<0.00013		0.500	0.516		mg/L		103	75 - 125	1	20
Antimony	<0.00038		0.250	0.227		mg/L		91	75 - 125	2	20
Selenium	<0.0015		1.00	0.873		mg/L		87	75 - 125	7	20
Thallium	<0.00015		1.00	1.02		mg/L		102	75 - 125	1	20
Lithium	<0.0034		0.500	0.434		mg/L		87	75 - 125	2	20
Calcium	90	F1	25.0	124	F1	mg/L		135	75 - 125	1	20
Boron	0.88		1.25	2.30		mg/L		114	75 - 125	0	20

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

Lab Sample ID: MB 180-290308/2
Matrix: Water
Analysis Batch: 290308

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/05/19 11:21	1

Lab Sample ID: LCS 180-290308/1
Matrix: Water
Analysis Batch: 290308

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	585	562		mg/L		96	80 - 120

Lab Sample ID: MB 180-290427/2
Matrix: Water
Analysis Batch: 290427

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/06/19 10:00	1

Lab Sample ID: LCS 180-290427/1
Matrix: Water
Analysis Batch: 290427

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	585	562		mg/L		96	80 - 120

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-1

HPLC/IC

Analysis Batch: 291017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-1	APMW-1R	Total/NA	Water	300.0	
180-95068-1	APMW-1R	Total/NA	Water	300.0	
180-95068-2	APMW-2	Total/NA	Water	300.0	
180-95068-2	APMW-2	Total/NA	Water	300.0	
180-95068-3	APMW-3	Total/NA	Water	300.0	
180-95068-3	APMW-3	Total/NA	Water	300.0	
180-95068-4	APMW-4	Total/NA	Water	300.0	
180-95068-4	APMW-4	Total/NA	Water	300.0	
180-95068-5	APMW-5	Total/NA	Water	300.0	
180-95068-5	APMW-5	Total/NA	Water	300.0	
180-95068-6	APMW-6R	Total/NA	Water	300.0	
180-95068-6	APMW-6R	Total/NA	Water	300.0	
180-95068-7	APMW-7	Total/NA	Water	300.0	
180-95068-7	APMW-7	Total/NA	Water	300.0	
180-95068-8	APMW-8	Total/NA	Water	300.0	
180-95068-8	APMW-8	Total/NA	Water	300.0	
180-95068-9	APMW-9	Total/NA	Water	300.0	
180-95068-9	APMW-9	Total/NA	Water	300.0	
180-95068-10	APMW-10	Total/NA	Water	300.0	
180-95068-10	APMW-10	Total/NA	Water	300.0	
180-95068-11	DUP-01	Total/NA	Water	300.0	
180-95068-12	DUP-02	Total/NA	Water	300.0	
180-95068-12	DUP-02	Total/NA	Water	300.0	
180-95068-14	APMW-12	Total/NA	Water	300.0	
180-95068-15	EB-01	Total/NA	Water	300.0	
180-95068-16	FB-01	Total/NA	Water	300.0	
180-95068-17	EB-02	Total/NA	Water	300.0	
180-95068-18	FB-02	Total/NA	Water	300.0	
MB 180-291017/6	Method Blank	Total/NA	Water	300.0	
LCS 180-291017/5	Lab Control Sample	Total/NA	Water	300.0	
180-95068-14 MS	APMW-12	Total/NA	Water	300.0	
180-95068-14 MSD	APMW-12	Total/NA	Water	300.0	

Analysis Batch: 291163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-13	APMW-11	Total/NA	Water	300.0	
MB 180-291163/6	Method Blank	Total/NA	Water	300.0	
LCS 180-291163/5	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 290438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-1	APMW-1R	Total Recoverable	Water	3005A	
180-95068-2	APMW-2	Total Recoverable	Water	3005A	
180-95068-3	APMW-3	Total Recoverable	Water	3005A	
180-95068-4	APMW-4	Total Recoverable	Water	3005A	
180-95068-5	APMW-5	Total Recoverable	Water	3005A	
180-95068-6	APMW-6R	Total Recoverable	Water	3005A	
MB 180-290438/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-290438/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals

Prep Batch: 290439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-7	APMW-7	Total Recoverable	Water	3005A	
180-95068-8	APMW-8	Total Recoverable	Water	3005A	
180-95068-9	APMW-9	Total Recoverable	Water	3005A	
180-95068-10	APMW-10	Total Recoverable	Water	3005A	
180-95068-11	DUP-01	Total Recoverable	Water	3005A	
180-95068-12	DUP-02	Total Recoverable	Water	3005A	
180-95068-13	APMW-11	Total Recoverable	Water	3005A	
180-95068-14	APMW-12	Total Recoverable	Water	3005A	
180-95068-15	EB-01	Total Recoverable	Water	3005A	
180-95068-16	FB-01	Total Recoverable	Water	3005A	
180-95068-17	EB-02	Total Recoverable	Water	3005A	
180-95068-18	FB-02	Total Recoverable	Water	3005A	
MB 180-290439/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-290439/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-95068-7 MS	APMW-7	Total Recoverable	Water	3005A	
180-95068-7 MSD	APMW-7	Total Recoverable	Water	3005A	

Analysis Batch: 290991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-1	APMW-1R	Total Recoverable	Water	EPA 6020	290438
180-95068-2	APMW-2	Total Recoverable	Water	EPA 6020	290438
180-95068-3	APMW-3	Total Recoverable	Water	EPA 6020	290438
180-95068-4	APMW-4	Total Recoverable	Water	EPA 6020	290438
180-95068-5	APMW-5	Total Recoverable	Water	EPA 6020	290438
180-95068-6	APMW-6R	Total Recoverable	Water	EPA 6020	290438
MB 180-290438/1-A	Method Blank	Total Recoverable	Water	EPA 6020	290438
LCS 180-290438/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	290438

Analysis Batch: 291679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-7	APMW-7	Total Recoverable	Water	EPA 6020	290439
180-95068-8	APMW-8	Total Recoverable	Water	EPA 6020	290439
180-95068-9	APMW-9	Total Recoverable	Water	EPA 6020	290439
180-95068-10	APMW-10	Total Recoverable	Water	EPA 6020	290439
180-95068-11	DUP-01	Total Recoverable	Water	EPA 6020	290439
180-95068-12	DUP-02	Total Recoverable	Water	EPA 6020	290439
180-95068-13	APMW-11	Total Recoverable	Water	EPA 6020	290439
180-95068-14	APMW-12	Total Recoverable	Water	EPA 6020	290439
180-95068-15	EB-01	Total Recoverable	Water	EPA 6020	290439
180-95068-16	FB-01	Total Recoverable	Water	EPA 6020	290439
180-95068-17	EB-02	Total Recoverable	Water	EPA 6020	290439
180-95068-18	FB-02	Total Recoverable	Water	EPA 6020	290439
MB 180-290439/1-A	Method Blank	Total Recoverable	Water	EPA 6020	290439
LCS 180-290439/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	290439
180-95068-7 MS	APMW-7	Total Recoverable	Water	EPA 6020	290439
180-95068-7 MSD	APMW-7	Total Recoverable	Water	EPA 6020	290439

General Chemistry

Analysis Batch: 290308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-11	DUP-01	Total/NA	Water	SM 2540C	
180-95068-13	APMW-11	Total/NA	Water	SM 2540C	
180-95068-14	APMW-12	Total/NA	Water	SM 2540C	
MB 180-290308/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-290308/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 290427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-1	APMW-1R	Total/NA	Water	SM 2540C	
180-95068-2	APMW-2	Total/NA	Water	SM 2540C	
180-95068-3	APMW-3	Total/NA	Water	SM 2540C	
180-95068-4	APMW-4	Total/NA	Water	SM 2540C	
180-95068-5	APMW-5	Total/NA	Water	SM 2540C	
180-95068-6	APMW-6R	Total/NA	Water	SM 2540C	
180-95068-7	APMW-7	Total/NA	Water	SM 2540C	
180-95068-8	APMW-8	Total/NA	Water	SM 2540C	
180-95068-9	APMW-9	Total/NA	Water	SM 2540C	
180-95068-10	APMW-10	Total/NA	Water	SM 2540C	
180-95068-12	DUP-02	Total/NA	Water	SM 2540C	
180-95068-15	EB-01	Total/NA	Water	SM 2540C	
180-95068-16	FB-01	Total/NA	Water	SM 2540C	
180-95068-17	EB-02	Total/NA	Water	SM 2540C	
180-95068-18	FB-02	Total/NA	Water	SM 2540C	
MB 180-290427/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-290427/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Rick Hagendorfer / Trevor Braddock	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-54081-11287.1
Client Contact: Rick Hagendorfer	Phone: 850-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: RDH Environmental Services Inc				Job #:
Address: 5720 Dove Drive	Due Date Requested:			
City: Pace	TAT Requested (days):			
State, Zip: FL, 32571				
Phone: 205-992-5417(Tel)	PO #: SCS10382606			
Email: rickhagendorfer@gmail.com	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	6020 - BCaSbAsBaBeCdCoPbLiMoSeTl	2540C_Calcd, 300_ORGFM_28D	Total Number of containers	Special Instructions/Note:
				Preservation Code:			D	D	N		
APMW-1R	8-30-19	0845	G	Water			X	X	X	3	
APMW-2	↓	1010	↓	Water			↓	↓	↓	↓	
APMW-3		1100		Water							
APMW-4		1210		Water							
APMW-5		1300		Water							
APMW-6R		0913		Water							
APMW-7		1054		Water							
APMW-8		1150		Water							
APMW-9		1339		Water							
APMW-10		1430		Water							
DUP-01	8-29-19	0800		Water							

180-95068 Chain of Custody

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:		Time:	Method of Shipment: 8-31-19	
Relinquished by: [signature]	Date/Time: 8-30-19 1502	Company: RDH ENV.	Received by: [signature]	Date/Time: 8-31-19 1015	Company: TA PIT
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Rick Hagendorfer / Trevor Braddock	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-54081-11287.2
Client Contact: Rick Hagendorfer	Phone: 850-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: RDH Environmental Services Inc				Job #:

Address: 5720 Dove Drive	Due Date Requested:
City: Pace	TAT Requested (days):
State, Zip: FL, 32571	
Phone: 205-992-5417(Tel)	PO #: SCS10382606
Email: rickhagendorfer@gmail.com	WO #:
Project Name: CCR - Plant Watson	Project #: 18020186
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	6020 - BCaSbAsBaBeCdCoPbLiMoSeTl	2540C_Calcd, 300_ORGFM_28D	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N		
Dup-02	8-30-19	0700	G	Water			X	X	X		
APMW-11	8-29-19	1651		Water							
APMW-12	8-29-19	1840		Water							
EB-01	8-30-19	0742		Water							
FB-01	8-30-19	0750		Water							
EB-02	8-30-19	1207		Water							
FB-02	8-30-19	1217		Water							
				Water							
				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

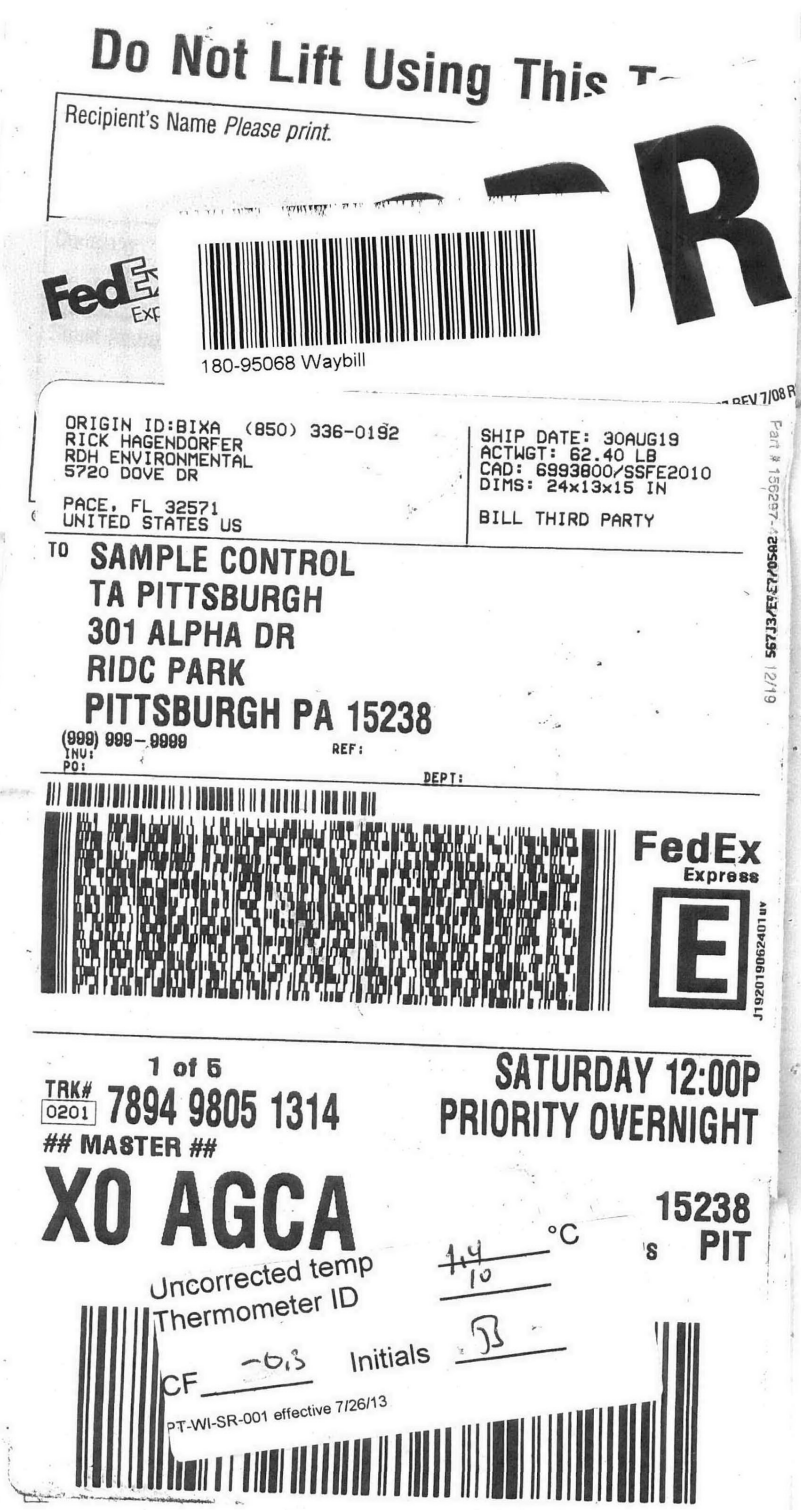
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-30-19 1502	RDH Env.	Melissa Watson	8-31-19	TAL-PIT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:15	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019



Do Not Lift Using This T

Recipient's Name *Please print.*

R

180-95068 Waybill

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

SHIP DATE: 30AUG19
ACTWGT: 62.40 LB
CAD: 6993800/SSFE2010
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(999) 999-9999
INV:
PO:
REF:
DEPT:

FedEx Express

1 of 5

TRK# 0201 7894 9805 1314

MASTER

SATURDAY 12:00P
PRIORITY OVERNIGHT

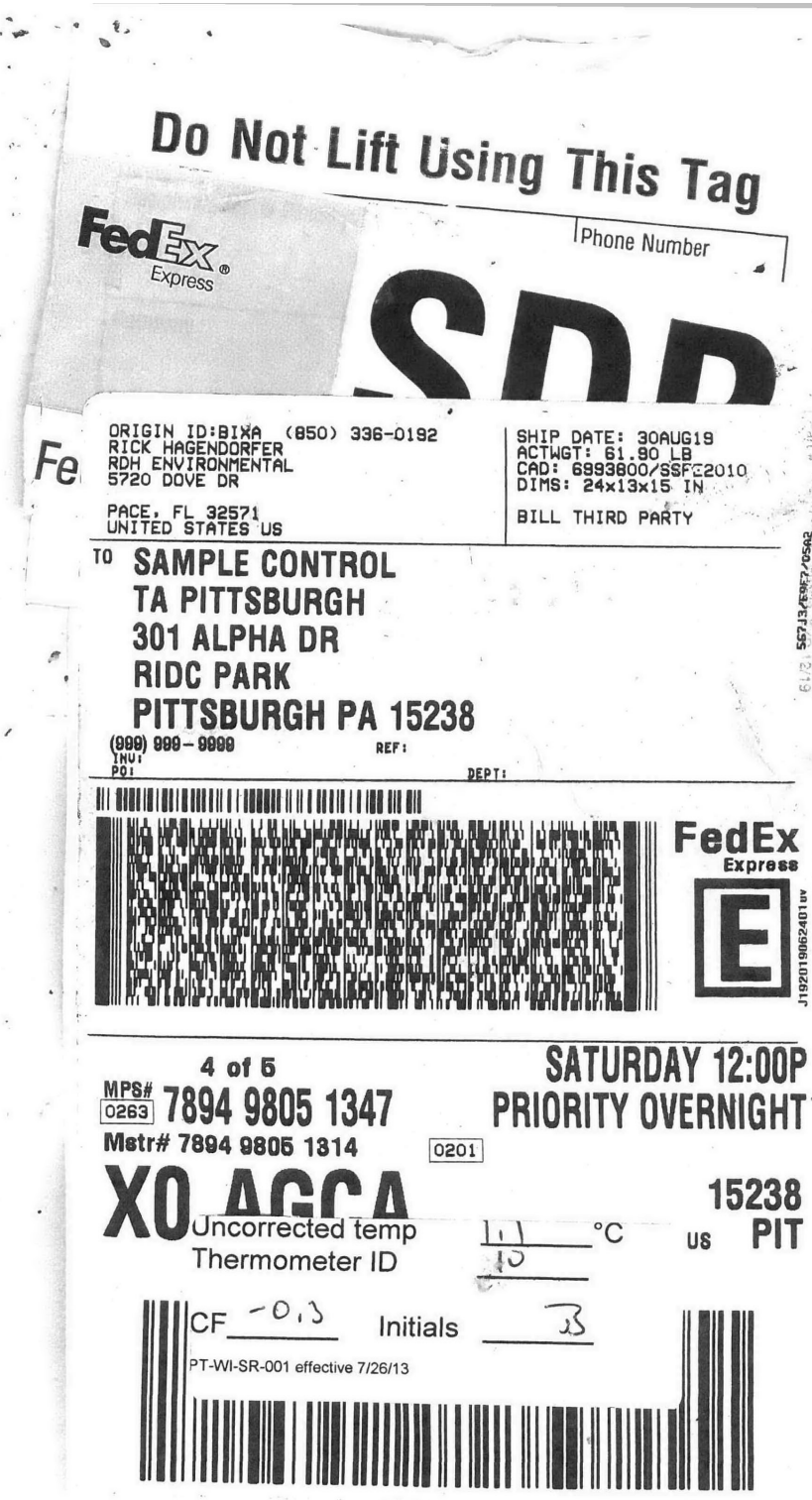
XO AGCA

15238
PIT

Uncorrected temp 1.4 °C
Thermometer ID 10

CF -0.3 Initials JB

PT-WI-SR-001 effective 7/26/13



Do Not Lift Using This Tag

FedEx Express

Phone Number

S D R

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

SHIP DATE: 30AUG19
ACTWGT: 61.90 LB
CAD: 6993800/SSFE2010
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(999) 999-9999
INV:
PO:
REF:
DEPT:

FedEx Express

4 of 5

MPS# 0263 7894 9805 1347

Mstr# 7894 9805 1314 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PIT

Uncorrected temp 1.1 °C
Thermometer ID 10

CF -0.3 Initials JB

PT-WI-SR-001 effective 7/26/13

dEx Express

SA

RT 639
ST 4

5
12:00
A
1358
08.31

dEx Saturday Delivery

151967 REV 7/08 RRD

RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

CAD: 6993800/SSFE2010
DIMS: 24x13x15 IN

BILL THIRD PARTY

Part # 156297- 12/19

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(999) 999-9999 REF:
INV:
PO: DEPT:

FedEx Express

E

J19201906240 1uv

5 of 5
MPS# 0263 7894 9805 1358
Mstr# 7894 9805 1314 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PA-US PIT

Uncorrected temp 1.3 °C
Thermometer ID 10
CF -0.3 Initials B
PT-WI-SR-001 effective 7/26/13

Do Not Lift Usi...

Recipient...

FedEx Express

SDR

151967 REV 7/08 RRD

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

SHIP DATE: 30AUG19
ACTWGT: 68.00 LB
CAD: 6993800/SSFE2010
DIMS: 24x13x15 IN

BILL THIRD PARTY

Part # 156297- 12/19

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(999) 999-9999 REF:
INV:
PO: DEPT:

FedEx Express

E

J19201906240 1uv

3 of 5
MPS# 0263 7894 9805 1336
Mstr# 7894 9805 1314 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PA-US PIT

Uncorrected temp 1.9 °C
Thermometer ID 10
CF -0.5 Initials B
PT-WI-SR-001 effective 7/26/13

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

Do Not Lift Using

FedEx Express

SnR

RT 639 5 A
ST 4 12:00
1325
08.31

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

CAD: 6993800/SSFE[illegible]
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(999) 999-9999 REF:
INV:
PO: DEPT:

FedEx Express

2 of 5
MPS# 0263 7894 9805 1325
Mstr# 7894 9805 1314

SATURDAY 12:00P
PRIORITY OVERNIGHT

0201

XO AGCA

15238
PA-US PIT

Uncorrected temp 1.9 °C
Thermometer ID 10

CF -0.3 Initials JB

PT-WI-SR-001 effective 7/26/13

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-372494.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-95068-1
Address: 13715 Rider Trail North,	Due Date Requested: 9/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APMW-1R (180-95068-1)	8/30/19	08:45 Eastern		Water			X	X	X	1	
APMW-2 (180-95068-2)	8/30/19	10:10 Eastern		Water			X	X	X	1	
APMW-3 (180-95068-3)	8/30/19	11:00 Eastern		Water			X	X	X	1	
APMW-4 (180-95068-4)	8/30/19	12:10 Eastern		Water			X	X	X	1	
APMW-5 (180-95068-5)	8/30/19	13:00 Eastern		Water			X	X	X	1	
APMW-6R (180-95068-6)	8/30/19	09:13 Eastern		Water			X	X	X	1	
APMW-7 (180-95068-7)	8/30/19	10:54 Eastern		Water			X	X	X	1	
APMW-8 (180-95068-8)	8/30/19	11:50 Eastern		Water			X	X	X	1	
APMW-9 (180-95068-9)	8/30/19	13:39 Eastern		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 9/4/19 1700	Company TAST	Received by:	Date/Time: 9/5/19 0520	Company TAST
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-372494.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-95068-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APMW-10 (180-95068-10)	8/30/19	14:30 Eastern		Water			X	X	X	1	
DUP-01 (180-95068-11)	8/29/19	08:00 Eastern		Water			X	X	X	1	
DUP-02 (180-95068-12)	8/30/19	07:00 Eastern		Water			X	X	X	1	
APMW-11 (180-95068-13)	8/29/19	16:51 Eastern		Water			X	X	X	1	
APMW-12 (180-95068-14)	8/29/19	18:40 Eastern		Water			X	X	X	1	
EB-01 (180-95068-15)	8/30/19	07:42 Eastern		Water			X	X	X	1	
FB-01 (180-95068-16)	8/30/19	07:50 Eastern		Water			X	X	X	1	
EB-02 (180-95068-17)	8/30/19	12:07 Eastern		Water			X	X	X	1	
FB-02 (180-95068-18)	8/30/19	12:17 Eastern		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/4/19 1720	TAL		9/5/19 05:20	TAL STL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-372494.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-95068-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APMW-1R (180-95068-1)	8/30/19	08:45 Eastern		Water			X	X	X	1	
APMW-2 (180-95068-2)	8/30/19	10:10 Eastern		Water			X	X	X	1	
APMW-3 (180-95068-3)	8/30/19	11:00 Eastern		Water			X	X	X	1	
APMW-4 (180-95068-4)	8/30/19	12:10 Eastern		Water			X	X	X	1	
APMW-5 (180-95068-5)	8/30/19	13:00 Eastern		Water			X	X	X	1	
APMW-6R (180-95068-6)	8/30/19	09:13 Eastern		Water			X	X	X	1	
APMW-7 (180-95068-7)	8/30/19	10:54 Eastern		Water			X	X	X	1	
APMW-8 (180-95068-8)	8/30/19	11:50 Eastern		Water			X	X	X	1	
APMW-9 (180-95068-9)	8/30/19	13:39 Eastern		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/4/19 1700	TAS		9/5/19 0520	TAS
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-372494.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-95068-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA
M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
				Preservation Code:							
APMW-10 (180-95068-10)	8/30/19	14:30 Eastern		Water			X	X	X	1	
DUP-01 (180-95068-11)	8/29/19	08:00 Eastern		Water			X	X	X	1	
DUP-02 (180-95068-12)	8/30/19	07:00 Eastern		Water			X	X	X	1	
APMW-11 (180-95068-13)	8/29/19	16:51 Eastern		Water			X	X	X	1	
APMW-12 (180-95068-14)	8/29/19	18:40 Eastern		Water			X	X	X	1	
EB-01 (180-95068-15)	8/30/19	07:42 Eastern		Water			X	X	X	1	
FB-01 (180-95068-16)	8/30/19	07:50 Eastern		Water			X	X	X	1	
EB-02 (180-95068-17)	8/30/19	12:07 Eastern		Water			X	X	X	1	
FB-02 (180-95068-18)	8/30/19	12:17 Eastern		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ______ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) | Primary Deliverable Rank: 2
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 9/4/19 1700	Company: [illegible]	Received by: [signature]	Date/Time: 9/5/19 05:20	Company: TASTL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-372494.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-95068-1
Address: 13715 Rider Trail North,	Due Date Requested: 9/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APMW-1R (180-95068-1)	8/30/19	08:45 Eastern		Water			X	X	X	1	
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APMW-3 (180-95068-3)	8/30/19	11:00 Eastern		Water			X	X	X	1	
APMW-4 (180-95068-4)	8/30/19	12:10 Eastern		Water			X	X	X	1	
APMW-5 (180-95068-5)	8/30/19	13:00 Eastern		Water			X	X	X	1	
APMW-6R (180-95068-6)	8/30/19	09:13 Eastern		Water			X	X	X	1	
APMW-7 (180-95068-7)	8/30/19	10:54 Eastern		Water			X	X	X	1	
APMW-8 (180-95068-8)	8/30/19	11:50 Eastern		Water			X	X	X	1	
APMW-9 (180-95068-9)	8/30/19	13:39 Eastern		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 9/4/19 1700	Company TAP	Received by:	Date/Time: 9/5/19 0520	Company TAST
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-372494.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-95068-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

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G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APMW-10 (180-95068-10)	8/30/19	14:30 Eastern		Water			X	X	X	1	
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DUP-02 (180-95068-12)	8/30/19	07:00 Eastern		Water			X	X	X	1	
APMW-11 (180-95068-13)	8/29/19	16:51 Eastern		Water			X	X	X	1	
APMW-12 (180-95068-14)	8/29/19	18:40 Eastern		Water			X	X	X	1	
EB-01 (180-95068-15)	8/30/19	07:42 Eastern		Water			X	X	X	1	
FB-01 (180-95068-16)	8/30/19	07:50 Eastern		Water			X	X	X	1	
EB-02 (180-95068-17)	8/30/19	12:07 Eastern		Water			X	X	X	1	
FB-02 (180-95068-18)	8/30/19	12:17 Eastern		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/4/19 1720	TAL		9/5/19 05:20	TAST
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-95068-1

Login Number: 95068
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

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

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-95068-2
Client Project/Site: CCR - Plant Watson

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Authorized for release by:
10/15/2019 6:53:25 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

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

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

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-95068-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-95068-2

Comments
No additional comments.

Receipt
The samples were received on 8/31/2019 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.8º C, 1.0º C, 1.1º C, 1.6º C and 1.6º C.

RAD
Method(s) 903.0, 9315: Ra-226 Prep Batch 160-441898

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
APMW-1R (180-95068-1), APMW-2 (180-95068-2), APMW-3 (180-95068-3), APMW-4 (180-95068-4), APMW-5 (180-95068-5), APMW-6R (180-95068-6), APMW-7 (180-95068-7), APMW-8 (180-95068-8), APMW-9 (180-95068-9), APMW-10 (180-95068-10), DUP-01 (180-95068-11), DUP-02 (180-95068-12), APMW-11 (180-95068-13), APMW-12 (180-95068-14), EB-01 (180-95068-15), FB-01 (180-95068-16), EB-02 (180-95068-17), FB-02 (180-95068-18), (LCS 160-441898/1-A), (MB 160-441898/23-A) and (180-95068-A-3-B DU)

Method(s) 904.0, 9320: Ra-228 Prep Batch 160-441912
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

APMW-1R (180-95068-1), APMW-2 (180-95068-2), APMW-3 (180-95068-3), APMW-4 (180-95068-4), APMW-5 (180-95068-5), APMW-6R (180-95068-6), APMW-7 (180-95068-7), APMW-8 (180-95068-8), APMW-9 (180-95068-9), APMW-10 (180-95068-10), DUP-01 (180-95068-11), DUP-02 (180-95068-12), APMW-11 (180-95068-13), APMW-12 (180-95068-14), EB-01 (180-95068-15), FB-01 (180-95068-16), EB-02 (180-95068-17), FB-02 (180-95068-18), (LCS 160-441912/1-A), (MB 160-441912/23-A) and (180-95068-A-3-D DU)

Method(s) 904.0, 9320: Radium-228 Prep Batch 160-441912

The following batch had a sample duplicate (180-95068-3-DU) with a RER (1.48) outside the limits (1.00). The associated LCS (laboratory control sample) has an acceptable spike recovery demonstrating acceptable sample preparation and instrument performance. The results are reported with this narrative.

APMW-1R (180-95068-1), APMW-2 (180-95068-2), APMW-3 (180-95068-3), APMW-4 (180-95068-4), APMW-5 (180-95068-5), APMW-6R (180-95068-6), APMW-7 (180-95068-7), APMW-8 (180-95068-8), APMW-9 (180-95068-9), APMW-10 (180-95068-10), DUP-01 (180-95068-11), DUP-02 (180-95068-12), APMW-11 (180-95068-13), APMW-12 (180-95068-14), EB-01 (180-95068-15), FB-01 (180-95068-16), EB-02 (180-95068-17), FB-02 (180-95068-18), (LCS 160-441912/1-A), (MB 160-441912/23-A) and (180-95068-A-3-D DU)

Method(s) PrecSep_0: Radium 226 Prep Batch 160-441912:

The following samples had yellow discoloration:APMW-7 (180-95068-7) and DUP-02 (180-95068-12).

Method(s) PrecSep-21: Radium 228 Prep Batch 160-441898:

The following samples had yellow discoloration:APMW-7 (180-95068-7) and DUP-02 (180-95068-12).

Job ID: 180-95068-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Qualifiers

Rad

Qualifier	Qualifier Description
F	Duplicate RPD exceeds the control limit
U	Result is less than the sample detection limit.

Glossary

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	12-31-19
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-19
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-19
Iowa	State Program	373	12-01-20
Kansas	NELAP	E-10236	10-31-19 *
Kentucky (DW)	State	KY90125	12-31-19
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-19
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-20
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-20
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	02-02-20
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
Washington	State Program	C592	08-30-19 *
West Virginia DEP	State Program	381	10-31-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-95068-1	APMW-1R	Water	08/30/19 08:45	08/31/19 10:15	
180-95068-2	APMW-2	Water	08/30/19 10:10	08/31/19 10:15	
180-95068-3	APMW-3	Water	08/30/19 11:00	08/31/19 10:15	
180-95068-4	APMW-4	Water	08/30/19 12:10	08/31/19 10:15	
180-95068-5	APMW-5	Water	08/30/19 13:00	08/31/19 10:15	
180-95068-6	APMW-6R	Water	08/30/19 09:13	08/31/19 10:15	
180-95068-7	APMW-7	Water	08/30/19 10:54	08/31/19 10:15	
180-95068-8	APMW-8	Water	08/30/19 11:50	08/31/19 10:15	
180-95068-9	APMW-9	Water	08/30/19 13:39	08/31/19 10:15	
180-95068-10	APMW-10	Water	08/30/19 14:30	08/31/19 10:15	
180-95068-11	DUP-01	Water	08/29/19 08:00	08/31/19 10:15	
180-95068-12	DUP-02	Water	08/30/19 07:00	08/31/19 10:15	
180-95068-13	APMW-11	Water	08/29/19 16:51	08/31/19 10:15	
180-95068-14	APMW-12	Water	08/29/19 18:40	08/31/19 10:15	
180-95068-15	EB-01	Water	08/30/19 07:42	08/31/19 10:15	
180-95068-16	FB-01	Water	08/30/19 07:50	08/31/19 10:15	
180-95068-17	EB-02	Water	08/30/19 12:07	08/31/19 10:15	
180-95068-18	FB-02	Water	08/30/19 12:17	08/31/19 10:15	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Client Sample ID: APMW-1R
Date Collected: 08/30/19 08:45
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.54 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 10:29	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.54 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443363	09/19/19 14:11	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-2
Date Collected: 08/30/19 10:10
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.37 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 10:30	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.37 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443363	09/19/19 14:11	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-3
Date Collected: 08/30/19 11:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.33 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 10:30	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.33 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443363	09/19/19 14:11	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-4
Date Collected: 08/30/19 12:10
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.73 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 10:30	KLS	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Client Sample ID: APMW-4
Date Collected: 08/30/19 12:10
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.73 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443363	09/19/19 14:11	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-5
Date Collected: 08/30/19 13:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.04 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 10:30	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.04 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443363	09/19/19 14:11	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-6R
Date Collected: 08/30/19 09:13
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.24 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 10:30	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.24 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443363	09/19/19 14:11	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-7
Date Collected: 08/30/19 10:54
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.11 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 10:31	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.11 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443365	09/19/19 14:14	KLS	TAL SL
	Instrument ID: GFPCBLUE									

Client Sample ID: APMW-7

Date Collected: 08/30/19 10:54
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL

Client Sample ID: APMW-8

Date Collected: 08/30/19 11:50
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.46 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:46	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.46 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443365	09/19/19 14:14	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-9

Date Collected: 08/30/19 13:39
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.59 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:46	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.59 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443365	09/19/19 14:14	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-10

Date Collected: 08/30/19 14:30
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.72 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:46	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.72 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443365	09/19/19 14:14	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-01

Lab Sample ID: 180-95068-11

Date Collected: 08/29/19 08:00

Matrix: Water

Date Received: 08/31/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.64 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:46	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.64 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443365	09/19/19 14:15	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-02

Lab Sample ID: 180-95068-12

Date Collected: 08/30/19 07:00

Matrix: Water

Date Received: 08/31/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.38 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:46	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.38 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443365	09/19/19 14:15	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-11

Lab Sample ID: 180-95068-13

Date Collected: 08/29/19 16:51

Matrix: Water

Date Received: 08/31/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.51 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:46	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.51 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443365	09/19/19 14:15	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-12

Lab Sample ID: 180-95068-14

Date Collected: 08/29/19 18:40

Matrix: Water

Date Received: 08/31/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.28 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:47	KLS	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Client Sample ID: APMW-12
Date Collected: 08/29/19 18:40
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.28 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443365	09/19/19 14:15	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-01
Date Collected: 08/30/19 07:42
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.11 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:47	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.11 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443457	09/19/19 14:17	CJQ	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-01
Date Collected: 08/30/19 07:50
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.19 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:47	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.19 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443457	09/19/19 14:17	CJQ	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-02
Date Collected: 08/30/19 12:07
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.29 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:47	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.29 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443457	09/19/19 14:17	CJQ	TAL SL
	Instrument ID: GFPCPROTEAN									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Client Sample ID: EB-02
Date Collected: 08/30/19 12:07
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL

Client Sample ID: FB-02
Date Collected: 08/30/19 12:17
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.46 mL	1.0 g	441898	09/06/19 13:19	ORM	TAL SL
Total/NA	Analysis	9315		1			444862	10/02/19 13:47	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.46 mL	1.0 g	441912	09/06/19 14:49	ORM	TAL SL
Total/NA	Analysis	9320		1			443457	09/19/19 14:17	CJQ	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			445524	10/09/19 08:01	SMP	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

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

Analyst References:

Lab: TAL SL

Batch Type: Prep

ORM = Octavia Moore

Batch Type: Analysis

CJQ = Caleb Quinn

KLS = Kody Saulters

SMP = Siobhan Perry

Client Sample ID: APMW-1R

Lab Sample ID: 180-95068-1

Date Collected: 08/30/19 08:45

Matrix: Water

Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	4.21		0.338	0.508	1.00	0.121	pCi/L	09/06/19 13:19	10/02/19 10:29	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110	09/06/19 13:19	10/02/19 10:29	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.76		0.497	0.606	1.00	0.451	pCi/L	09/06/19 14:49	09/19/19 14:11	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110	09/06/19 14:49	09/19/19 14:11	1
Y Carrier	82.2		40 - 110	09/06/19 14:49	09/19/19 14:11	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	7.98		0.601	0.791	5.00	0.451	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-2

Lab Sample ID: 180-95068-2

Date Collected: 08/30/19 10:10

Matrix: Water

Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	10.8		0.507	1.10	1.00	0.0925	pCi/L	09/06/19 13:19	10/02/19 10:30	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	108		40 - 110	09/06/19 13:19	10/02/19 10:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.68		0.510	0.730	1.00	0.326	pCi/L	09/06/19 14:49	09/19/19 14:11	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	108		40 - 110	09/06/19 14:49	09/19/19 14:11	1
Y Carrier	89.3		40 - 110	09/06/19 14:49	09/19/19 14:11	1

Client Sample ID: APMW-2

Date Collected: 08/30/19 10:10
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-2
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	16.5		0.719	1.32	5.00	0.326	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-3

Date Collected: 08/30/19 11:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.564		0.124	0.134	1.00	0.0937	pCi/L	09/06/19 13:19	10/02/19 10:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*110*		*40 - 110*	*09/06/19 13:19*	*10/02/19 10:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.89		0.510	0.680	1.00	0.390	pCi/L	09/06/19 14:49	09/19/19 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*110*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:11*	*1*
Y Carrier	*82.6*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	5.45		0.525	0.693	5.00	0.390	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-4

Date Collected: 08/30/19 12:10
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.483		0.141	0.147	1.00	0.129	pCi/L	09/06/19 13:19	10/02/19 10:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.9*		*40 - 110*	*09/06/19 13:19*	*10/02/19 10:30*	*1*

Client Sample ID: APMW-4

Date Collected: 08/30/19 12:10
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-4
Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.758		0.317	0.325	1.00	0.439	pCi/L	09/06/19 14:49	09/19/19 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.9*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:11*	*1*
Y Carrier	*92.3*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.24		0.347	0.357	5.00	0.439	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-5

Date Collected: 08/30/19 13:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-5
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.295		0.102	0.105	1.00	0.107	pCi/L	09/06/19 13:19	10/02/19 10:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*09/06/19 13:19*	*10/02/19 10:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.53		0.423	0.483	1.00	0.430	pCi/L	09/06/19 14:49	09/19/19 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:11*	*1*
Y Carrier	*85.6*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.82		0.435	0.494	5.00	0.430	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-6R

Lab Sample ID: 180-95068-6

Date Collected: 08/30/19 09:13

Matrix: Water

Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.382		0.112	0.117	1.00	0.0979	pCi/L	09/06/19 13:19	10/02/19 10:30	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		40 - 110	09/06/19 13:19	10/02/19 10:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.14		0.417	0.461	1.00	0.468	pCi/L	09/06/19 14:49	09/19/19 14:11	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		40 - 110	09/06/19 14:49	09/19/19 14:11	1
Y Carrier	81.9		40 - 110	09/06/19 14:49	09/19/19 14:11	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.52		0.432	0.476	5.00	0.468	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-7

Lab Sample ID: 180-95068-7

Date Collected: 08/30/19 10:54

Matrix: Water

Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.88		0.234	0.289	1.00	0.121	pCi/L	09/06/19 13:19	10/02/19 10:31	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110	09/06/19 13:19	10/02/19 10:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.75		0.549	0.702	1.00	0.438	pCi/L	09/06/19 14:49	09/19/19 14:14	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110	09/06/19 14:49	09/19/19 14:14	1
Y Carrier	86.0		40 - 110	09/06/19 14:49	09/19/19 14:14	1

Client Sample ID: APMW-7

Date Collected: 08/30/19 10:54
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-7

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.63		0.597	0.759	5.00	0.438	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-8

Date Collected: 08/30/19 11:50
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-8

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.775		0.160	0.174	1.00	0.130	pCi/L	09/06/19 13:19	10/02/19 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.18		0.457	0.543	1.00	0.415	pCi/L	09/06/19 14:49	09/19/19 14:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:14*	*1*
Y Carrier	*89.3*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.96		0.484	0.570	5.00	0.415	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-9

Date Collected: 08/30/19 13:39
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.97		0.232	0.292	1.00	0.112	pCi/L	09/06/19 13:19	10/02/19 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.0*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:46*	*1*

Client Sample ID: APMW-9

Date Collected: 08/30/19 13:39
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-9
Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.35		0.584	0.764	1.00	0.465	pCi/L	09/06/19 14:49	09/19/19 14:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.0*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:14*	*1*
Y Carrier	*78.1*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	7.32		0.628	0.818	5.00	0.465	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-10

Date Collected: 08/30/19 14:30
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-10
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.954		0.171	0.192	1.00	0.112	pCi/L	09/06/19 13:19	10/02/19 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.24		0.392	0.408	1.00	0.532	pCi/L	09/06/19 14:49	09/19/19 14:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:14*	*1*
Y Carrier	*85.6*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:14*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.19		0.428	0.451	5.00	0.532	pCi/L		10/09/19 08:01	1

Client Sample ID: DUP-01

Date Collected: 08/29/19 08:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-11
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.179**		0.0936	0.0949	1.00	0.124	pCi/L	09/06/19 13:19	10/02/19 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.8*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0881	U	0.275	0.275	1.00	0.508	pCi/L	09/06/19 14:49	09/19/19 14:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.8*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:15*	*1*
Y Carrier	*75.1*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:15*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0910	U	0.290	0.291	5.00	0.508	pCi/L		10/09/19 08:01	1

Client Sample ID: DUP-02

Date Collected: 08/30/19 07:00
Date Received: 08/31/19 10:15

Lab Sample ID: 180-95068-12
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**2.12**		0.235	0.303	1.00	0.0979	pCi/L	09/06/19 13:19	10/02/19 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**4.83**		0.545	0.703	1.00	0.469	pCi/L	09/06/19 14:49	09/19/19 14:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:15*	*1*
Y Carrier	*85.6*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:15*	*1*

Client Sample ID: DUP-02

Lab Sample ID: 180-95068-12
Matrix: Water
Date Collected: 08/30/19 07:00
Date Received: 08/31/19 10:15

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**6.95**		0.594	0.766	5.00	0.469	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-11

Lab Sample ID: 180-95068-13
Matrix: Water
Date Collected: 08/29/19 16:51
Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0980	U	0.0711	0.0716	1.00	0.102	pCi/L	09/06/19 13:19	10/02/19 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.3*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0920	U	0.286	0.286	1.00	0.496	pCi/L	09/06/19 14:49	09/19/19 14:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.3*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:15*	*1*
Y Carrier	*77.0*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:15*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.190	U	0.295	0.295	5.00	0.496	pCi/L		10/09/19 08:01	1

Client Sample ID: APMW-12

Lab Sample ID: 180-95068-14
Matrix: Water
Date Collected: 08/29/19 18:40
Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.217**		0.0855	0.0877	1.00	0.0894	pCi/L	09/06/19 13:19	10/02/19 13:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.6*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:47*	*1*

Client Sample ID: APMW-12

Lab Sample ID: 180-95068-14

Date Collected: 08/29/19 18:40

Matrix: Water

Date Received: 08/31/19 10:15

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0358	U	0.242	0.242	1.00	0.428	pCi/L	09/06/19 14:49	09/19/19 14:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.6*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:15*	*1*
Y Carrier	*84.1*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:15*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.253	U	0.257	0.257	5.00	0.428	pCi/L		10/09/19 08:01	1

Client Sample ID: EB-01

Lab Sample ID: 180-95068-15

Date Collected: 08/30/19 07:42

Matrix: Water

Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0594	U	0.0414	0.0417	1.00	0.120	pCi/L	09/06/19 13:19	10/02/19 13:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:47*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.244	U	0.355	0.356	1.00	0.593	pCi/L	09/06/19 14:49	09/19/19 14:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*
Y Carrier	*86.4*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.185	U	0.357	0.358	5.00	0.593	pCi/L		10/09/19 08:01	1

Client Sample ID: FB-01

Lab Sample ID: 180-95068-16

Date Collected: 08/30/19 07:50

Matrix: Water

Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0232	U	0.0523	0.0523	1.00	0.116	pCi/L	09/06/19 13:19	10/02/19 13:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:47*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0120	U	0.340	0.340	1.00	0.603	pCi/L	09/06/19 14:49	09/19/19 14:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*
Y Carrier	*77.0*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0112	U	0.344	0.344	5.00	0.603	pCi/L		10/09/19 08:01	1

Client Sample ID: EB-02

Lab Sample ID: 180-95068-17

Date Collected: 08/30/19 12:07

Matrix: Water

Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.507**		0.131	0.139	1.00	0.104	pCi/L	09/06/19 13:19	10/02/19 13:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:47*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.408	U	0.408	0.409	1.00	0.664	pCi/L	09/06/19 14:49	09/19/19 14:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*
Y Carrier	*71.0*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Client Sample ID: EB-02

Lab Sample ID: 180-95068-17

Date Collected: 08/30/19 12:07
Matrix: Water
Date Received: 08/31/19 10:15

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.915		0.429	0.432	5.00	0.664	pCi/L		10/09/19 08:01	1

Client Sample ID: FB-02

Lab Sample ID: 180-95068-18

Date Collected: 08/30/19 12:17
Matrix: Water
Date Received: 08/31/19 10:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0150	U	0.0625	0.0625	1.00	0.117	pCi/L	09/06/19 13:19	10/02/19 13:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.6*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:47*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0219	U	0.282	0.282	1.00	0.494	pCi/L	09/06/19 14:49	09/19/19 14:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.6*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*
Y Carrier	*96.4*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0369	U	0.289	0.289	5.00	0.494	pCi/L		10/09/19 08:01	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-441898/23-A
Matrix: Water
Analysis Batch: 444901

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 441898

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.05456	U	0.0536	0.0538	1.00	0.128	pCi/L	09/06/19 13:19	10/02/19 13:43	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.8*		*40 - 110*	*09/06/19 13:19*	*10/02/19 13:43*	*1*

Lab Sample ID: LCS 160-441898/1-A
Matrix: Water
Analysis Batch: 444862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 441898

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	9.577		1.01	1.00	0.135	pCi/L	84	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*85.6*		*40 - 110*

Lab Sample ID: 180-95068-3 DU
Matrix: Water
Analysis Batch: 444862

Client Sample ID: APMW-3
Prep Type: Total/NA
Prep Batch: 441898

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.564			0.3741		0.137	1.00	0.131	pCi/L			0.70	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*62.7*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-441912/23-A
Matrix: Water
Analysis Batch: 443457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 441912

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2534	U	0.324	0.325	1.00	0.538	pCi/L	09/06/19 14:49	09/19/19 14:17	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.8*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*
Y Carrier	*74.8*		*40 - 110*	*09/06/19 14:49*	*09/19/19 14:17*	*1*

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

Lab Sample ID: LCS 160-441912/1-A
Matrix: Water
Analysis Batch: 443363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 441912

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.57	9.779		1.20	1.00	0.498	pCi/L	102	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*85.6*		*40 - 110*
Y Carrier	*80.7*		*40 - 110*

Lab Sample ID: 180-95068-3 DU
Matrix: Water
Analysis Batch: 443363

Client Sample ID: APMW-3
Prep Type: Total/NA
Prep Batch: 441912

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	4.89			7.493	F	1.08	1.00	0.689	pCi/L			1.48	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*62.7*		*40 - 110*
Y Carrier	*84.5*		*40 - 110*

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-95068-2

Rad

Prep Batch: 441898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-1	APMW-1R	Total/NA	Water	PrecSep-21	
180-95068-2	APMW-2	Total/NA	Water	PrecSep-21	
180-95068-3	APMW-3	Total/NA	Water	PrecSep-21	
180-95068-4	APMW-4	Total/NA	Water	PrecSep-21	
180-95068-5	APMW-5	Total/NA	Water	PrecSep-21	
180-95068-6	APMW-6R	Total/NA	Water	PrecSep-21	
180-95068-7	APMW-7	Total/NA	Water	PrecSep-21	
180-95068-8	APMW-8	Total/NA	Water	PrecSep-21	
180-95068-9	APMW-9	Total/NA	Water	PrecSep-21	
180-95068-10	APMW-10	Total/NA	Water	PrecSep-21	
180-95068-11	DUP-01	Total/NA	Water	PrecSep-21	
180-95068-12	DUP-02	Total/NA	Water	PrecSep-21	
180-95068-13	APMW-11	Total/NA	Water	PrecSep-21	
180-95068-14	APMW-12	Total/NA	Water	PrecSep-21	
180-95068-15	EB-01	Total/NA	Water	PrecSep-21	
180-95068-16	FB-01	Total/NA	Water	PrecSep-21	
180-95068-17	EB-02	Total/NA	Water	PrecSep-21	
180-95068-18	FB-02	Total/NA	Water	PrecSep-21	
MB 160-441898/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-441898/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
180-95068-3 DU	APMW-3	Total/NA	Water	PrecSep-21	

Prep Batch: 441912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95068-1	APMW-1R	Total/NA	Water	PrecSep_0	
180-95068-2	APMW-2	Total/NA	Water	PrecSep_0	
180-95068-3	APMW-3	Total/NA	Water	PrecSep_0	
180-95068-4	APMW-4	Total/NA	Water	PrecSep_0	
180-95068-5	APMW-5	Total/NA	Water	PrecSep_0	
180-95068-6	APMW-6R	Total/NA	Water	PrecSep_0	
180-95068-7	APMW-7	Total/NA	Water	PrecSep_0	
180-95068-8	APMW-8	Total/NA	Water	PrecSep_0	
180-95068-9	APMW-9	Total/NA	Water	PrecSep_0	
180-95068-10	APMW-10	Total/NA	Water	PrecSep_0	
180-95068-11	DUP-01	Total/NA	Water	PrecSep_0	
180-95068-12	DUP-02	Total/NA	Water	PrecSep_0	
180-95068-13	APMW-11	Total/NA	Water	PrecSep_0	
180-95068-14	APMW-12	Total/NA	Water	PrecSep_0	
180-95068-15	EB-01	Total/NA	Water	PrecSep_0	
180-95068-16	FB-01	Total/NA	Water	PrecSep_0	
180-95068-17	EB-02	Total/NA	Water	PrecSep_0	
180-95068-18	FB-02	Total/NA	Water	PrecSep_0	
MB 160-441912/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-441912/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
180-95068-3 DU	APMW-3	Total/NA	Water	PrecSep_0	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Rick Hagendorfer / Trevor Braddock	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-54081-11287.1
Client Contact: Rick Hagendorfer	Phone: 850-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: RDH Environmental Services Inc				Job #:

Address: 5720 Dove Drive	Due Date Requested:
City: Pace	TAT Requested (days):
State, Zip: FL, 32571	
Phone: 205-992-5417(Tel)	PO #: SCS10382606
Email: rickhagendorfer@gmail.com	WO #:
Project Name: CCR - Plant Watson	Project #: 18020186
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	6020 - BCaSbAsBaBeCdCoPbLiMoSeTl	2540C_Calcd, 300_ORGFM_28D	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N		
APMW-1R	8-30-19	0845	G	Water			X	X	X	3	
APMW-2		1010		Water							
APMW-3		1100		Water							
APMW-4		1210		Water							
APMW-5		1300		Water							
APMW-6R		0913		Water							
APMW-7		1054		Water							
APMW-8		1150		Water							
APMW-9		1339		Water							
APMW-10		1430		Water							
DUP-01	8-29-19	0800		Water							

180-95068 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: 8-31-19

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-30-19 1502	RDH ENV.	Claudia Walsh	8-31-19	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:15	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Rick Hagendorfer / Trevor Braddock	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-54081-11287.2
Client Contact: Rick Hagendorfer	Phone: 850-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: RDH Environmental Services Inc				Job #:

Address: 5720 Dove Drive	Due Date Requested:
City: Pace	TAT Requested (days):
State, Zip: FL, 32571	
Phone: 205-992-5417(Tel)	PO #: SCS10382606
Email: rickhagendorfer@gmail.com	WO #:
Project Name: CCR - Plant Watson	Project #: 18020186
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	6020 - BCaSbAsBaBeCdCoPbLiMoSeTl	2540C_Calcd, 300_ORGFM_28D	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N		
Dup-02	8-30-19	0700	G	Water			X	X	X		
APMW-11	8-29-19	1651		Water							
APMW-12	8-29-19	1840		Water							
EB-01	8-30-19	0742		Water							
FB-01	8-30-19	0750		Water							
EB-02	8-30-19	1207		Water							
FB-02	8-30-19	1217		Water							
				Water							
				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-30-19 1502	RDH Env.	Melissa Watson	8-31-19 10:15	TAL-PIT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Do Not Lift Using This T

Recipient's Name *Please print.*

180-95068 Waybill

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

SHIP DATE: 30AUG19
ACTWGT: 62.40 LB
CAD: 6993800/SSFE2010
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238
(999) 999-9999 REF:
INV:
PO: DEPT:

Part # 156297-... 567J3/E3E7/05A2 12/19

FedEx Express
E

J192019062401uv

1 of 5
TRK# 0201 7894 9805 1314
MASTER

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA 15238
US PIT

Uncorrected temp 1.4 °C
Thermometer ID 10
CF -0.3 Initials JB
PT-WI-SR-001 effective 7/26/13

Do Not Lift Using This Tag

Phone Number

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

SHIP DATE: 30AUG19
ACTWGT: 61.90 LB
CAD: 6993800/SSFE2010
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238
(999) 999-9999 REF:
INV:
PO: DEPT:

567J3/E3E7/05A2 12/19

FedEx Express
E

J192019062401uv

4 of 5
MPS# 0263 7894 9805 1347
Mstr# 7894 9805 1314 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA 15238
US PIT

Uncorrected temp 1.1 °C
Thermometer ID 10
CF -0.3 Initials JB
PT-WI-SR-001 effective 7/26/13

dEx Express

S...

RT 639
ST 4
5
12:00
A
1358
08.31

dEx Saturday Delivery

151967 REV 7/08 RRD

RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

CAD: 6993800/SSFE2010
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(999) 999-9999 REF:
INV:
PO: DEPT:

Part # 156297- 12/19

FedEx Express

E

J192019062401uv

SATURDAY 12:00P
PRIORITY OVERNIGHT

5 of 5
MPS# 0263 7894 9805 1358
Mstr# 7894 9805 1314 0201

XO AGCA

15238
PA-US PIT

Uncorrected temp 1.3 °C
Thermometer ID 10
CF -0.3 Initials JB
PT-WI-SR-001 effective 7/26/13

Do Not Lift Usi...

Recipient...

FedEx Express

SDR

151967 REV 7/08 RRD

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

SHIP DATE: 30AUG19
ACTWGT: 68.00 LB
CAD: 6993800/SSFE2010
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(999) 999-9999 REF:
INV:
PO: DEPT:

Part # 156297- 12/19

FedEx Express

E

J192019062401uv

SATURDAY 12:00P
PRIORITY OVERNIGHT

3 of 5
MPS# 0263 7894 9805 1336
Mstr# 7894 9805 1314 0201

XO AGCA

15238
PA-US PIT

Uncorrected temp 1.9 °C
Thermometer ID 10
CF -0.5 Initials JB
PT-WI-SR-001 effective 7/26/13

Do Not Lift Using

FedEx Express

SnR

RT 639 5 A
ST 4 12:00
1325
08.31

ORIGIN ID:BIXA (850) 336-0192
RICK HAGENDORFER
RDH ENVIRONMENTAL
5720 DOVE DR

PACE, FL 32571
UNITED STATES US

CAD: 6993800/SSFE[illegible]
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO SAMPLE CONTROL
TA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(999) 999-9999 REF:
INV:
PO: DEPT:

FedEx Express

2 of 5
MPS# 0263 7894 9805 1325
Mstr# 7894 9805 1314

SATURDAY 12:00P
PRIORITY OVERNIGHT

0201

XO AGCA

15238
PA-US PIT

Uncorrected temp 1.9 °C
Thermometer ID 10

CF -0.3 Initials JB

PT-WI-SR-001 effective 7/26/13

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-95068-2

Login Number: 95068
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-95068-2

Login Number: 95068
List Number: 2
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/05/19 01:01 PM

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

Product Name: Low-Flow System

Date: 2019-08-29 16:50:42

Project Information:		Pump Information:	
Operator Name	Rick Hagendorfer	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	56 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	46.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-11	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.7299517 L
Well Total Depth	51.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.05 in
Depth to Water	18.34 ft	Total Volume Pumped	26 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	16:28:27	2700.02	23.64	6.15	130.12	3.10	18.39	0.10	7.45
Last 5	16:33:27	3000.02	23.66	6.17	129.78	2.79	18.39	0.10	4.12
Last 5	16:38:27	3300.02	23.66	6.18	128.74	2.51	18.39	0.10	2.36
Last 5	16:43:27	3600.02	23.73	6.19	129.61	2.25	18.39	0.10	0.54
Last 5	16:48:28	3901.02	23.65	6.20	129.38	1.99	18.39	0.10	-1.68
Variance 0			-0.01	0.01	-1.05			-0.00	-1.76
Variance 1			0.08	0.01	0.88			-0.00	-1.83
Variance 2			-0.08	0.01	-0.23			-0.00	-2.22

Notes

Sample time 1651. Sunny 91.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-29 18:40:25

Project Information:		Pump Information:	
Operator Name	Rick Hagendorfer	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	64 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	49.1 ft

Well Information:		Pumping Information:	
Well ID	APMW-12	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.765659 L
Well Total Depth	54.1 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1 in
Depth to Water	16.01 ft	Total Volume Pumped	30 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	18:17:30	3300.02	23.17	6.24	194.62	3.74	16.11	0.08	-18.88
Last 5	18:22:30	3600.02	23.16	6.24	193.86	2.94	16.11	0.08	-20.42
Last 5	18:27:30	3900.02	23.19	6.24	196.01	2.79	16.11	0.08	-21.03
Last 5	18:32:30	4200.02	23.16	6.24	193.22	2.32	16.11	0.08	-23.05
Last 5	18:37:30	4500.02	23.07	6.24	193.65	1.98	16.11	0.08	-23.35
Variance 0			0.03	-0.00	2.15			-0.00	-0.61
Variance 1			-0.03	0.01	-2.79			-0.00	-2.02
Variance 2			-0.09	-0.01	0.43			0.00	-0.30

Notes

Sample time 1840. Dup-01 fake time 0800. Sunny 90.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 08:42:22

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	46 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	36.1 ft

Well Information:		Pumping Information:	
Well ID	APMW-1R	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2953174 L
Well Total Depth	38.6 ft	Calculated Sample Rate	300 sec
Screen Length	5 ft	Stabilization Drawdown	3 in
Depth to Water	24.42 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	08:18:54	300.11	23.51	6.61	6938.89	2.67	24.71	0.12	-138.17
Last 5	08:23:54	600.02	23.55	6.69	6946.78	2.50	24.79	0.10	-140.83
Last 5	08:28:54	900.01	23.38	6.71	6960.29	2.32	24.76	0.09	-141.28
Last 5	08:33:54	1200.01	23.32	6.72	6983.36	1.67	24.76	0.09	-141.45
Last 5	08:38:57	1503.01	23.35	6.72	6992.46	1.66	24.76	0.09	-141.16
Variance 0			-0.17	0.02	13.51			-0.01	-0.45
Variance 1			-0.05	0.01	23.07			-0.01	-0.17
Variance 2			0.02	-0.00	9.10			0.00	0.29

Notes

Sample time 0845. Sunny 80

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 09:12:58

Project Information:		Pump Information:	
Operator Name	Rick Hagendorfer	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	60 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	46.85 ft

Well Information:		Pumping Information:	
Well ID	APMW-6R	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.7478054 L
Well Total Depth	51.85 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	37 in
Depth to Water	6.59 ft	Total Volume Pumped	24 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:49:03	2400.02	22.33	5.87	12849.17	1.02	9.72	0.09	-3.53
Last 5	08:54:03	2700.02	22.29	5.88	12960.23	0.99	9.73	0.09	-12.62
Last 5	08:59:03	3000.02	22.36	5.90	12978.50	1.00	9.74	0.08	-19.59
Last 5	09:04:03	3300.02	22.44	5.91	12960.47	1.12	9.74	0.08	-24.77
Last 5	09:09:03	3600.02	22.47	5.92	12955.59	1.05	9.74	0.08	-28.75
Variance 0			0.06	0.01	18.27			-0.00	-6.96
Variance 1			0.09	0.02	-18.02			-0.00	-5.18
Variance 2			0.03	0.01	-4.89			-0.00	-3.99

Notes

Sample time 0913. EB-01 sample time 0742. FB-01 sample time 0750. Sunny 81.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 10:08:17

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	37.9 ft

Well Information:		Pumping Information:	
Well ID	APMW-2	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	42.9 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	21.49 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:55:19	300.04	23.23	6.03	7807.54	2.89	21.49	0.19	-52.30
Last 5	10:00:19	600.01	23.20	6.08	7874.07	1.86	21.49	0.15	-57.25
Last 5	10:05:19	900.01	23.14	6.10	7892.70	1.55	21.49	0.14	-58.02
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.03	0.05	66.53			-0.04	-4.94
Variance 2			-0.06	0.02	18.63			-0.01	-0.78

Notes

Sample time 1010. Sunny 80

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 10:53:56

Project Information:		Pump Information:	
Operator Name	Rick Hagendorfer	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	47 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	32.4 ft

Well Information:		Pumping Information:	
Well ID	APMW-7	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.6897809 L
Well Total Depth	37.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	11.97 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:31:56	900.02	22.80	6.44	13129.32	0.61	12.64	0.11	-178.28
Last 5	10:36:56	1200.02	22.80	6.47	13182.56	0.80	12.64	0.11	-248.84
Last 5	10:41:56	1500.02	22.82	6.36	13222.73	0.73	12.64	0.11	-278.71
Last 5	10:46:56	1800.02	22.76	6.31	13244.86	0.67	12.64	0.11	-283.99
Last 5	10:51:56	2100.02	22.89	6.31	13273.99	0.60	12.64	0.11	-286.24
Variance 0			0.02	-0.12	40.17			0.00	-29.87
Variance 1			-0.06	-0.04	22.13			-0.00	-5.28
Variance 2			0.13	-0.01	29.13			0.00	-2.25

Notes

Sample time 1054. Dup-02 fake sample time 0700. Sunny 88.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 10:55:40

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	31.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-3	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	36.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	7.20 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	10:37:32	300.03	23.98	6.71	28840.60	6.13	7.32	0.15	-64.98
Last 5	10:42:32	600.02	24.46	6.73	29037.63	3.04	7.32	0.13	-61.32
Last 5	10:47:32	900.01	24.50	6.74	29005.79	2.52	7.32	0.13	-57.48
Last 5	10:52:32	1200.01	24.45	6.75	28948.41	1.67	7.32	0.13	-52.91
Last 5									
Variance 0			0.49	0.02	197.03			-0.02	3.66
Variance 1			0.03	0.01	-31.85			0.00	3.84
Variance 2			-0.05	0.01	-57.38			-0.00	4.58

Notes

Sample time 1100. Sunny 87

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 11:49:19

Project Information:		Pump Information:	
Operator Name	Rick Hagendorfer	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	52 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	37.8 ft

Well Information:		Pumping Information:	
Well ID	APMW-8	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.712098 L
Well Total Depth	42.8 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	19.51 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:33:20	300.04	23.21	6.67	11561.06	0.82	19.75	0.29	-234.27
Last 5	11:38:20	600.02	23.16	6.68	11641.61	0.80	19.75	0.19	-243.47
Last 5	11:43:20	900.02	23.10	6.68	11707.04	0.79	19.73	0.18	-242.77
Last 5	11:48:25	1205.02	23.12	6.68	11716.94	0.73	19.73	0.17	-241.44
Last 5									
Variance 0			-0.05	0.01	80.55			-0.10	-9.20
Variance 1			-0.07	0.00	65.43			-0.01	0.71
Variance 2			0.03	-0.00	9.90			-0.00	1.32

Notes

Sample time 1150. Sunny 90.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 12:02:21

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	32.05 ft

Well Information:		Pumping Information:	
Well ID	APMW-4	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	37.05 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	12.21 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	11:39:30	900.01	23.90	6.62	11187.40	1.03	12.35	0.13	-134.75
Last 5	11:44:30	1200.01	23.79	6.67	11199.20	1.12	12.35	0.12	-150.77
Last 5	11:49:30	1500.01	23.89	6.69	11211.77	1.04	12.35	0.10	-159.23
Last 5	11:54:30	1800.00	23.95	6.69	11209.35	0.87	12.35	0.09	-163.82
Last 5	11:59:30	2100.00	23.77	6.68	11258.67	0.83	12.35	0.08	-166.09
Variance 0			0.10	0.02	12.57			-0.02	-8.46
Variance 1			0.06	0.00	-2.42			-0.01	-4.59
Variance 2			-0.18	-0.01	49.32			-0.00	-2.27

Notes

Sample time 1205. Sunny 89

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 12:56:21

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	31.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-5	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	36.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1 in
Depth to Water	7.41 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	12:43:39	300.03	23.00	6.42	25089.29	3.08	7.51	0.14	-72.00
Last 5	12:48:39	600.02	22.96	6.46	25068.34	1.89	7.51	0.12	-73.38
Last 5	12:53:39	900.02	22.95	6.47	25106.22	1.81	7.51	0.12	-72.10
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.03	0.04	-20.95			-0.01	-1.38
Variance 2			-0.02	0.02	37.88			-0.01	1.28

Notes

Sample time 1300. Sunny 90

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 13:39:56

Project Information:		Pump Information:	
Operator Name	Rick Hagendorfer	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	50 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	37.5 ft

Well Information:		Pumping Information:	
Well ID	APMW-9	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.7031711 L
Well Total Depth	42.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1 in
Depth to Water	20.97 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	13:15:59	900.02	23.45	6.05	9641.74	1.07	21.12	0.16	9.53
Last 5	13:20:59	1200.07	23.38	6.08	9647.84	1.12	21.12	0.15	-3.07
Last 5	13:25:59	1500.03	23.30	6.09	9656.46	1.36	21.12	0.15	-10.53
Last 5	13:30:59	1800.02	23.25	6.10	9702.49	1.21	21.12	0.15	-15.46
Last 5	13:35:59	2100.02	23.30	6.10	9664.76	0.92	21.12	0.15	-18.92
Variance 0			-0.08	0.01	8.61			0.00	-7.46
Variance 1			-0.04	0.01	46.03			-0.00	-4.93
Variance 2			0.05	0.00	-37.73			0.00	-3.46

Notes

Sample time 1339. EB-02 sample time 1207. FB-02 sample time 1217. Sunny 91.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-30 14:23:30

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	27.9 ft

Well Information:		Pumping Information:	
Well ID	APMW-10	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	32.9 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	19.56 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	14:03:32	300.02	25.08	6.90	4374.05	2.89	21.85	0.35	-85.63
Last 5	14:08:32	600.02	24.51	7.00	4449.80	1.71	21.85	0.12	-107.10
Last 5	14:13:32	900.02	24.54	7.07	4446.09	1.57	21.85	0.11	-113.31
Last 5	14:18:32	1200.01	24.55	7.09	4466.44	1.43	21.85	0.11	-116.19
Last 5									
Variance 0			-0.56	0.10	75.75			-0.23	-21.47
Variance 1			0.03	0.07	-3.70			-0.01	-6.22
Variance 2			0.01	0.02	20.35			-0.00	-2.88

Notes

Sample time 1430. Sunny 90

Grab Samples

Semiannual Assessment Monitoring Event 2

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-103782-1
Client Project/Site: CCR - Plant Watson

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Authorized for release by:
4/21/2020 7:48:36 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

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

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

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-103782-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-103782-1

Comments
No additional comments.

Receipt
The samples were received on 3/19/2020 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 1.2º C, 1.3º C, 1.6º C, 1.9º C, 2.4º C and 3.9º C.

GC Semi VOA
Methods 300.0, 9056A: The matrix spike duplicate (MSD) recovery for Sulfate for analytical batch 180-311839 was outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery and matrix spike (MS) were within acceptance limits.

Methods 300.0, 9056A: The continuing calibration verification (CCV) associated with batch 180-312087 recovered above the upper control limit for Fluoride. The samples associated with this CCV were non-detect or estimated (J) for the affected analyte; therefore, the data have been reported. The associated samples are impacted: SW-5 (180-103782-5), SW-6 (180-103782-6), SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9) and DUP-03 (180-103785-16).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6020: The post digestion spike % recovery for calcium associated with batch 180-312686 was outside of control limits. The associated sample is: APMW-1R (180-103785-1).

Method 6020: The following samples were diluted for boron due to the nature of the sample matrix: APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-8 (180-103785-8), APMW-9 (180-103785-9), APMW-10 (180-103785-10), DUP-02 (180-103785-15), DUP-03 (180-103785-16), (180-103785-C-1-B MS ^5), (180-103785-C-1-C MSD ^5), (180-103785-C-1-A PDS ^5) and (180-103785-C-1-A SD ^25). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Qualifiers

HPLC/IC

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

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-103782-1	SW-1	Water	03/16/20 16:55	03/19/20 08:30	
180-103782-2	SW-2	Water	03/16/20 16:35	03/19/20 08:30	
180-103782-3	SW-3	Water	03/16/20 15:00	03/19/20 08:30	
180-103782-4	SW-4	Water	03/16/20 12:30	03/19/20 08:30	
180-103782-5	SW-5	Water	03/16/20 12:55	03/19/20 08:30	
180-103782-6	SW-6	Water	03/16/20 13:10	03/19/20 08:30	
180-103782-7	SW-7	Water	03/16/20 13:35	03/19/20 08:30	
180-103782-8	SW-8	Water	03/16/20 13:55	03/19/20 08:30	
180-103782-9	DUP-01	Water	03/16/20 14:00	03/19/20 08:30	
180-103785-1	APMW-1R	Water	03/16/20 13:30	03/19/20 08:30	
180-103785-2	APMW-2	Water	03/16/20 14:50	03/19/20 08:30	
180-103785-3	APMW-3	Water	03/16/20 16:25	03/19/20 08:30	
180-103785-4	APMW-4	Water	03/16/20 17:40	03/19/20 08:30	
180-103785-5	APMW-5	Water	03/17/20 07:55	03/19/20 08:30	
180-103785-6	APMW-6R	Water	03/17/20 10:50	03/19/20 08:30	
180-103785-7	APMW-7	Water	03/17/20 12:00	03/19/20 08:30	
180-103785-8	APMW-8	Water	03/17/20 13:00	03/19/20 08:30	
180-103785-9	APMW-9	Water	03/17/20 10:40	03/19/20 08:30	
180-103785-10	APMW-10	Water	03/17/20 11:20	03/19/20 08:30	
180-103785-11	APMW-11	Water	03/17/20 08:05	03/19/20 08:30	
180-103785-12	APMW-12	Water	03/17/20 09:25	03/19/20 08:30	
180-103785-13	FB-01	Water	03/17/20 08:00	03/19/20 08:30	
180-103785-14	EB-01	Water	03/17/20 08:15	03/19/20 08:30	
180-103785-15	DUP-02	Water	03/16/20 12:30	03/19/20 08:30	
180-103785-16	DUP-03	Water	03/17/20 12:30	03/19/20 08:30	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: SW-1
Date Collected: 03/16/20 16:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			311839	04/03/20 01:08	SAC	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		25			311839	04/03/20 01:24	SAC	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 13:33	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SW-2
Date Collected: 03/16/20 16:35
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			311839	04/03/20 01:40	SAC	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		10			311839	04/03/20 01:56	SAC	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 13:35	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	310666	03/21/20 08:52	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SW-3
Date Collected: 03/16/20 15:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			311839	04/03/20 02:11	SAC	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		10			311839	04/03/20 02:27	SAC	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 13:38	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: SW-4

Date Collected: 03/16/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			311839	04/03/20 02:43	SAC	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		25			311839	04/03/20 02:59	SAC	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 13:40	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SW-5

Date Collected: 03/16/20 12:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			312087	04/05/20 16:11	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		25			312087	04/05/20 16:27	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 13:43	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SW-6

Date Collected: 03/16/20 13:10
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			312087	04/05/20 17:14	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		25			312087	04/05/20 17:30	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 13:45	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: SW-7

Lab Sample ID: 180-103782-7

Date Collected: 03/16/20 13:35

Matrix: Water

Date Received: 03/19/20 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			312087	04/05/20 17:46	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		25			312087	04/05/20 18:02	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 13:57	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312765	04/13/20 12:29	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SW-8

Lab Sample ID: 180-103782-8

Date Collected: 03/16/20 13:55

Matrix: Water

Date Received: 03/19/20 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			312087	04/05/20 18:17	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		25			312087	04/05/20 18:33	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:00	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312765	04/13/20 12:32	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-01

Lab Sample ID: 180-103782-9

Date Collected: 03/16/20 14:00

Matrix: Water

Date Received: 03/19/20 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312087	04/05/20 18:49	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			312087	04/05/20 19:05	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:02	RJR	TAL PIT
	Instrument ID: NEMO									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: DUP-01
Date Collected: 03/16/20 14:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	311210	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312765	04/13/20 12:34	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-1R
Date Collected: 03/16/20 13:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		5			312089	04/05/20 12:59	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		50			312089	04/05/20 13:15	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:10	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		5			313029	04/15/20 12:40	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-2
Date Collected: 03/16/20 14:50
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		5			312089	04/05/20 13:30	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		50			312089	04/05/20 13:46	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:26	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		2			313029	04/15/20 12:52	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: APMW-3

Date Collected: 03/16/20 16:25
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		25			312089	04/05/20 14:02	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		250			312089	04/05/20 14:18	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:29	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		5			313029	04/15/20 12:54	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-4

Date Collected: 03/16/20 17:40
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		10			312089	04/05/20 15:05	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		100			312089	04/05/20 15:21	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:31	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			313029	04/15/20 12:57	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-5

Date Collected: 03/17/20 07:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		25			312442	04/09/20 16:21	SAC	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		250			312442	04/09/20 16:36	SAC	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:34	RJR	TAL PIT
	Instrument ID: NEMO									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: APMW-5
Date Collected: 03/17/20 07:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		5			313029	04/15/20 12:59	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-6R
Date Collected: 03/17/20 10:50
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		10			312089	04/05/20 16:08	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		100			312089	04/05/20 16:24	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:36	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		10			313029	04/15/20 13:02	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-7
Date Collected: 03/17/20 12:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		10			312089	04/05/20 16:40	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		100			312089	04/05/20 16:56	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:38	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			313029	04/15/20 13:14	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: APMW-8

Date Collected: 03/17/20 13:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		10			312089	04/05/20 17:12	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		100			312089	04/05/20 17:27	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:41	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		10			313029	04/15/20 13:11	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-9

Date Collected: 03/17/20 10:40
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		5			312089	04/05/20 18:46	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		50			312089	04/05/20 19:02	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:43	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		5			313029	04/15/20 13:16	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-10

Date Collected: 03/17/20 11:20
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			312089	04/05/20 19:18	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		25			312089	04/05/20 19:34	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:46	RJR	TAL PIT
	Instrument ID: NEMO									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: APMW-10
Date Collected: 03/17/20 11:20
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		2			313029	04/15/20 13:21	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-11
Date Collected: 03/17/20 08:05
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312089	04/05/20 19:50	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:48	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			313029	04/15/20 13:24	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	310666	03/21/20 08:52	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-12
Date Collected: 03/17/20 09:25
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312089	04/05/20 20:05	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:55	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			313029	04/15/20 13:26	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-01
Date Collected: 03/17/20 08:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312089	04/05/20 18:15	MJH	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: FB-01

Lab Sample ID: 180-103785-13

Date Collected: 03/17/20 08:00

Matrix: Water

Date Received: 03/19/20 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 14:58	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			313029	04/15/20 13:29	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	310666	03/21/20 08:52	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-01

Lab Sample ID: 180-103785-14

Date Collected: 03/17/20 08:15

Matrix: Water

Date Received: 03/19/20 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312089	04/05/20 18:31	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 15:00	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			313029	04/15/20 13:31	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	310666	03/21/20 08:52	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-02

Lab Sample ID: 180-103785-15

Date Collected: 03/16/20 12:30

Matrix: Water

Date Received: 03/19/20 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		5			312089	04/05/20 20:21	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		50			312089	04/05/20 20:37	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 15:03	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		10			313029	04/15/20 13:19	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: DUP-03

Date Collected: 03/17/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		10			312087	04/06/20 06:37	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		100			312087	04/06/20 06:52	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			312686	04/10/20 15:05	RJR	TAL PIT
	Instrument ID: NEMO									
Total Recoverable	Prep	3005A			50 mL	50 mL	311212	03/26/20 09:15	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		10			313029	04/15/20 13:09	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	15 mL	100 mL	310668	03/21/20 08:55	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

RJR = Ron Rosenbaum

Batch Type: Analysis

AVS = Abbey Smith
MJH = Matthew Hartman
RJR = Ron Rosenbaum
SAC = Shawn Clemente

Client Sample ID: SW-1

Lab Sample ID: 180-103782-1

Date Collected: 03/16/20 16:55

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**820**		25	8.0	mg/L			04/03/20 01:24	25
Fluoride	**0.11**	**J**	0.25	0.066	mg/L			04/03/20 01:08	2.5
Sulfate	**120**		2.5	0.95	mg/L			04/03/20 01:08	2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00064**	**J**	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 13:33	1
Boron	**0.23**		0.080	0.039	mg/L		03/26/20 09:15	04/10/20 13:33	1
Barium	**0.037**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 13:33	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 13:33	1
Calcium	**22**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 13:33	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 13:33	1
Cobalt	**0.00045**	**J**	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 13:33	1
Molybdenum	**0.00066**	**J**	0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 13:33	1
Lead	**0.00031**	**J**	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 13:33	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 13:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 13:33	1
Lithium	**0.0094**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 13:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1700**		20	20	mg/L			03/21/20 08:55	1

Client Sample ID: SW-2

Lab Sample ID: 180-103782-2

Date Collected: 03/16/20 16:35

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**680**		10	3.2	mg/L			04/03/20 01:56	10
Fluoride	**0.046**	**J**	0.10	0.026	mg/L			04/03/20 01:40	1
Sulfate	**99**		1.0	0.38	mg/L			04/03/20 01:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00057**	**J**	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 13:35	1
Boron	**0.20**		0.080	0.039	mg/L		03/26/20 09:15	04/10/20 13:35	1
Barium	**0.037**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 13:35	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 13:35	1
Calcium	**19**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 13:35	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 13:35	1
Cobalt	**0.00044**	**J**	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 13:35	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 13:35	1
Lead	**0.00030**	**J**	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 13:35	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 13:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 13:35	1
Lithium	**0.0080**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 13:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 13:35	1

Client Sample ID: SW-2

Lab Sample ID: 180-103782-2

Date Collected: 03/16/20 16:35

Matrix: Water

Date Received: 03/19/20 08:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1500		20	20	mg/L			03/21/20 08:52	1

Client Sample ID: SW-3

Lab Sample ID: 180-103782-3

Date Collected: 03/16/20 15:00

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	570		10	3.2	mg/L			04/03/20 02:27	10
Fluoride	0.046	J	0.10	0.026	mg/L			04/03/20 02:11	1
Sulfate	81		1.0	0.38	mg/L			04/03/20 02:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00050	J	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 13:38	1
Boron	0.17		0.080	0.039	mg/L		03/26/20 09:15	04/10/20 13:38	1
Barium	0.038		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 13:38	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 13:38	1
Calcium	16		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 13:38	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 13:38	1
Cobalt	0.00044	J	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 13:38	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 13:38	1
Lead	0.00033	J	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 13:38	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 13:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 13:38	1
Lithium	0.0070		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 13:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 13:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		10	10	mg/L			03/21/20 07:58	1

Client Sample ID: SW-4

Lab Sample ID: 180-103782-4

Date Collected: 03/16/20 12:30

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		25	8.0	mg/L			04/03/20 02:59	25
Fluoride	0.10	J	0.25	0.066	mg/L			04/03/20 02:43	2.5
Sulfate	160		2.5	0.95	mg/L			04/03/20 02:43	2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00060	J	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 13:40	1
Boron	0.32		0.080	0.039	mg/L		03/26/20 09:15	04/10/20 13:40	1
Barium	0.033		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 13:40	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 13:40	1
Calcium	30		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 13:40	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 13:40	1
Cobalt	0.00042	J	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 13:40	1

Client Sample ID: SW-4

Lab Sample ID: 180-103782-4

Date Collected: 03/16/20 12:30

Matrix: Water

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.0010	J	0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 13:40	1
Lead	0.00035	J	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 13:40	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 13:40	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 13:40	1
Lithium	0.013		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 13:40	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 13:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2300		20	20	mg/L			03/21/20 07:58	1

Client Sample ID: SW-5

Lab Sample ID: 180-103782-5

Date Collected: 03/16/20 12:55

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		25	8.0	mg/L			04/05/20 16:27	25
Fluoride	0.084	J	0.25	0.066	mg/L			04/05/20 16:11	2.5
Sulfate	150		2.5	0.95	mg/L			04/05/20 16:11	2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00052	J	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 13:43	1
Boron	0.32		0.080	0.039	mg/L		03/26/20 09:15	04/10/20 13:43	1
Barium	0.033		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 13:43	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 13:43	1
Calcium	29		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 13:43	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 13:43	1
Cobalt	0.00039	J	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 13:43	1
Molybdenum	0.00086	J	0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 13:43	1
Lead	0.00032	J	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 13:43	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 13:43	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 13:43	1
Lithium	0.012		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 13:43	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 13:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2300		20	20	mg/L			03/21/20 07:58	1

Client Sample ID: SW-6

Lab Sample ID: 180-103782-6

Date Collected: 03/16/20 13:10

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		25	8.0	mg/L			04/05/20 17:30	25
Fluoride	0.088	J	0.25	0.066	mg/L			04/05/20 17:14	2.5
Sulfate	150		2.5	0.95	mg/L			04/05/20 17:14	2.5

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: SW-6

Lab Sample ID: 180-103782-6

Date Collected: 03/16/20 13:10

Matrix: Water

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00070	J	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 13:45	1
Boron	0.31		0.080	0.039	mg/L		03/26/20 09:15	04/10/20 13:45	1
Barium	0.033		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 13:45	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 13:45	1
Calcium	29		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 13:45	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 13:45	1
Cobalt	0.00035	J	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 13:45	1
Molybdenum	0.00077	J	0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 13:45	1
Lead	0.00029	J	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 13:45	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 13:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 13:45	1
Lithium	0.012		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 13:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2100		20	20	mg/L			03/21/20 07:58	1

Client Sample ID: SW-7

Lab Sample ID: 180-103782-7

Date Collected: 03/16/20 13:35

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		25	8.0	mg/L			04/05/20 18:02	25
Fluoride	0.18	J	0.25	0.066	mg/L			04/05/20 17:46	2.5
Sulfate	160		2.5	0.95	mg/L			04/05/20 17:46	2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00057	J	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 13:57	1
Boron	0.35		0.080	0.039	mg/L		03/26/20 09:15	04/13/20 12:29	1
Barium	0.032		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 13:57	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 13:57	1
Calcium	29		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 13:57	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 13:57	1
Cobalt	0.00040	J	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 13:57	1
Molybdenum	0.00088	J	0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 13:57	1
Lead	0.00030	J	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 13:57	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 13:57	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 13:57	1
Lithium	0.012		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 13:57	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 13:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2500		40	40	mg/L			03/21/20 07:58	1

Client Sample ID: SW-8

Lab Sample ID: 180-103782-8

Date Collected: 03/16/20 13:55

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**		25	8.0	mg/L			04/05/20 18:33	25
Fluoride	<0.066		0.25	0.066	mg/L			04/05/20 18:17	2.5
Sulfate	**150**		2.5	0.95	mg/L			04/05/20 18:17	2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00052**	**J**	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:00	1
Boron	**0.34**		0.080	0.039	mg/L		03/26/20 09:15	04/13/20 12:32	1
Barium	**0.035**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:00	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:00	1
Calcium	**28**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:00	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:00	1
Cobalt	**0.00042**	**J**	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:00	1
Molybdenum	**0.00089**	**J**	0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:00	1
Lead	**0.00033**	**J**	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:00	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:00	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:00	1
Lithium	**0.012**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:00	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2200**		20	20	mg/L			03/21/20 07:58	1

Client Sample ID: DUP-01

Lab Sample ID: 180-103782-9

Date Collected: 03/16/20 14:00

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**570**		10	3.2	mg/L			04/05/20 19:05	10
Fluoride	**0.072**	**J**	0.10	0.026	mg/L			04/05/20 18:49	1
Sulfate	**79**		1.0	0.38	mg/L			04/05/20 18:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00054**	**J**	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:02	1
Boron	**0.19**		0.080	0.039	mg/L		03/26/20 09:15	04/13/20 12:34	1
Barium	**0.036**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:02	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:02	1
Calcium	**15**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:02	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:02	1
Cobalt	**0.00043**	**J**	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:02	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:02	1
Lead	**0.00035**	**J**	0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:02	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:02	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:02	1
Lithium	**0.0067**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:02	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:02	1

Client Sample ID: DUP-01
Date Collected: 03/16/20 14:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-9
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1200**		10	10	mg/L			03/21/20 07:58	1

Client Sample ID: APMW-1R
Date Collected: 03/16/20 13:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-1
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2600**		50	16	mg/L			04/05/20 13:15	50
Fluoride	<0.13		0.50	0.13	mg/L			04/05/20 12:59	5
Sulfate	**23**		5.0	1.9	mg/L			04/05/20 12:59	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00085**	**J**	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:10	1
Boron	**7.2**		0.40	0.19	mg/L		03/26/20 09:15	04/15/20 12:40	5
Barium	**1.2**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:10	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:10	1
Calcium	**200**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:10	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:10	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:10	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:10	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:10	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:10	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:10	1
Lithium	**0.013**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:10	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4500**		40	40	mg/L			03/21/20 07:58	1

Client Sample ID: APMW-2
Date Collected: 03/16/20 14:50
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-2
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2500**		50	16	mg/L			04/05/20 13:46	50
Fluoride	<0.13		0.50	0.13	mg/L			04/05/20 13:30	5
Sulfate	**16**		5.0	1.9	mg/L			04/05/20 13:30	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:26	1
Boron	**3.7**		0.16	0.077	mg/L		03/26/20 09:15	04/15/20 12:52	2
Barium	**3.2**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:26	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:26	1
Calcium	**350**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:26	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:26	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:26	1

Client Sample ID: APMW-2

Lab Sample ID: 180-103785-2

Date Collected: 03/16/20 14:50

Matrix: Water

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:26	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:26	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:26	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:26	1
Lithium	**0.030**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:26	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4400**		40	40	mg/L			03/21/20 07:58	1

Client Sample ID: APMW-3

Lab Sample ID: 180-103785-3

Date Collected: 03/16/20 16:25

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10000**		250	80	mg/L			04/05/20 14:18	250
Fluoride	<0.66		2.5	0.66	mg/L			04/05/20 14:02	25
Sulfate	**1100**		25	9.5	mg/L			04/05/20 14:02	25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.071**		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:29	1
Boron	**5.3**		0.40	0.19	mg/L		03/26/20 09:15	04/15/20 12:54	5
Barium	**0.10**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:29	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:29	1
Calcium	**310**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:29	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:29	1
Cobalt	**0.0022**		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:29	1
Molybdenum	**0.072**		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:29	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:29	1
Lithium	**0.070**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:29	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**16000**		200	200	mg/L			03/21/20 08:55	1

Client Sample ID: APMW-4

Lab Sample ID: 180-103785-4

Date Collected: 03/16/20 17:40

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3400**		100	32	mg/L			04/05/20 15:21	100
Fluoride	<0.26		1.0	0.26	mg/L			04/05/20 15:05	10
Sulfate	**330**		10	3.8	mg/L			04/05/20 15:05	10

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: APMW-4

Lab Sample ID: 180-103785-4

Date Collected: 03/16/20 17:40
Matrix: Water
Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.017		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:31	1
Boron	1.6		0.080	0.039	mg/L		03/26/20 09:15	04/15/20 12:57	1
Barium	0.27		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:31	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:31	1
Calcium	170		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:31	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:31	1
Cobalt	0.0039		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:31	1
Molybdenum	0.010		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:31	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:31	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:31	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:31	1
Lithium	0.053		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:31	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6100		67	67	mg/L			03/21/20 07:58	1

Client Sample ID: APMW-5

Lab Sample ID: 180-103785-5

Date Collected: 03/17/20 07:55
Matrix: Water
Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8900		250	80	mg/L			04/09/20 16:36	250
Fluoride	<0.66		2.5	0.66	mg/L			04/09/20 16:21	25
Sulfate	910		25	9.5	mg/L			04/09/20 16:21	25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.21		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:34	1
Boron	6.6		0.40	0.19	mg/L		03/26/20 09:15	04/15/20 12:59	5
Barium	0.10		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:34	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:34	1
Calcium	330		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:34	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:34	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:34	1
Molybdenum	0.079		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:34	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:34	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:34	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:34	1
Lithium	0.044		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:34	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	15000		200	200	mg/L			03/21/20 08:55	1

Client Sample ID: APMW-6R

Lab Sample ID: 180-103785-6

Date Collected: 03/17/20 10:50

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6000**		100	32	mg/L			04/05/20 16:24	100
Fluoride	<0.26		1.0	0.26	mg/L			04/05/20 16:08	10
Sulfate	**590**		10	3.8	mg/L			04/05/20 16:08	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.18**		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:36	1
Boron	**11**		0.80	0.39	mg/L		03/26/20 09:15	04/15/20 13:02	10
Barium	**0.050**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:36	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:36	1
Calcium	**420**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:36	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:36	1
Cobalt	**0.0029**		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:36	1
Molybdenum	**0.47**		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:36	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:36	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:36	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:36	1
Lithium	**0.056**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:36	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**7200**		67	67	mg/L			03/21/20 08:55	1

Client Sample ID: APMW-7

Lab Sample ID: 180-103785-7

Date Collected: 03/17/20 12:00

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4600**		100	32	mg/L			04/05/20 16:56	100
Fluoride	**1.6**		1.0	0.26	mg/L			04/05/20 16:40	10
Sulfate	**430**		10	3.8	mg/L			04/05/20 16:40	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00053**	**J**	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:38	1
Boron	**0.98**		0.080	0.039	mg/L		03/26/20 09:15	04/15/20 13:14	1
Barium	**0.53**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:38	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:38	1
Calcium	**110**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:38	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:38	1
Cobalt	**0.00024**	**J**	0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:38	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:38	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:38	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:38	1
Lithium	**0.0071**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:38	1

Client Sample ID: APMW-7

Lab Sample ID: 180-103785-7

Date Collected: 03/17/20 12:00

Matrix: Water

Date Received: 03/19/20 08:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6900**		67	67	mg/L			03/21/20 08:55	1

Client Sample ID: APMW-8

Lab Sample ID: 180-103785-8

Date Collected: 03/17/20 13:00

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3700**		100	32	mg/L			04/05/20 17:27	100
Fluoride	**0.52**	**J**	1.0	0.26	mg/L			04/05/20 17:12	10
Sulfate	**680**		10	3.8	mg/L			04/05/20 17:12	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.043**		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:41	1
Boron	**20**		0.80	0.39	mg/L		03/26/20 09:15	04/15/20 13:11	10
Barium	**0.21**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:41	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:41	1
Calcium	**470**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:41	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:41	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:41	1
Molybdenum	**0.094**		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:41	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:41	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:41	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:41	1
Lithium	**0.080**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:41	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6400**		67	67	mg/L			03/21/20 08:55	1

Client Sample ID: APMW-9

Lab Sample ID: 180-103785-9

Date Collected: 03/17/20 10:40

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3100**		50	16	mg/L			04/05/20 19:02	50
Fluoride	<0.13		0.50	0.13	mg/L			04/05/20 18:46	5
Sulfate	**290**		5.0	1.9	mg/L			04/05/20 18:46	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0010**		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:43	1
Boron	**7.1**		0.40	0.19	mg/L		03/26/20 09:15	04/15/20 13:16	5
Barium	**0.49**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:43	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:43	1
Calcium	**310**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:43	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:43	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:43	1

Client Sample ID: APMW-9

Lab Sample ID: 180-103785-9

Date Collected: 03/17/20 10:40

Matrix: Water

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:43	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:43	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:43	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:43	1
Lithium	**0.0077**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:43	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5400**		50	50	mg/L			03/21/20 07:58	1

Client Sample ID: APMW-10

Lab Sample ID: 180-103785-10

Date Collected: 03/17/20 11:20

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**		25	8.0	mg/L			04/05/20 19:34	25
Fluoride	**0.38**		0.25	0.066	mg/L			04/05/20 19:18	2.5
Sulfate	**110**		2.5	0.95	mg/L			04/05/20 19:18	2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.093**		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:46	1
Boron	**1.9**		0.16	0.077	mg/L		03/26/20 09:15	04/15/20 13:21	2
Barium	**0.25**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:46	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:46	1
Calcium	**59**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:46	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:46	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:46	1
Molybdenum	**0.081**		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:46	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:46	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:46	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:46	1
Lithium	**0.017**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:46	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2700**		40	40	mg/L			03/21/20 08:55	1

Client Sample ID: APMW-11

Lab Sample ID: 180-103785-11

Date Collected: 03/17/20 08:05

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.2**		1.0	0.32	mg/L			04/05/20 19:50	1
Fluoride	<0.026		0.10	0.026	mg/L			04/05/20 19:50	1
Sulfate	**3.7**		1.0	0.38	mg/L			04/05/20 19:50	1

Client Sample ID: APMW-11

Date Collected: 03/17/20 08:05
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:48	1
Boron	**0.057**	**J**	0.080	0.039	mg/L		03/26/20 09:15	04/15/20 13:24	1
Barium	**0.037**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:48	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:48	1
Calcium	**9.8**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:48	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:48	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:48	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:48	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:48	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:48	1
Lithium	**0.014**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:48	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**95**		10	10	mg/L			03/21/20 08:52	1

Client Sample ID: APMW-12

Date Collected: 03/17/20 09:25
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-12

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14**		1.0	0.32	mg/L			04/05/20 20:05	1
Fluoride	**0.036**	**J**	0.10	0.026	mg/L			04/05/20 20:05	1
Sulfate	**3.2**		1.0	0.38	mg/L			04/05/20 20:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00043**	**J**	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:55	1
Boron	**0.057**	**J**	0.080	0.039	mg/L		03/26/20 09:15	04/15/20 13:26	1
Barium	**0.070**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:55	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:55	1
Calcium	**12**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:55	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:55	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:55	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:55	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:55	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:55	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:55	1
Lithium	**0.017**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:55	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**120**		10	10	mg/L			03/21/20 08:55	1

Client Sample ID: FB-01

Lab Sample ID: 180-103785-13

Date Collected: 03/17/20 08:00
Matrix: Water
Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/05/20 18:15	1
Fluoride	<0.026		0.10	0.026	mg/L			04/05/20 18:15	1
Sulfate	<0.38		1.0	0.38	mg/L			04/05/20 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:58	1
Boron	<0.039		0.080	0.039	mg/L		03/26/20 09:15	04/15/20 13:29	1
Barium	<0.0016		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:58	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:58	1
Calcium	<0.13		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:58	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:58	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:58	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:58	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:58	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:58	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:58	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:58	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/21/20 08:52	1

Client Sample ID: EB-01

Lab Sample ID: 180-103785-14

Date Collected: 03/17/20 08:15
Matrix: Water
Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/05/20 18:31	1
Fluoride	<0.026		0.10	0.026	mg/L			04/05/20 18:31	1
Sulfate	<0.38		1.0	0.38	mg/L			04/05/20 18:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 15:00	1
Boron	<0.039		0.080	0.039	mg/L		03/26/20 09:15	04/15/20 13:31	1
Barium	<0.0016		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 15:00	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 15:00	1
Calcium	<0.13		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 15:00	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 15:00	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 15:00	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 15:00	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 15:00	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 15:00	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 15:00	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 15:00	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 15:00	1

Client Sample ID: EB-01
Date Collected: 03/17/20 08:15
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-14
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/21/20 08:52	1

Client Sample ID: DUP-02
Date Collected: 03/16/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-15
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2400**		50	16	mg/L			04/05/20 20:37	50
Fluoride	<0.13		0.50	0.13	mg/L			04/05/20 20:21	5
Sulfate	**12**		5.0	1.9	mg/L			04/05/20 20:21	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00074**	**J**	0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 15:03	1
Boron	**8.0**		0.80	0.39	mg/L		03/26/20 09:15	04/15/20 13:19	10
Barium	**1.2**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 15:03	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 15:03	1
Calcium	**200**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 15:03	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 15:03	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 15:03	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 15:03	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 15:03	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 15:03	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 15:03	1
Lithium	**0.013**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 15:03	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4200**		40	40	mg/L			03/21/20 07:58	1

Client Sample ID: DUP-03
Date Collected: 03/17/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-16
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3500**		100	32	mg/L			04/06/20 06:52	100
Fluoride	**0.97**	**J**	1.0	0.26	mg/L			04/06/20 06:37	10
Sulfate	**620**		10	3.8	mg/L			04/06/20 06:37	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.045**		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 15:05	1
Boron	**20**		0.80	0.39	mg/L		03/26/20 09:15	04/15/20 13:09	10
Barium	**0.22**		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 15:05	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 15:05	1
Calcium	**490**		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 15:05	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 15:05	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 15:05	1

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-1

Client Sample ID: DUP-03
Date Collected: 03/17/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	**0.10**		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 15:05	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 15:05	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 15:05	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 15:05	1
Lithium	**0.081**		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 15:05	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6600**		67	67	mg/L			03/21/20 08:55	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-311839/45
Matrix: Water
Analysis Batch: 311839

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/02/20 19:21	1
Fluoride	<0.026		0.10	0.026	mg/L			04/02/20 19:21	1
Sulfate	<0.38		1.0	0.38	mg/L			04/02/20 19:21	1

Lab Sample ID: LCS 180-311839/44
Matrix: Water
Analysis Batch: 311839

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.7		mg/L		99	90 - 110
Fluoride	2.50	2.42		mg/L		97	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: MB 180-312087/37
Matrix: Water
Analysis Batch: 312087

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/05/20 14:20	1
Fluoride	<0.026		0.10	0.026	mg/L			04/05/20 14:20	1
Sulfate	<0.38		1.0	0.38	mg/L			04/05/20 14:20	1

Lab Sample ID: MB 180-312087/73
Matrix: Water
Analysis Batch: 312087

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/05/20 23:44	1
Fluoride	<0.026		0.10	0.026	mg/L			04/05/20 23:44	1
Sulfate	<0.38		1.0	0.38	mg/L			04/05/20 23:44	1

Lab Sample ID: LCS 180-312087/36
Matrix: Water
Analysis Batch: 312087

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.3		mg/L		101	90 - 110
Fluoride	2.50	2.71		mg/L		108	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: LCS 180-312087/72
Matrix: Water
Analysis Batch: 312087

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.6		mg/L		101	90 - 110
Fluoride	2.50	2.72		mg/L		109	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-312089/6
Matrix: Water
Analysis Batch: 312089

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/05/20 08:16	1
Fluoride	<0.026		0.10	0.026	mg/L			04/05/20 08:16	1
Sulfate	<0.38		1.0	0.38	mg/L			04/05/20 08:16	1

Lab Sample ID: LCS 180-312089/5
Matrix: Water
Analysis Batch: 312089

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.8		mg/L		100	90 - 110
Fluoride	2.50	2.35		mg/L		94	90 - 110
Sulfate	50.0	49.5		mg/L		99	90 - 110

Lab Sample ID: MB 180-312442/6
Matrix: Water
Analysis Batch: 312442

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/09/20 08:58	1
Fluoride	<0.026		0.10	0.026	mg/L			04/09/20 08:58	1
Sulfate	<0.38		1.0	0.38	mg/L			04/09/20 08:58	1

Lab Sample ID: LCS 180-312442/5
Matrix: Water
Analysis Batch: 312442

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.9		mg/L		102	90 - 110
Fluoride	2.50	2.62		mg/L		105	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-311210/1-A
Matrix: Water
Analysis Batch: 312686

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 311210

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 13:04	1
Boron	<0.039		0.080	0.039	mg/L		03/26/20 09:15	04/10/20 13:04	1
Barium	<0.0016		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 13:04	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 13:04	1
Calcium	<0.13		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 13:04	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 13:04	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 13:04	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 13:04	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 13:04	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 13:04	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 13:04	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 13:04	1

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

Lab Sample ID: MB 180-311210/1-A
Matrix: Water
Analysis Batch: 312686

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 311210

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 13:04	1

Lab Sample ID: LCS 180-311210/2-A
Matrix: Water
Analysis Batch: 312686

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 311210

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.01		mg/L		101	80 - 120
Boron	1.25	1.23		mg/L		98	80 - 120
Barium	1.00	0.987		mg/L		99	80 - 120
Beryllium	0.500	0.498		mg/L		100	80 - 120
Calcium	25.0	26.0		mg/L		104	80 - 120
Cadmium	0.500	0.491		mg/L		98	80 - 120
Cobalt	0.500	0.482		mg/L		96	80 - 120
Molybdenum	0.500	0.519		mg/L		104	80 - 120
Lead	0.500	0.501		mg/L		100	80 - 120
Antimony	0.250	0.243		mg/L		97	80 - 120
Thallium	1.00	1.01		mg/L		101	80 - 120
Lithium	0.500	0.478		mg/L		96	80 - 120
Selenium	1.00	0.998		mg/L		100	80 - 120

Lab Sample ID: MB 180-311212/1-A
Matrix: Water
Analysis Batch: 312686

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 311212

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/26/20 09:15	04/10/20 14:05	1
Boron	<0.039	^	0.080	0.039	mg/L		03/26/20 09:15	04/10/20 14:05	1
Barium	<0.0016		0.010	0.0016	mg/L		03/26/20 09:15	04/10/20 14:05	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		03/26/20 09:15	04/10/20 14:05	1
Calcium	<0.13		0.50	0.13	mg/L		03/26/20 09:15	04/10/20 14:05	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		03/26/20 09:15	04/10/20 14:05	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/26/20 09:15	04/10/20 14:05	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/26/20 09:15	04/10/20 14:05	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/26/20 09:15	04/10/20 14:05	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/26/20 09:15	04/10/20 14:05	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/26/20 09:15	04/10/20 14:05	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/26/20 09:15	04/10/20 14:05	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/26/20 09:15	04/10/20 14:05	1

Lab Sample ID: LCS 180-311212/2-A
Matrix: Water
Analysis Batch: 312686

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 311212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.994		mg/L		99	80 - 120
Barium	1.00	0.973		mg/L		97	80 - 120
Beryllium	0.500	0.487		mg/L		97	80 - 120
Calcium	25.0	26.1		mg/L		104	80 - 120

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

Lab Sample ID: LCS 180-311212/2-A
Matrix: Water
Analysis Batch: 312686

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 311212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.500	0.484		mg/L		97	80 - 120
Cobalt	0.500	0.480		mg/L		96	80 - 120
Molybdenum	0.500	0.504		mg/L		101	80 - 120
Lead	0.500	0.490		mg/L		98	80 - 120
Antimony	0.250	0.242		mg/L		97	80 - 120
Thallium	1.00	0.991		mg/L		99	80 - 120
Lithium	0.500	0.465		mg/L		93	80 - 120
Selenium	1.00	0.995		mg/L		100	80 - 120

Lab Sample ID: 180-103785-1 MS
Matrix: Water
Analysis Batch: 312686

Client Sample ID: APMW-1R
Prep Type: Total Recoverable
Prep Batch: 311212

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00085	J	1.00	0.993		mg/L		99	75 - 125
Barium	1.2		1.00	2.24		mg/L		99	75 - 125
Beryllium	<0.00018		0.500	0.471		mg/L		94	75 - 125
Calcium	200		25.0	226	4	mg/L		85	75 - 125
Cadmium	<0.00022		0.500	0.479		mg/L		96	75 - 125
Cobalt	<0.00013		0.500	0.469		mg/L		94	75 - 125
Molybdenum	<0.00061		0.500	0.535		mg/L		107	75 - 125
Lead	<0.00013		0.500	0.501		mg/L		100	75 - 125
Antimony	<0.00038		0.250	0.244		mg/L		98	75 - 125
Thallium	<0.00015		1.00	1.01		mg/L		101	75 - 125
Lithium	0.013		0.500	0.483		mg/L		94	75 - 125
Selenium	<0.0015		1.00	0.961		mg/L		96	75 - 125

Lab Sample ID: 180-103785-1 MS
Matrix: Water
Analysis Batch: 313029

Client Sample ID: APMW-1R
Prep Type: Total Recoverable
Prep Batch: 311212

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	7.2		1.25	8.52	4	mg/L		102	75 - 125

Lab Sample ID: 180-103785-1 MSD
Matrix: Water
Analysis Batch: 312686

Client Sample ID: APMW-1R
Prep Type: Total Recoverable
Prep Batch: 311212

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00085	J	1.00	0.994		mg/L		99	75 - 125	0	20
Barium	1.2		1.00	2.26		mg/L		102	75 - 125	1	20
Beryllium	<0.00018		0.500	0.472		mg/L		94	75 - 125	0	20
Calcium	200		25.0	228	4	mg/L		90	75 - 125	1	20
Cadmium	<0.00022		0.500	0.480		mg/L		96	75 - 125	0	20
Cobalt	<0.00013		0.500	0.470		mg/L		94	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.530		mg/L		106	75 - 125	1	20
Lead	<0.00013		0.500	0.508		mg/L		102	75 - 125	1	20
Antimony	<0.00038		0.250	0.246		mg/L		98	75 - 125	1	20
Thallium	<0.00015		1.00	1.04		mg/L		104	75 - 125	3	20

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

Lab Sample ID: 180-103785-1 MSD
Matrix: Water
Analysis Batch: 312686

Client Sample ID: APMW-1R
Prep Type: Total Recoverable
Prep Batch: 311212

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.013		0.500	0.485		mg/L		94	75 - 125	0	20
Selenium	<0.0015		1.00	0.959		mg/L		96	75 - 125	0	20

Lab Sample ID: 180-103785-1 MSD
Matrix: Water
Analysis Batch: 313029

Client Sample ID: APMW-1R
Prep Type: Total Recoverable
Prep Batch: 311212

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	7.2		1.25	8.81	4	mg/L		126	75 - 125	3	20

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

Lab Sample ID: MB 180-310664/2
Matrix: Water
Analysis Batch: 310664

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/21/20 07:58	1

Lab Sample ID: LCS 180-310664/1
Matrix: Water
Analysis Batch: 310664

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	242	236		mg/L		98	80 - 120

Lab Sample ID: MB 180-310666/2
Matrix: Water
Analysis Batch: 310666

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/21/20 08:52	1

Lab Sample ID: LCS 180-310666/1
Matrix: Water
Analysis Batch: 310666

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	242	248		mg/L		102	80 - 120

Lab Sample ID: MB 180-310668/2
Matrix: Water
Analysis Batch: 310668

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/21/20 08:55	1

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

Lab Sample ID: LCS 180-310668/1
Matrix: Water
Analysis Batch: 310668

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			242	224		mg/L		93	80 - 120		

Lab Sample ID: 180-103785-12 DU
Matrix: Water
Analysis Batch: 310668

Client Sample ID: APMW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	120			126		mg/L				7	10

HPLC/IC

Analysis Batch: 311839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-1	SW-1	Total/NA	Water	EPA 300.0 R2.1	
180-103782-1	SW-1	Total/NA	Water	EPA 300.0 R2.1	
180-103782-2	SW-2	Total/NA	Water	EPA 300.0 R2.1	
180-103782-2	SW-2	Total/NA	Water	EPA 300.0 R2.1	
180-103782-3	SW-3	Total/NA	Water	EPA 300.0 R2.1	
180-103782-3	SW-3	Total/NA	Water	EPA 300.0 R2.1	
180-103782-4	SW-4	Total/NA	Water	EPA 300.0 R2.1	
180-103782-4	SW-4	Total/NA	Water	EPA 300.0 R2.1	
MB 180-311839/45	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-311839/44	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 312087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-5	SW-5	Total/NA	Water	EPA 300.0 R2.1	
180-103782-5	SW-5	Total/NA	Water	EPA 300.0 R2.1	
180-103782-6	SW-6	Total/NA	Water	EPA 300.0 R2.1	
180-103782-6	SW-6	Total/NA	Water	EPA 300.0 R2.1	
180-103782-7	SW-7	Total/NA	Water	EPA 300.0 R2.1	
180-103782-7	SW-7	Total/NA	Water	EPA 300.0 R2.1	
180-103782-8	SW-8	Total/NA	Water	EPA 300.0 R2.1	
180-103782-8	SW-8	Total/NA	Water	EPA 300.0 R2.1	
180-103782-9	DUP-01	Total/NA	Water	EPA 300.0 R2.1	
180-103782-9	DUP-01	Total/NA	Water	EPA 300.0 R2.1	
180-103785-16	DUP-03	Total/NA	Water	EPA 300.0 R2.1	
180-103785-16	DUP-03	Total/NA	Water	EPA 300.0 R2.1	
MB 180-312087/37	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-312087/73	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-312087/36	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-312087/72	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 312089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-1	APMW-1R	Total/NA	Water	EPA 300.0 R2.1	
180-103785-1	APMW-1R	Total/NA	Water	EPA 300.0 R2.1	
180-103785-2	APMW-2	Total/NA	Water	EPA 300.0 R2.1	
180-103785-2	APMW-2	Total/NA	Water	EPA 300.0 R2.1	
180-103785-3	APMW-3	Total/NA	Water	EPA 300.0 R2.1	
180-103785-3	APMW-3	Total/NA	Water	EPA 300.0 R2.1	
180-103785-4	APMW-4	Total/NA	Water	EPA 300.0 R2.1	
180-103785-4	APMW-4	Total/NA	Water	EPA 300.0 R2.1	
180-103785-6	APMW-6R	Total/NA	Water	EPA 300.0 R2.1	
180-103785-6	APMW-6R	Total/NA	Water	EPA 300.0 R2.1	
180-103785-7	APMW-7	Total/NA	Water	EPA 300.0 R2.1	
180-103785-7	APMW-7	Total/NA	Water	EPA 300.0 R2.1	
180-103785-8	APMW-8	Total/NA	Water	EPA 300.0 R2.1	
180-103785-8	APMW-8	Total/NA	Water	EPA 300.0 R2.1	
180-103785-9	APMW-9	Total/NA	Water	EPA 300.0 R2.1	
180-103785-9	APMW-9	Total/NA	Water	EPA 300.0 R2.1	
180-103785-10	APMW-10	Total/NA	Water	EPA 300.0 R2.1	
180-103785-10	APMW-10	Total/NA	Water	EPA 300.0 R2.1	
180-103785-11	APMW-11	Total/NA	Water	EPA 300.0 R2.1	

HPLC/IC (Continued)

Analysis Batch: 312089 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-12	APMW-12	Total/NA	Water	EPA 300.0 R2.1	
180-103785-13	FB-01	Total/NA	Water	EPA 300.0 R2.1	
180-103785-14	EB-01	Total/NA	Water	EPA 300.0 R2.1	
180-103785-15	DUP-02	Total/NA	Water	EPA 300.0 R2.1	
180-103785-15	DUP-02	Total/NA	Water	EPA 300.0 R2.1	
MB 180-312089/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-312089/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 312442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-5	APMW-5	Total/NA	Water	EPA 300.0 R2.1	
180-103785-5	APMW-5	Total/NA	Water	EPA 300.0 R2.1	
MB 180-312442/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-312442/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 311210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-1	SW-1	Total Recoverable	Water	3005A	
180-103782-2	SW-2	Total Recoverable	Water	3005A	
180-103782-3	SW-3	Total Recoverable	Water	3005A	
180-103782-4	SW-4	Total Recoverable	Water	3005A	
180-103782-5	SW-5	Total Recoverable	Water	3005A	
180-103782-6	SW-6	Total Recoverable	Water	3005A	
180-103782-7	SW-7	Total Recoverable	Water	3005A	
180-103782-8	SW-8	Total Recoverable	Water	3005A	
180-103782-9	DUP-01	Total Recoverable	Water	3005A	
MB 180-311210/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-311210/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 311212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-1	APMW-1R	Total Recoverable	Water	3005A	
180-103785-2	APMW-2	Total Recoverable	Water	3005A	
180-103785-3	APMW-3	Total Recoverable	Water	3005A	
180-103785-4	APMW-4	Total Recoverable	Water	3005A	
180-103785-5	APMW-5	Total Recoverable	Water	3005A	
180-103785-6	APMW-6R	Total Recoverable	Water	3005A	
180-103785-7	APMW-7	Total Recoverable	Water	3005A	
180-103785-8	APMW-8	Total Recoverable	Water	3005A	
180-103785-9	APMW-9	Total Recoverable	Water	3005A	
180-103785-10	APMW-10	Total Recoverable	Water	3005A	
180-103785-11	APMW-11	Total Recoverable	Water	3005A	
180-103785-12	APMW-12	Total Recoverable	Water	3005A	
180-103785-13	FB-01	Total Recoverable	Water	3005A	
180-103785-14	EB-01	Total Recoverable	Water	3005A	
180-103785-15	DUP-02	Total Recoverable	Water	3005A	
180-103785-16	DUP-03	Total Recoverable	Water	3005A	
MB 180-311212/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-311212/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 311212 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-1 MS	APMW-1R	Total Recoverable	Water	3005A	
180-103785-1 MSD	APMW-1R	Total Recoverable	Water	3005A	

Analysis Batch: 312686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-1	SW-1	Total Recoverable	Water	EPA 6020	311210
180-103782-2	SW-2	Total Recoverable	Water	EPA 6020	311210
180-103782-3	SW-3	Total Recoverable	Water	EPA 6020	311210
180-103782-4	SW-4	Total Recoverable	Water	EPA 6020	311210
180-103782-5	SW-5	Total Recoverable	Water	EPA 6020	311210
180-103782-6	SW-6	Total Recoverable	Water	EPA 6020	311210
180-103782-7	SW-7	Total Recoverable	Water	EPA 6020	311210
180-103782-8	SW-8	Total Recoverable	Water	EPA 6020	311210
180-103782-9	DUP-01	Total Recoverable	Water	EPA 6020	311210
180-103785-1	APMW-1R	Total Recoverable	Water	EPA 6020	311212
180-103785-2	APMW-2	Total Recoverable	Water	EPA 6020	311212
180-103785-3	APMW-3	Total Recoverable	Water	EPA 6020	311212
180-103785-4	APMW-4	Total Recoverable	Water	EPA 6020	311212
180-103785-5	APMW-5	Total Recoverable	Water	EPA 6020	311212
180-103785-6	APMW-6R	Total Recoverable	Water	EPA 6020	311212
180-103785-7	APMW-7	Total Recoverable	Water	EPA 6020	311212
180-103785-8	APMW-8	Total Recoverable	Water	EPA 6020	311212
180-103785-9	APMW-9	Total Recoverable	Water	EPA 6020	311212
180-103785-10	APMW-10	Total Recoverable	Water	EPA 6020	311212
180-103785-11	APMW-11	Total Recoverable	Water	EPA 6020	311212
180-103785-12	APMW-12	Total Recoverable	Water	EPA 6020	311212
180-103785-13	FB-01	Total Recoverable	Water	EPA 6020	311212
180-103785-14	EB-01	Total Recoverable	Water	EPA 6020	311212
180-103785-15	DUP-02	Total Recoverable	Water	EPA 6020	311212
180-103785-16	DUP-03	Total Recoverable	Water	EPA 6020	311212
MB 180-311210/1-A	Method Blank	Total Recoverable	Water	EPA 6020	311210
MB 180-311212/1-A	Method Blank	Total Recoverable	Water	EPA 6020	311212
LCS 180-311210/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	311210
LCS 180-311212/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	311212
180-103785-1 MS	APMW-1R	Total Recoverable	Water	EPA 6020	311212
180-103785-1 MSD	APMW-1R	Total Recoverable	Water	EPA 6020	311212

Analysis Batch: 312765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-7	SW-7	Total Recoverable	Water	EPA 6020	311210
180-103782-8	SW-8	Total Recoverable	Water	EPA 6020	311210
180-103782-9	DUP-01	Total Recoverable	Water	EPA 6020	311210

Analysis Batch: 313029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-1	APMW-1R	Total Recoverable	Water	EPA 6020	311212
180-103785-2	APMW-2	Total Recoverable	Water	EPA 6020	311212
180-103785-3	APMW-3	Total Recoverable	Water	EPA 6020	311212
180-103785-4	APMW-4	Total Recoverable	Water	EPA 6020	311212
180-103785-5	APMW-5	Total Recoverable	Water	EPA 6020	311212
180-103785-6	APMW-6R	Total Recoverable	Water	EPA 6020	311212

Metals (Continued)

Analysis Batch: 313029 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-7	APMW-7	Total Recoverable	Water	EPA 6020	311212
180-103785-8	APMW-8	Total Recoverable	Water	EPA 6020	311212
180-103785-9	APMW-9	Total Recoverable	Water	EPA 6020	311212
180-103785-10	APMW-10	Total Recoverable	Water	EPA 6020	311212
180-103785-11	APMW-11	Total Recoverable	Water	EPA 6020	311212
180-103785-12	APMW-12	Total Recoverable	Water	EPA 6020	311212
180-103785-13	FB-01	Total Recoverable	Water	EPA 6020	311212
180-103785-14	EB-01	Total Recoverable	Water	EPA 6020	311212
180-103785-15	DUP-02	Total Recoverable	Water	EPA 6020	311212
180-103785-16	DUP-03	Total Recoverable	Water	EPA 6020	311212
180-103785-1 MS	APMW-1R	Total Recoverable	Water	EPA 6020	311212
180-103785-1 MSD	APMW-1R	Total Recoverable	Water	EPA 6020	311212

General Chemistry

Analysis Batch: 310664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-3	SW-3	Total/NA	Water	SM 2540C	
180-103782-4	SW-4	Total/NA	Water	SM 2540C	
180-103782-5	SW-5	Total/NA	Water	SM 2540C	
180-103782-6	SW-6	Total/NA	Water	SM 2540C	
180-103782-7	SW-7	Total/NA	Water	SM 2540C	
180-103782-8	SW-8	Total/NA	Water	SM 2540C	
180-103782-9	DUP-01	Total/NA	Water	SM 2540C	
180-103785-1	APMW-1R	Total/NA	Water	SM 2540C	
180-103785-2	APMW-2	Total/NA	Water	SM 2540C	
180-103785-4	APMW-4	Total/NA	Water	SM 2540C	
180-103785-9	APMW-9	Total/NA	Water	SM 2540C	
180-103785-15	DUP-02	Total/NA	Water	SM 2540C	
MB 180-310664/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310664/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 310666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-2	SW-2	Total/NA	Water	SM 2540C	
180-103785-11	APMW-11	Total/NA	Water	SM 2540C	
180-103785-13	FB-01	Total/NA	Water	SM 2540C	
180-103785-14	EB-01	Total/NA	Water	SM 2540C	
MB 180-310666/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310666/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 310668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-1	SW-1	Total/NA	Water	SM 2540C	
180-103785-3	APMW-3	Total/NA	Water	SM 2540C	
180-103785-5	APMW-5	Total/NA	Water	SM 2540C	
180-103785-6	APMW-6R	Total/NA	Water	SM 2540C	
180-103785-7	APMW-7	Total/NA	Water	SM 2540C	
180-103785-8	APMW-8	Total/NA	Water	SM 2540C	
180-103785-10	APMW-10	Total/NA	Water	SM 2540C	
180-103785-12	APMW-12	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 310668 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-16	DUP-03	Total/NA	Water	SM 2540C	
MB 180-310668/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310668/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-103785-12 DU	APMW-12	Total/NA	Water	SM 2540C	

TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information

Client Contact: Rick Hagendorfer	Sampler: Rick Hagendorfer/ Phillip Evans	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-59233-10600.3
Company: RDH Environmental Services Inc	Phone: 1-(850)-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 1
Address: 5720 Dove Drive	Due Date Requested:			Job #:
City: Pace	TAT Requested (days):			
State, Zip: FL, 32571				
Phone: 205-992-5417(Tel)	PO #: SCS10382606			
Email: rickhagendorfer@gmail.com	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd, 300_ORGFM_28D	6020 - BCaSbAsBaBeCdCoPbLiMoSeTl	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Chloride, Fluoride, Sulfate, TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
SW-1	3/16/20	1655	G	Water			X	X	X	X		
SW-2	3/16/20	1635	G	Water			X	X	X	X		
SW-3	3/16/20	1500	G	Water			X	X	X	X		
SW-4	3/16/20	1230	G	Water			X	X	X	X		
SW-5	3/16/20	1255	G	Water			X	X	X	X		
SW-6	3/16/20	1310	G	Water			X	X	X	X		
SW-7	3/16/20	1335	G	Water			X	X	X	X		
SW-8	3/16/20	1355	G	Water			X	X	X	X		
DUP-01	3/16/20	1400	G	Water			X	X	X	X		

180-103782 Chain of Custody

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: TMW MW	Date/Time: 3/18/20 1400	Company: RDH	Received by:	Date/Time: 03/19/2020 0830	Company: EMA PITT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Trevor Braddock/ Phillip Evans	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-59233-10600.3
Client Contact: Rick Hagendorfer	Phone: 1-(850)-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: RDH Environmental Services Inc				Job #:
Address: 5720 Dove Drive	Due Date Requested:			
City: Pace	TAT Requested (days):			
State, Zip: FL, 32571				
Phone: 205-992-5417(Tel)	PO #: SCS10382606			
Email: rickhagendorfer@gmail.com	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd, 300_ORGFM_28D	6020 - BCaSbAsBaBeCdCoPbLiMoSeTl	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Chloride, Fluoride, Sulfate, TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
APMW-1R	3/16/20	1330	G	Water			X	X	X	X		
APMW-2	3/16/20	1450	G	Water			X	X	X	X		
APMW-3	3/16/20	1625	G	Water			X	X	X	X		
APMW-4	3/16/20	1740	G	Water			X	X	X	X		
APMW-5	3/17/20	0755	G	Water			X	X	X	X		
APMW-6R	3/17/20	1050	G	Water			X	X	X	X		
APMW-7	3/17/20	1200	G	Water			X	X	X	X		
APMW-8	3/17/20	1300	G	Water			X	X	X	X		
APMW-9	3/17/20	1040	G	Water			X	X	X	X		
APMW-10	3/17/20	1120	G	Water			X	X	X	X		
APMW-11	3/17/20	0805	G	Water			X	X	X	X		

180-103785 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/18/20 1400	RDH	[signature]	03/19/2020 0830	Lab Post
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

ORI[illegible] ID:PNSA (850) 336-0192
RDH [illegible]VIRONMENTAL
TRE[illegible] BRADDOCK
SEE [illegible]ERS 5 BEFORE BILL
301 [illegible]HA DR
PITT[illegible]RGH, PA 15238
UNI[illegible] STATES US

SHIP DATE: 18MAR20
ACTWGT: 67.85 LB
CAD: 6994796/SSFE2101
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) [illegible]-6222 REF:
INV:
PO: DEPT:

FedEx Express

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT

FedEx 0263 3912 1600 4460

15238
PA-US
PIT

XH AGCA

Uncorrected temp
Thermometer ID
CF 0 Initials B

PT-WI-SR-001 effective 11/8/18

180-103782 Waybill

ORIGIN ID:PNSA [illegible]50) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 1[illegible]
ACTWGT: 69.50
CAD: 6994796/S
DIMS: 24x14x14

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-6222 REF:
INV:
PO:

FedEx Express

FedEx MPS# 0263 3912 1600 4470

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT

15238
PA-US
PIT

XH AGCA

Uncorrected temp
Thermometer ID
CF 0 Initials B

PT-WI-SR-001 effective 11/8/18

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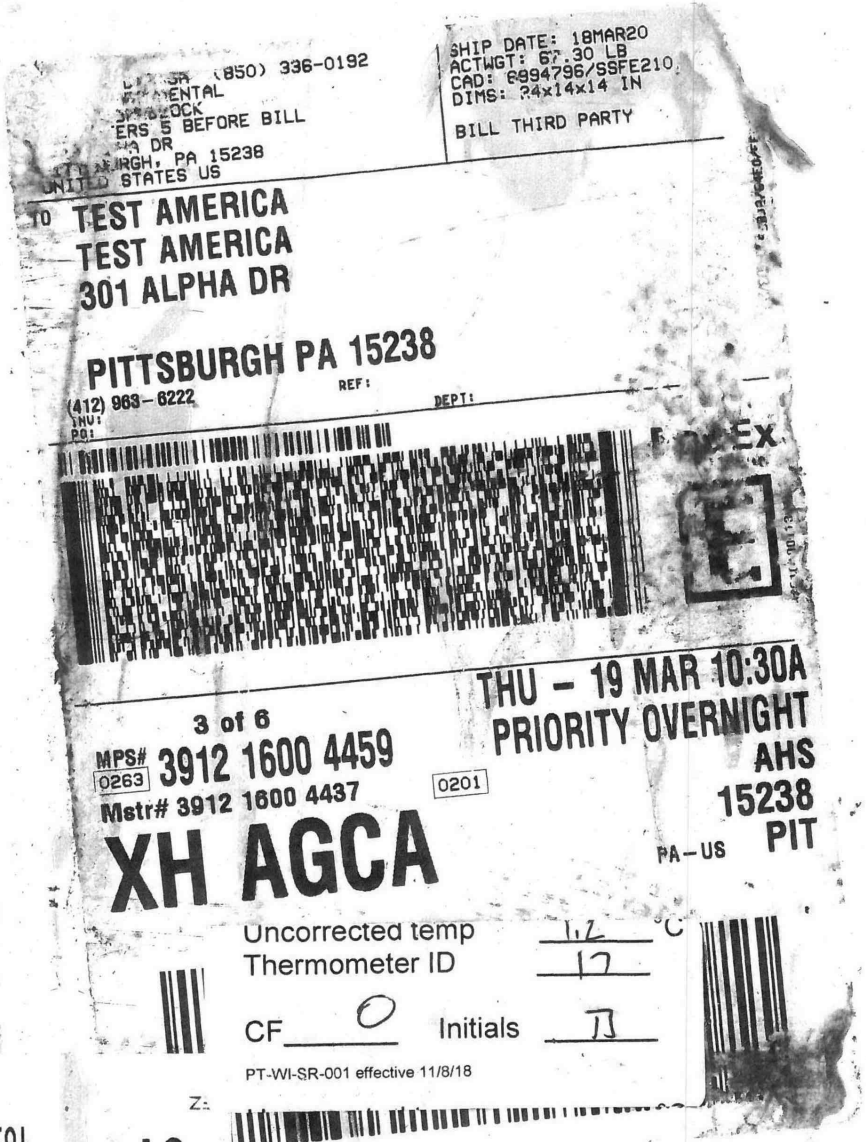
4/21/2020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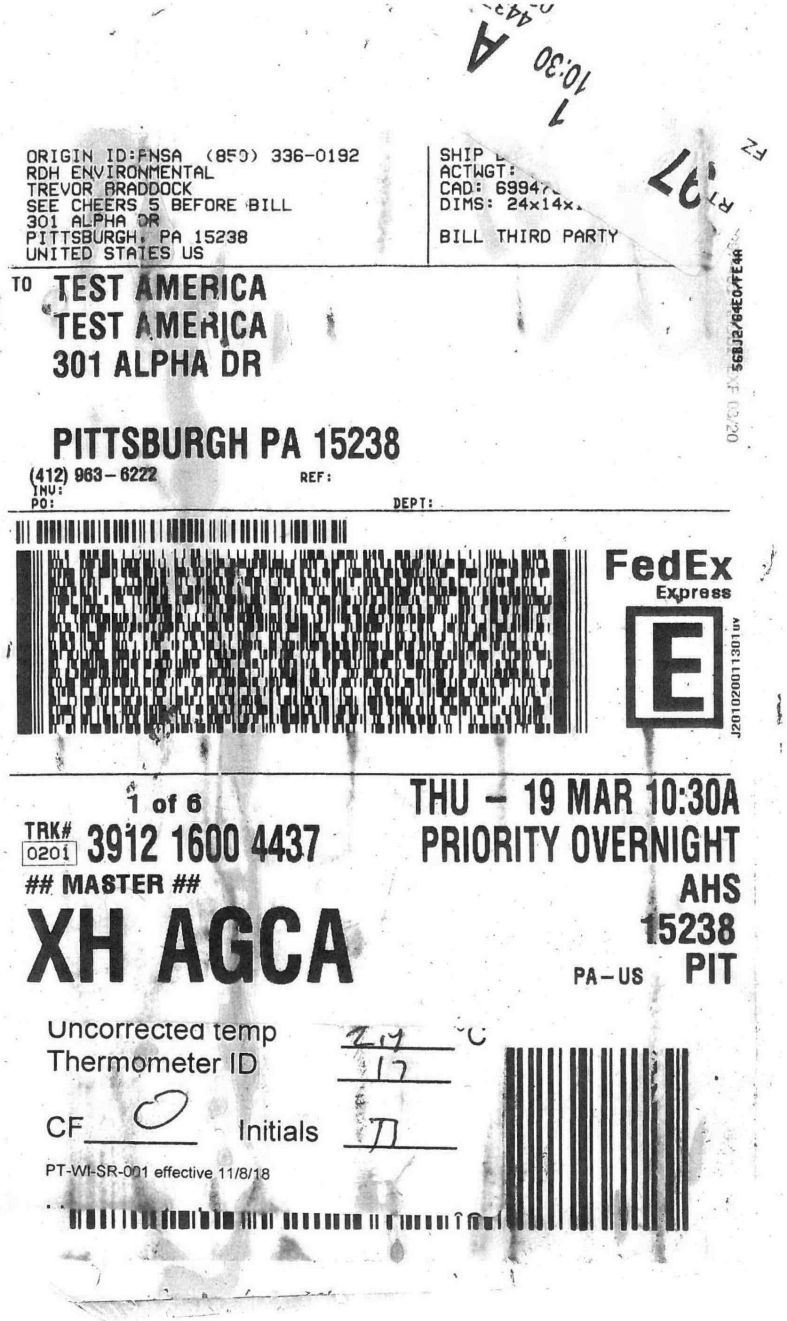
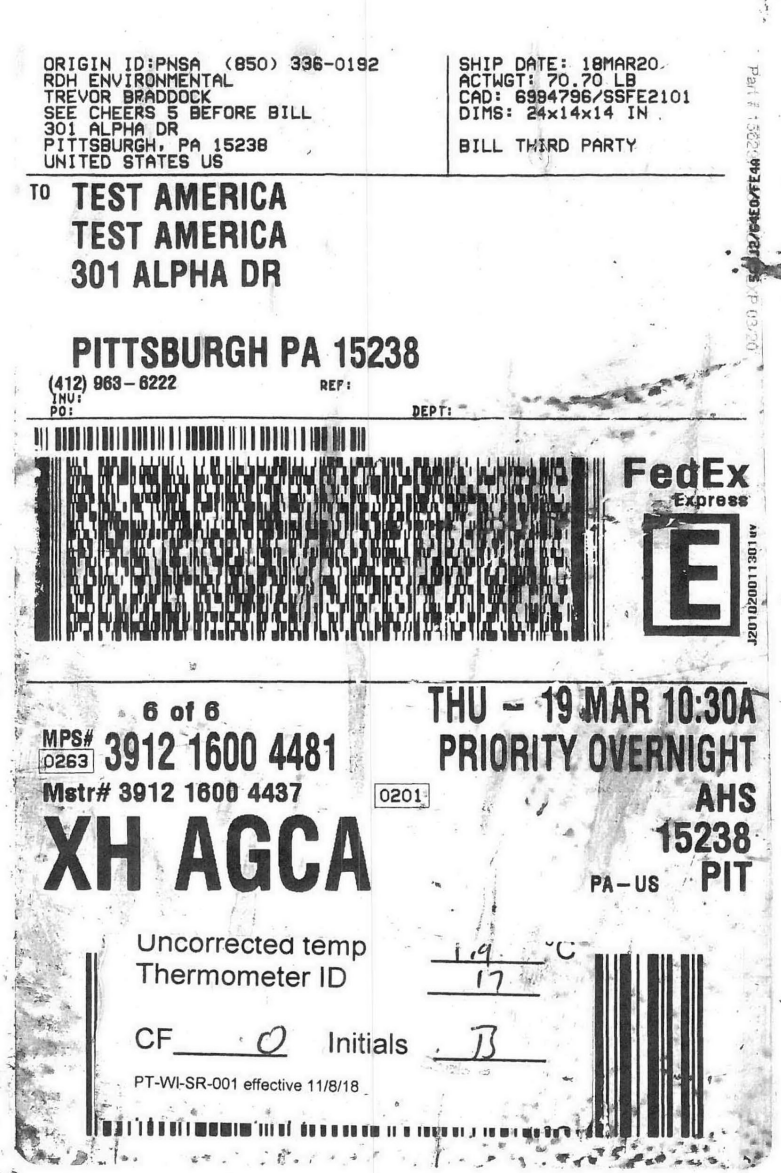
SHIP DATE: 18MAR20
ACTWGT: 67.30 LB
CAD: 6994796/SSFE210
DIMS: 24x14x14 IN
BILL THIRD PARTY
TO TEST AMERICA
TEST AMERICA
301 ALPHA DR
PITTSBURGH PA 15238
(412) 963-6222
REF:
DEPT:
FedEx
3 of 6
MPS# 3912 1600 4459
Mstr# 3912 1600 4437
0263
0201
THU - 19 MAR 10:30A
PRIORITY OVERNIGHT
AHS
15238
PIT
PA-US
XH AGCA
Uncorrected temp 1.2 °C
Thermometer ID 17
CF 0
Initials JJ
PT-WI-SR-001 effective 11/8/18


ORIGIN ID:FNSA (850) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US
BILL THIRD PARTY
TO TEST AMERICA
TEST AMERICA
301 ALPHA DR
PITTSBURGH PA 15238
(412) 963-6222
REF:
DEPT:
FedEx
Express
1 of 6
TRK# 3912 1600 4437
0201
MASTER
THU - 19 MAR 10:30A
PRIORITY OVERNIGHT
AHS
15238
PIT
PA-US
XH AGCA
Uncorrected temp 2.4 °C
Thermometer ID 17
CF 0
Initials JJ
PT-WI-SR-001 effective 11/8/18



ORIGIN ID:PNSA (850) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 18MAR20
ACTWGT: 70.70 LB
CAD: 6994796/SSFE2101
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-6222 REF:
INV:
PO: DEPT:

FedEx Express

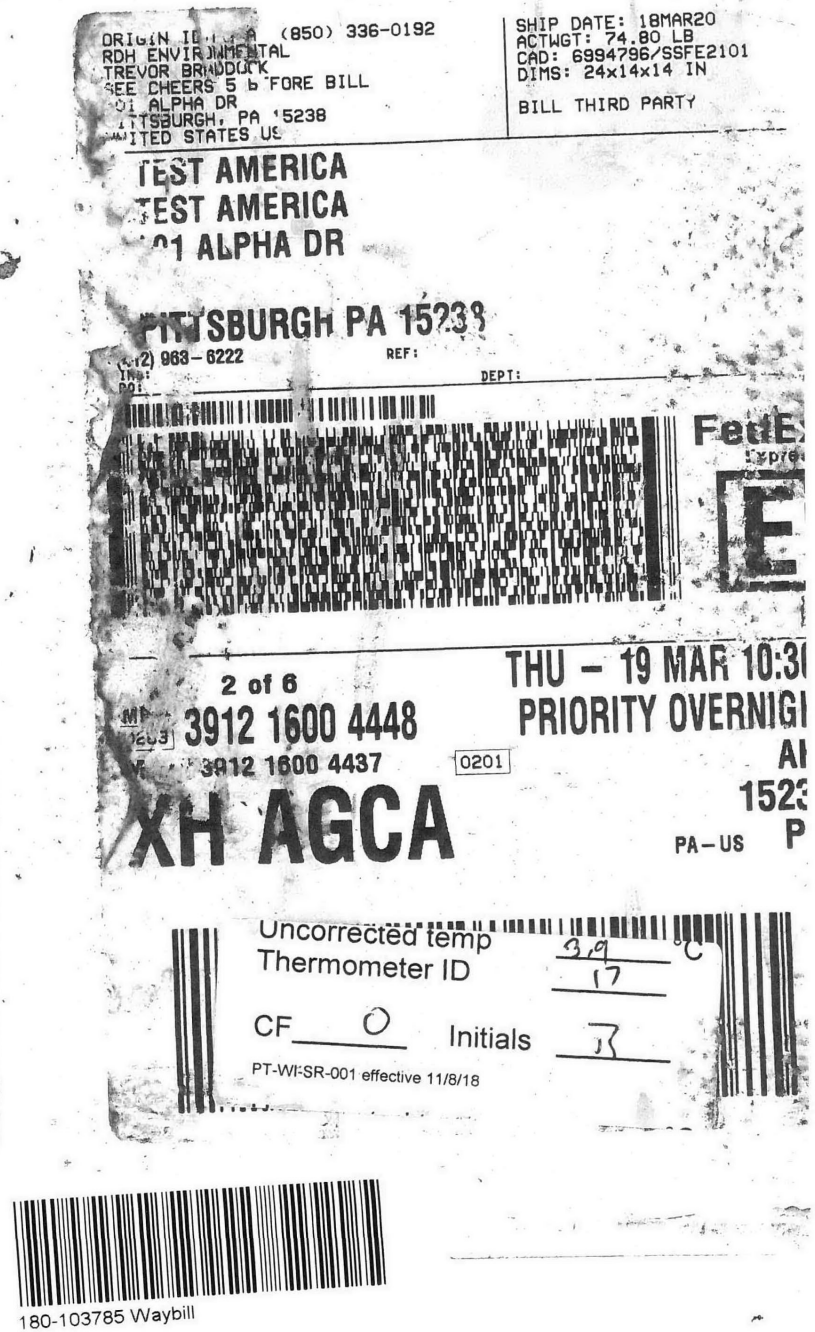
6 of 6
MPS# 0263 3912 1600 4481
Mstr# 3912 1600 4437 0201

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT
AHS
15238
PA-US PIT

XH AGCA

Uncorrected temp 1.9 °C
Thermometer ID 17
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18



ORIGIN ID:PNSA (850) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 18MAR20
ACTWGT: 74.80 LB
CAD: 6994796/SSFE2101
DIMS: 24x14x14 IN

BILL THIRD PARTY

TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-6222 REF:
INV:
PO: DEPT:

FedEx Express

2 of 6
MPS# 0263 3912 1600 4448
Mstr# 3912 1600 4437 0201

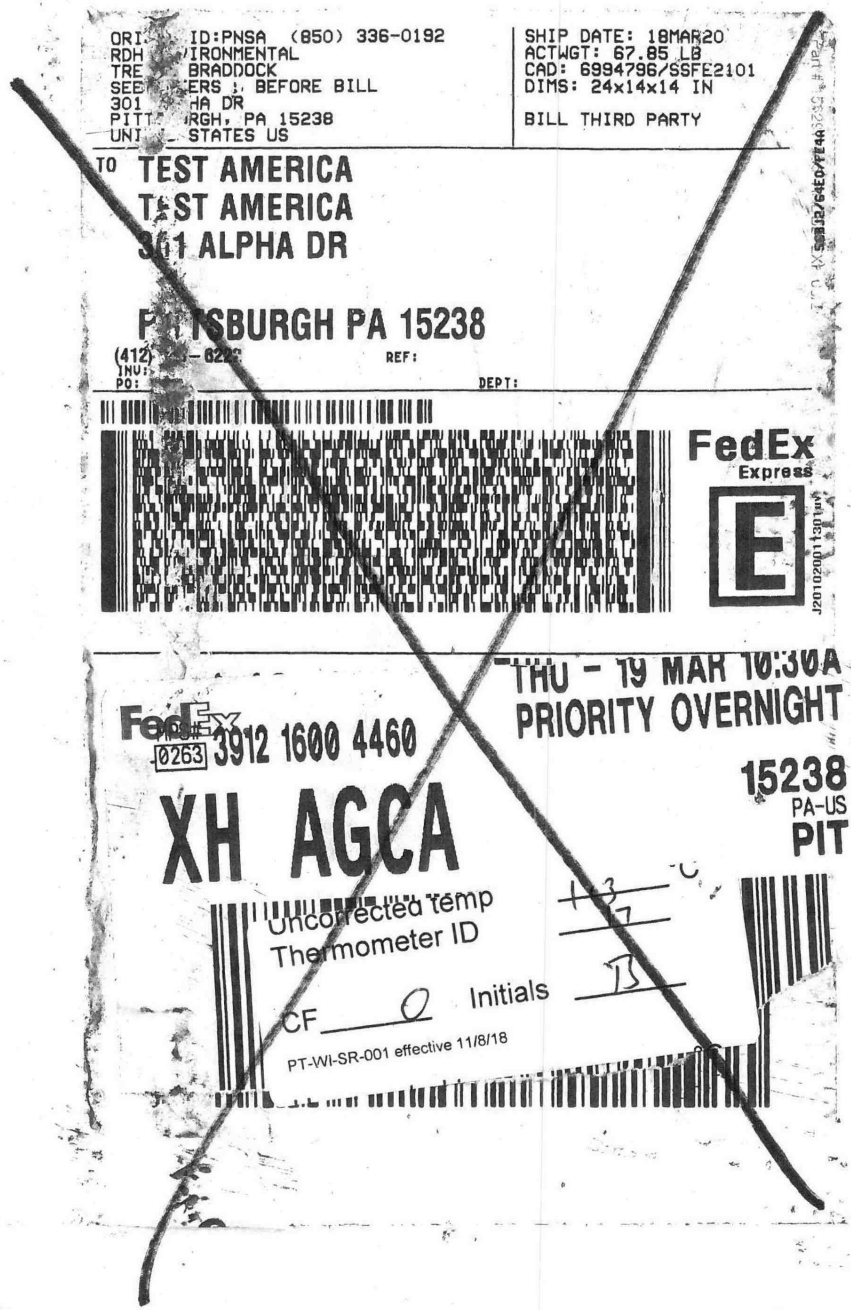
THU - 19 MAR 10:30
PRIORITY OVERNIGHT
AHS
15238
PA-US PIT

XH AGCA

Uncorrected temp 3.9 °C
Thermometer ID 17
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

180-103785 Waybill



ORI[illegible] ID:PNSA (850) 336-0192
RDH [illegible]VIRONMENTAL
TRE[illegible] BRADDOCK
SEE [illegible]ERS ; BEFORE BILL
301 [illegible]HA DR
PITT[illegible]RGH, PA 15238
UNI[illegible] STATES US

SHIP DATE: 18MAR20
ACTWGT: 67.85 LB
CAD: 6994796/SSFE2101
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

P[illegible]TSBURGH PA 15238
(412) [illegible]-6222 REF:
INV:
PO: DEPT:

FedEx Express

J201020011301uv

FedEx
0263 3912 1600 4460

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT

XH AGCA

15238
PA-US
PIT

Uncorrected temp +3.7 C
Thermometer ID
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

ORIGIN ID:PNSA [illegible]50) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 1[illegible]
ACTWGT: 69.50
CAD: 6994796/S
DIMS: 24x14x14

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-6222 REF:
INV:
PO: DEPT:

FedEx Express

J201020011301uv

FedEx
MPS# 0263 3912 1600 4470

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT

XH AGCA

15238
PA-US
PIT

Uncorrected temp 1.6 C
Thermometer ID
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103782-1

Login Number: 103782
List Number: 1
Creator: DiNardo, Nicholas J

List Source: Eurofins TestAmerica, Pittsburgh

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103782-1

Login Number: 103785
List Number: 1
Creator: DiNardo, Nicholas J

List Source: Eurofins TestAmerica, Pittsburgh

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

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-103782-2
Client Project/Site: CCR - Plant Watson

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Authorized for release by:
5/15/2020 4:02:24 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

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

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

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-103782-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-103782-2

Comments
No additional comments.

Receipt
The samples were received on 3/19/2020 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 1.2º C, 1.3º C, 1.6º C, 1.9º C, 2.4º C and 3.9º C.

RAD
Methods 903.0, 9315: Ra-226 Prep Batch 160-465538
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.
Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
SW-1 (180-103782-1), SW-2 (180-103782-2), SW-3 (180-103782-3), SW-4 (180-103782-4), SW-5 (180-103782-5), SW-6 (180-103782-6), (LCS 160-465538/1-A), (MB 160-465538/23-A), (160-37649-B-2-A) and (160-37649-A-2-C DU)

Method 9315: Ra-226 Prep Batch 160-468488
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.
Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9), APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-4 (180-103785-4), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-7 (180-103785-7), APMW-8 (180-103785-8), APMW-9 (180-103785-9), APMW-10 (180-103785-10), APMW-11 (180-103785-11), APMW-12 (180-103785-12), FB-01 (180-103785-13), EB-01 (180-103785-14), DUP-02 (180-103785-15), DUP-03 (180-103785-16), (LCS 160-468488/1-A), (LCSD 160-468488/2-A) and (MB 160-468488/22-A)

Methods 904.0, 9320: Ra-228 Prep Batch 160-465544
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.
Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
SW-1 (180-103782-1), SW-2 (180-103782-2), SW-3 (180-103782-3), SW-4 (180-103782-4), SW-5 (180-103782-5), SW-6 (180-103782-6), (LCS 160-465544/1-A) and (MB 160-465544/23-A)

Method 9320: Radium-228 Prep Batch 160-468573
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.
Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9), APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-4 (180-103785-4), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-7 (180-103785-7), APMW-8 (180-103785-8), APMW-9 (180-103785-9), APMW-10 (180-103785-10), APMW-11 (180-103785-11), APMW-12 (180-103785-12), FB-01 (180-103785-13), EB-01 (180-103785-14), DUP-02 (180-103785-15), DUP-03 (180-103785-16), (LCS 160-468573/1-A), (LCSD 160-468573/2-A) and (MB 160-468573/22-A)

Method PrecSep_0: Radium 228 Prep Batch 160-465539:
The following sample (180-103782-7, 180-103782-8, 180-103782-9 and 103785-7) were prepared at a reduced aliquot due to slight yellow discoloration: SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9) and APMW-7 (180-103785-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-465539:
Insufficient sample volume was available to perform a sample duplicate for the following samples: SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9), APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-4 (180-103785-4), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-7 (180-103785-7), APMW-8 (180-103785-8), APMW-9

Job ID: 180-103782-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

(180-103785-9), APMW-10 (180-103785-10), APMW-11 (180-103785-11), APMW-12 (180-103785-12), FB-01 (180-103785-13), EB-01 (180-103785-14), DUP-02 (180-103785-15) and DUP-03 (180-103785-16). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-468573:
Insufficient sample volume was available to perform a sample duplicate for the following samples: SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9), APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-4 (180-103785-4), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-7 (180-103785-7), APMW-8 (180-103785-8), APMW-9 (180-103785-9), APMW-10 (180-103785-10), APMW-11 (180-103785-11), APMW-12 (180-103785-12), FB-01 (180-103785-13), EB-01 (180-103785-14), DUP-02 (180-103785-15) and DUP-03 (180-103785-16). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-468573:
The following samples were prepared at a reduced aliquot due to limited volume because of re-prep: APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-4 (180-103785-4), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-8 (180-103785-8), APMW-9 (180-103785-9), APMW-10 (180-103785-10), APMW-11 (180-103785-11), APMW-12 (180-103785-12), FB-01 (180-103785-13), EB-01 (180-103785-14), DUP-02 (180-103785-15) and DUP-03 (180-103785-16).

Method PrecSep_0: Radium 228 Prep Batch 160-468573:
The following samples were prepared at a reduced aliquot due to a yellow discoloration: SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9) and APMW-7 (180-103785-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-465536:
The following sample (180-103782-7, 180-103782-8, 180-103782-9 and 103785-7) were prepared at a reduced aliquot due to slight yellow discoloration: SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9) and APMW-7 (180-103785-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium Prep Batch 160-465536:
Insufficient sample volume was available to perform a sample duplicate for the following samples: SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9), APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-4 (180-103785-4), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-7 (180-103785-7), APMW-8 (180-103785-8), APMW-9 (180-103785-9), APMW-10 (180-103785-10), APMW-11 (180-103785-11), APMW-12 (180-103785-12), FB-01 (180-103785-13), EB-01 (180-103785-14), DUP-02 (180-103785-15) and DUP-03 (180-103785-16). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-468488:
The following samples were prepared at a reduced aliquot due to limited volume because of re-prep: APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-4 (180-103785-4), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-8 (180-103785-8), APMW-9 (180-103785-9), APMW-10 (180-103785-10), APMW-11 (180-103785-11), APMW-12 (180-103785-12), FB-01 (180-103785-13), EB-01 (180-103785-14), DUP-02 (180-103785-15) and DUP-03 (180-103785-16).

Method PrecSep-21: Radium 226 Prep Batch 160-468488:
Insufficient sample volume was available to perform a sample duplicate for the following samples: SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9), APMW-1R (180-103785-1), APMW-2 (180-103785-2), APMW-3 (180-103785-3), APMW-4 (180-103785-4), APMW-5 (180-103785-5), APMW-6R (180-103785-6), APMW-7 (180-103785-7), APMW-8 (180-103785-8), APMW-9 (180-103785-9), APMW-10 (180-103785-10), APMW-11 (180-103785-11), APMW-12 (180-103785-12), FB-01 (180-103785-13), EB-01 (180-103785-14), DUP-02 (180-103785-15) and DUP-03 (180-103785-16). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-468488:
The following samples were prepared at a reduced aliquot due to a yellow discoloration: SW-7 (180-103782-7), SW-8 (180-103782-8), DUP-01 (180-103782-9) and APMW-7 (180-103785-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Qualifiers

Rad

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

Glossary

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20 *
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20 *
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-103782-1	SW-1	Water	03/16/20 16:55	03/19/20 08:30	
180-103782-2	SW-2	Water	03/16/20 16:35	03/19/20 08:30	
180-103782-3	SW-3	Water	03/16/20 15:00	03/19/20 08:30	
180-103782-4	SW-4	Water	03/16/20 12:30	03/19/20 08:30	
180-103782-5	SW-5	Water	03/16/20 12:55	03/19/20 08:30	
180-103782-6	SW-6	Water	03/16/20 13:10	03/19/20 08:30	
180-103782-7	SW-7	Water	03/16/20 13:35	03/19/20 08:30	
180-103782-8	SW-8	Water	03/16/20 13:55	03/19/20 08:30	
180-103782-9	DUP-01	Water	03/16/20 14:00	03/19/20 08:30	
180-103785-1	APMW-1R	Water	03/16/20 13:30	03/19/20 08:30	
180-103785-2	APMW-2	Water	03/16/20 14:50	03/19/20 08:30	
180-103785-3	APMW-3	Water	03/16/20 16:25	03/19/20 08:30	
180-103785-4	APMW-4	Water	03/16/20 17:40	03/19/20 08:30	
180-103785-5	APMW-5	Water	03/17/20 07:55	03/19/20 08:30	
180-103785-6	APMW-6R	Water	03/17/20 10:50	03/19/20 08:30	
180-103785-7	APMW-7	Water	03/17/20 12:00	03/19/20 08:30	
180-103785-8	APMW-8	Water	03/17/20 13:00	03/19/20 08:30	
180-103785-9	APMW-9	Water	03/17/20 10:40	03/19/20 08:30	
180-103785-10	APMW-10	Water	03/17/20 11:20	03/19/20 08:30	
180-103785-11	APMW-11	Water	03/17/20 08:05	03/19/20 08:30	
180-103785-12	APMW-12	Water	03/17/20 09:25	03/19/20 08:30	
180-103785-13	FB-01	Water	03/17/20 08:00	03/19/20 08:30	
180-103785-14	EB-01	Water	03/17/20 08:15	03/19/20 08:30	
180-103785-15	DUP-02	Water	03/16/20 12:30	03/19/20 08:30	
180-103785-16	DUP-03	Water	03/17/20 12:30	03/19/20 08:30	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Client Sample ID: SW-1
Date Collected: 03/16/20 16:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.55 mL	1.0 g	465538	03/25/20 09:52	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 13:14	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.55 mL	1.0 g	465544	03/25/20 11:38	RBR	TAL SL
Total/NA	Analysis	9320		1			467662	04/14/20 17:37	AJD	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			468015	04/17/20 07:58	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SW-2
Date Collected: 03/16/20 16:35
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.59 mL	1.0 g	465538	03/25/20 09:52	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 13:13	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.59 mL	1.0 g	465544	03/25/20 11:38	RBR	TAL SL
Total/NA	Analysis	9320		1			467662	04/14/20 17:37	AJD	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			468015	04/17/20 07:58	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SW-3
Date Collected: 03/16/20 15:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.62 mL	1.0 g	465538	03/25/20 09:52	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 13:13	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	465544	03/25/20 11:38	RBR	TAL SL
Total/NA	Analysis	9320		1			467662	04/14/20 17:37	AJD	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			468015	04/17/20 07:58	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SW-4
Date Collected: 03/16/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.27 mL	1.0 g	465538	03/25/20 09:52	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 13:14	CJQ	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Client Sample ID: SW-4

Date Collected: 03/16/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.27 mL	1.0 g	465544	03/25/20 11:38	RBR	TAL SL
Total/NA	Analysis	9320		1			467662	04/14/20 17:38	AJD	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			468015	04/17/20 07:58	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SW-5

Date Collected: 03/16/20 12:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.14 mL	1.0 g	465538	03/25/20 09:52	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 13:14	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.14 mL	1.0 g	465544	03/25/20 11:38	RBR	TAL SL
Total/NA	Analysis	9320		1			467662	04/14/20 17:38	AJD	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			468015	04/17/20 07:58	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SW-6

Date Collected: 03/16/20 13:10
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.99 mL	1.0 g	465538	03/25/20 09:52	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 13:14	CJQ	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.99 mL	1.0 g	465544	03/25/20 11:38	RBR	TAL SL
Total/NA	Analysis	9320		1			467662	04/14/20 17:38	AJD	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			468015	04/17/20 07:58	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SW-7

Date Collected: 03/16/20 13:35
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.71 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:44	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.71 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:43	KLS	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Client Sample ID: SW-7

Date Collected: 03/16/20 13:35
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL

Client Sample ID: SW-8

Date Collected: 03/16/20 13:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.65 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:44	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.65 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:43	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-01

Date Collected: 03/16/20 14:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.45 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:44	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.45 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:43	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-1R

Date Collected: 03/16/20 13:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			975.38 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:44	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			975.38 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Client Sample ID: APMW-2
Date Collected: 03/16/20 14:50
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			980.62 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:44	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			980.62 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-3
Date Collected: 03/16/20 16:25
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			981.50 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:44	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			981.50 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-4
Date Collected: 03/16/20 17:40
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			991.12 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:46	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			991.12 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-5
Date Collected: 03/17/20 07:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			990.02 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:46	KLS	TAL SL
	Instrument ID: GFPCRED									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Client Sample ID: APMW-5
Date Collected: 03/17/20 07:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			990.02 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-6R
Date Collected: 03/17/20 10:50
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			992.91 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:46	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			992.91 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-7
Date Collected: 03/17/20 12:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.40 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:46	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.40 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-8
Date Collected: 03/17/20 13:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			993.99 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:46	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			993.99 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Client Sample ID: APMW-8
Date Collected: 03/17/20 13:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL

Client Sample ID: APMW-9
Date Collected: 03/17/20 10:40
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			986.81 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:46	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			986.81 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-10
Date Collected: 03/17/20 11:20
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			947.58 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:46	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			947.58 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469896	05/08/20 07:44	KLS	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-11
Date Collected: 03/17/20 08:05
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			951.23 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:48	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			951.23 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469897	05/08/20 07:47	KLS	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Client Sample ID: APMW-12
Date Collected: 03/17/20 09:25
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			972.67 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:48	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			972.67 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469897	05/08/20 07:47	KLS	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-01
Date Collected: 03/17/20 08:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			964.81 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:48	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			964.81 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469897	05/08/20 07:47	KLS	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-01
Date Collected: 03/17/20 08:15
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			962.74 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:48	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			962.74 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469897	05/08/20 07:47	KLS	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-02
Date Collected: 03/16/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			993.17 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:48	KLS	TAL SL
	Instrument ID: GFPCRED									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant Watson

Job ID: 180-103782-2

Client Sample ID: DUP-02
Date Collected: 03/16/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			993.17 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469897	05/08/20 07:47	KLS	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-03
Date Collected: 03/17/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			983.76 mL	1.0 g	468488	04/22/20 06:13	RBR	TAL SL
Total/NA	Analysis	9315		1			470398	05/14/20 13:48	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			983.76 mL	1.0 g	468573	04/22/20 06:52	RBR	TAL SL
Total/NA	Analysis	9320		1			469897	05/08/20 07:47	KLS	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			470564	05/15/20 09:39	SMP	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

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

Analyst References:

Lab: TAL SL

Batch Type: Prep

RBR = Rachael Ratcliff

Batch Type: Analysis

AJD = Audra DeMariano
CJQ = Caleb Quinn
KLS = Kody Saulters
SMP = Siobhan Perry

Client Sample ID: SW-1

Lab Sample ID: 180-103782-1

Date Collected: 03/16/20 16:55

Matrix: Water

Date Received: 03/19/20 08:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.227		0.145	0.146	1.00	0.192	pCi/L	03/25/20 09:52	04/16/20 13:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.1*		*40 - 110*	*03/25/20 09:52*	*04/16/20 13:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0393	U	0.310	0.310	1.00	0.544	pCi/L	03/25/20 11:38	04/14/20 17:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.1*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:37*	*1*
Y Carrier	*81.1*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:37*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.266	U	0.342	0.343	5.00	0.544	pCi/L		04/17/20 07:58	1

Client Sample ID: SW-2

Lab Sample ID: 180-103782-2

Date Collected: 03/16/20 16:35

Matrix: Water

Date Received: 03/19/20 08:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.101	U	0.128	0.128	1.00	0.213	pCi/L	03/25/20 09:52	04/16/20 13:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*03/25/20 09:52*	*04/16/20 13:13*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.292	U	0.308	0.309	1.00	0.503	pCi/L	03/25/20 11:38	04/14/20 17:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:37*	*1*
Y Carrier	*79.3*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:37*	*1*

Client Sample ID: SW-2

Lab Sample ID: 180-103782-2

Date Collected: 03/16/20 16:35

Matrix: Water

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.393	U	0.334	0.334	5.00	0.503	pCi/L		04/17/20 07:58	1

Client Sample ID: SW-3

Lab Sample ID: 180-103782-3

Date Collected: 03/16/20 15:00

Matrix: Water

Date Received: 03/19/20 08:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.117	U	0.159	0.160	1.00	0.268	pCi/L	03/25/20 09:52	04/16/20 13:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*69.4*		*40 - 110*	*03/25/20 09:52*	*04/16/20 13:13*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.596**		0.375	0.379	1.00	0.577	pCi/L	03/25/20 11:38	04/14/20 17:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*69.4*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:37*	*1*
Y Carrier	*84.5*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:37*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.714**		0.407	0.411	5.00	0.577	pCi/L		04/17/20 07:58	1

Client Sample ID: SW-4

Lab Sample ID: 180-103782-4

Date Collected: 03/16/20 12:30

Matrix: Water

Date Received: 03/19/20 08:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0792	U	0.140	0.140	1.00	0.245	pCi/L	03/25/20 09:52	04/16/20 13:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.4*		*40 - 110*	*03/25/20 09:52*	*04/16/20 13:14*	*1*

Client Sample ID: SW-4

Lab Sample ID: 180-103782-4

Date Collected: 03/16/20 12:30

Matrix: Water

Date Received: 03/19/20 08:30

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.233	U	0.284	0.285	1.00	0.470	pCi/L	03/25/20 11:38	04/14/20 17:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.4*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:38*	*1*
Y Carrier	*75.9*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:38*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.313	U	0.317	0.318	5.00	0.470	pCi/L		04/17/20 07:58	1

Client Sample ID: SW-5

Lab Sample ID: 180-103782-5

Date Collected: 03/16/20 12:55

Matrix: Water

Date Received: 03/19/20 08:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.172	U	0.140	0.141	1.00	0.202	pCi/L	03/25/20 09:52	04/16/20 13:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.8*		*40 - 110*	*03/25/20 09:52*	*04/16/20 13:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.298	U	0.329	0.330	1.00	0.540	pCi/L	03/25/20 11:38	04/14/20 17:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.8*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:38*	*1*
Y Carrier	*78.9*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:38*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.470	U	0.358	0.359	5.00	0.540	pCi/L		04/17/20 07:58	1

Client Sample ID: SW-6

Date Collected: 03/16/20 13:10
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-6
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.172	U	0.134	0.135	1.00	0.191	pCi/L	03/25/20 09:52	04/16/20 13:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*03/25/20 09:52*	*04/16/20 13:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.246	U	0.411	0.411	1.00	0.695	pCi/L	03/25/20 11:38	04/14/20 17:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:38*	*1*
Y Carrier	*54.2*		*40 - 110*	*03/25/20 11:38*	*04/14/20 17:38*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.419	U	0.432	0.433	5.00	0.695	pCi/L		04/17/20 07:58	1

Client Sample ID: SW-7

Date Collected: 03/16/20 13:35
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-7
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.893**		0.210	0.225	1.00	0.119	pCi/L	04/22/20 06:13	05/14/20 13:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.325	U	0.353	0.354	1.00	0.578	pCi/L	04/22/20 06:52	05/08/20 07:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:43*	*1*
Y Carrier	*86.4*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:43*	*1*

Client Sample ID: SW-7

Date Collected: 03/16/20 13:35
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-7
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.22		0.411	0.419	5.00	0.578	pCi/L		05/15/20 09:39	1

Client Sample ID: SW-8

Date Collected: 03/16/20 13:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-8
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0801	U	0.0847	0.0850	1.00	0.131	pCi/L	04/22/20 06:13	05/14/20 13:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.555	U	0.417	0.420	1.00	0.655	pCi/L	04/22/20 06:52	05/08/20 07:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:43*	*1*
Y Carrier	*72.5*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:43*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.635	U	0.426	0.429	5.00	0.655	pCi/L		05/15/20 09:39	1

Client Sample ID: DUP-01

Date Collected: 03/16/20 14:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103782-9
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.146	U	0.124	0.125	1.00	0.188	pCi/L	04/22/20 06:13	05/14/20 13:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:44*	*1*

Client Sample ID: DUP-01

Lab Sample ID: 180-103782-9

Date Collected: 03/16/20 14:00

Matrix: Water

Date Received: 03/19/20 08:30

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.397	U	0.345	0.347	1.00	0.551	pCi/L	04/22/20 06:52	05/08/20 07:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:43*	*1*
Y Carrier	*82.2*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:43*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.543	U	0.367	0.369	5.00	0.551	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-1R

Lab Sample ID: 180-103785-1

Date Collected: 03/16/20 13:30

Matrix: Water

Date Received: 03/19/20 08:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**5.92**		0.426	0.682	1.00	0.0990	pCi/L	04/22/20 06:13	05/14/20 13:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.4*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**4.67**		0.453	0.624	1.00	0.325	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.4*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*
Y Carrier	*92.0*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**10.6**		0.622	0.924	5.00	0.325	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-2

Date Collected: 03/16/20 14:50
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-2
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.250		0.0919	0.0947	1.00	0.0830	pCi/L	04/22/20 06:13	05/14/20 13:44	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	110		40 - 110	04/22/20 06:13	05/14/20 13:44	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.20		0.507	0.763	1.00	0.329	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	110		40 - 110	04/22/20 06:52	05/08/20 07:44	1
Y Carrier	84.5		40 - 110	04/22/20 06:52	05/08/20 07:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.45		0.515	0.769	5.00	0.329	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-3

Date Collected: 03/16/20 16:25
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	13.9		0.666	1.42	1.00	0.134	pCi/L	04/22/20 06:13	05/14/20 13:44	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		40 - 110	04/22/20 06:13	05/14/20 13:44	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.93		0.546	0.772	1.00	0.384	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		40 - 110	04/22/20 06:52	05/08/20 07:44	1
Y Carrier	84.9		40 - 110	04/22/20 06:52	05/08/20 07:44	1

Client Sample ID: APMW-3

Date Collected: 03/16/20 16:25
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-3
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	19.9		0.861	1.62	5.00	0.384	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-4

Date Collected: 03/16/20 17:40
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.590		0.147	0.157	1.00	0.0958	pCi/L	04/22/20 06:13	05/14/20 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.12		0.318	0.334	1.00	0.408	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*
Y Carrier	*87.9*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.71		0.350	0.369	5.00	0.408	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-5

Date Collected: 03/17/20 07:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-5
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.424		0.123	0.129	1.00	0.0914	pCi/L	04/22/20 06:13	05/14/20 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.5*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:46*	*1*

Client Sample ID: APMW-5

Date Collected: 03/17/20 07:55
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-5
Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.81		0.456	0.575	1.00	0.379	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.5*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*
Y Carrier	*83.7*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	4.23		0.472	0.589	5.00	0.379	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-6R

Date Collected: 03/17/20 10:50
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-6
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.449		0.123	0.130	1.00	0.0858	pCi/L	04/22/20 06:13	05/14/20 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.5*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.72		0.385	0.459	1.00	0.349	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.5*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*
Y Carrier	*87.1*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.16		0.404	0.477	5.00	0.349	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-7

Date Collected: 03/17/20 12:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-7
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.54		0.256	0.291	1.00	0.102	pCi/L	04/22/20 06:13	05/14/20 13:46	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110	04/22/20 06:13	05/14/20 13:46	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.83		0.530	0.636	1.00	0.490	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110	04/22/20 06:52	05/08/20 07:44	1
Y Carrier	84.5		40 - 110	04/22/20 06:52	05/08/20 07:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	5.37		0.589	0.699	5.00	0.490	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-8

Date Collected: 03/17/20 13:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-8
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.967		0.186	0.206	1.00	0.0945	pCi/L	04/22/20 06:13	05/14/20 13:46	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.4		40 - 110	04/22/20 06:13	05/14/20 13:46	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.46		0.425	0.481	1.00	0.413	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.4		40 - 110	04/22/20 06:52	05/08/20 07:44	1
Y Carrier	77.8		40 - 110	04/22/20 06:52	05/08/20 07:44	1

Client Sample ID: APMW-8

Date Collected: 03/17/20 13:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-8

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.43		0.464	0.523	5.00	0.413	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-9

Date Collected: 03/17/20 10:40
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.36		0.297	0.365	1.00	0.100	pCi/L	04/22/20 06:13	05/14/20 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.6*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.00		0.559	0.724	1.00	0.446	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.6*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*
Y Carrier	*84.1*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	7.36		0.633	0.811	5.00	0.446	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-10

Date Collected: 03/17/20 11:20
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-10

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.13		0.193	0.218	1.00	0.0886	pCi/L	04/22/20 06:13	05/14/20 13:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.4*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:46*	*1*

Client Sample ID: APMW-10

Date Collected: 03/17/20 11:20
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-10
Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.81		0.352	0.390	1.00	0.394	pCi/L	04/22/20 06:52	05/08/20 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.4*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*
Y Carrier	*83.4*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:44*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.94		0.401	0.447	5.00	0.394	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-11

Date Collected: 03/17/20 08:05
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-11
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0706	U	0.0657	0.0660	1.00	0.0980	pCi/L	04/22/20 06:13	05/14/20 13:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:48*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.525		0.336	0.340	1.00	0.523	pCi/L	04/22/20 06:52	05/08/20 07:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:47*	*1*
Y Carrier	*77.8*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:47*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.596		0.342	0.346	5.00	0.523	pCi/L		05/15/20 09:39	1

Client Sample ID: APMW-12

Date Collected: 03/17/20 09:25
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-12
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.247		0.0966	0.0991	1.00	0.0920	pCi/L	04/22/20 06:13	05/14/20 13:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.8*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:48*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.457		0.281	0.284	1.00	0.433	pCi/L	04/22/20 06:52	05/08/20 07:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.8*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:47*	*1*
Y Carrier	*82.6*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:47*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.703		0.297	0.301	5.00	0.433	pCi/L		05/15/20 09:39	1

Client Sample ID: FB-01

Date Collected: 03/17/20 08:00
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-13
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0161	U	0.0530	0.0530	1.00	0.103	pCi/L	04/22/20 06:13	05/14/20 13:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.9*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:48*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.148	U	0.262	0.262	1.00	0.442	pCi/L	04/22/20 06:52	05/08/20 07:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.9*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:47*	*1*
Y Carrier	*89.0*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:47*	*1*

Client Sample ID: FB-01

Lab Sample ID: 180-103785-13
Date Collected: 03/17/20 08:00
Matrix: Water
Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.164	U	0.267	0.267	5.00	0.442	pCi/L		05/15/20 09:39	1

Client Sample ID: EB-01

Lab Sample ID: 180-103785-14
Date Collected: 03/17/20 08:15
Matrix: Water
Date Received: 03/19/20 08:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0198	U	0.0475	0.0476	1.00	0.112	pCi/L	04/22/20 06:13	05/14/20 13:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.0*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:48*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00426	U	0.265	0.265	1.00	0.468	pCi/L	04/22/20 06:52	05/08/20 07:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.0*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:47*	*1*
Y Carrier	*83.7*		*40 - 110*	*04/22/20 06:52*	*05/08/20 07:47*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0240	U	0.269	0.269	5.00	0.468	pCi/L		05/15/20 09:39	1

Client Sample ID: DUP-02

Lab Sample ID: 180-103785-15
Date Collected: 03/16/20 12:30
Matrix: Water
Date Received: 03/19/20 08:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**5.19**		0.409	0.621	1.00	0.101	pCi/L	04/22/20 06:13	05/14/20 13:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.4*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:48*	*1*

Client Sample ID: DUP-02

Date Collected: 03/16/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-15
Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.19		0.527	0.711	1.00	0.407	pCi/L	04/22/20 06:52	05/08/20 07:47	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110	04/22/20 06:52	05/08/20 07:47	1
Y Carrier	81.5		40 - 110	04/22/20 06:52	05/08/20 07:47	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	10.4		0.667	0.944	5.00	0.407	pCi/L		05/15/20 09:39	1

Client Sample ID: DUP-03

Date Collected: 03/17/20 12:30
Date Received: 03/19/20 08:30

Lab Sample ID: 180-103785-16
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.866		0.175	0.192	1.00	0.105	pCi/L	04/22/20 06:13	05/14/20 13:48	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110	04/22/20 06:13	05/14/20 13:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.11		0.447	0.531	1.00	0.424	pCi/L	04/22/20 06:52	05/08/20 07:47	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110	04/22/20 06:52	05/08/20 07:47	1
Y Carrier	79.3		40 - 110	04/22/20 06:52	05/08/20 07:47	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.98		0.480	0.565	5.00	0.424	pCi/L		05/15/20 09:39	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-465538/23-A
Matrix: Water
Analysis Batch: 467927

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 465538

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.005643	U	0.118	0.119	1.00	0.239	pCi/L	03/25/20 09:52	04/16/20 13:14	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.5*		*40 - 110*	*03/25/20 09:52*	*04/16/20 13:14*	*1*

Lab Sample ID: LCS 160-465538/1-A
Matrix: Water
Analysis Batch: 467927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 465538

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	9.325		1.12	1.00	0.231	pCi/L	82	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*95.4*		*40 - 110*

Lab Sample ID: MB 160-468488/22-A
Matrix: Water
Analysis Batch: 470398

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468488

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.003277	U	0.0596	0.0596	1.00	0.124	pCi/L	04/22/20 06:13	05/14/20 13:48	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.2*		*40 - 110*	*04/22/20 06:13*	*05/14/20 13:48*	*1*

Lab Sample ID: LCS 160-468488/1-A
Matrix: Water
Analysis Batch: 470398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468488

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.70		1.15	1.00	0.0932	pCi/L	94	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*79.9*		*40 - 110*

Lab Sample ID: LCSD 160-468488/2-A
Matrix: Water
Analysis Batch: 470398

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 468488

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	10.39		1.11	1.00	0.0997	pCi/L	92	75 - 125	0.14	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCSD 160-468488/2-A
Matrix: Water
Analysis Batch: 470398

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 468488

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	83.2		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-465544/23-A
Matrix: Water
Analysis Batch: 467662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 465544

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.01949	U	0.204	0.204	1.00	0.364	pCi/L	03/25/20 11:38	04/14/20 17:38	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		40 - 110	03/25/20 11:38	04/14/20 17:38	1
Y Carrier	87.1		40 - 110	03/25/20 11:38	04/14/20 17:38	1

Lab Sample ID: LCS 160-465544/1-A
Matrix: Water
Analysis Batch: 467710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 465544

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.93	8.257		1.01	1.00	0.469	pCi/L	92	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	95.4		40 - 110
Y Carrier	83.0		40 - 110

Lab Sample ID: MB 160-468573/22-A
Matrix: Water
Analysis Batch: 469897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468573

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2404	U	0.272	0.273	1.00	0.448	pCi/L	04/22/20 06:52	05/08/20 07:47	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		40 - 110	04/22/20 06:52	05/08/20 07:47	1
Y Carrier	87.5		40 - 110	04/22/20 06:52	05/08/20 07:47	1

Lab Sample ID: LCS 160-468573/1-A
Matrix: Water
Analysis Batch: 469896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468573

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.86	8.992		1.09	1.00	0.454	pCi/L	101	75 - 125		

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

Lab Sample ID: LCS 160-468573/1-A
Matrix: Water
Analysis Batch: 469896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468573

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	79.9		40 - 110
Y Carrier	85.2		40 - 110

Lab Sample ID: LCSD 160-468573/2-A
Matrix: Water
Analysis Batch: 469896

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 468573

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			8.86	8.196		0.986	1.00	0.398	pCi/L	93	75 - 125	0.38	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	83.2		40 - 110
Y Carrier	91.6		40 - 110

Rad

Prep Batch: 465538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-1	SW-1	Total/NA	Water	PrecSep-21	
180-103782-2	SW-2	Total/NA	Water	PrecSep-21	
180-103782-3	SW-3	Total/NA	Water	PrecSep-21	
180-103782-4	SW-4	Total/NA	Water	PrecSep-21	
180-103782-5	SW-5	Total/NA	Water	PrecSep-21	
180-103782-6	SW-6	Total/NA	Water	PrecSep-21	
MB 160-465538/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-465538/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 465544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-1	SW-1	Total/NA	Water	PrecSep_0	
180-103782-2	SW-2	Total/NA	Water	PrecSep_0	
180-103782-3	SW-3	Total/NA	Water	PrecSep_0	
180-103782-4	SW-4	Total/NA	Water	PrecSep_0	
180-103782-5	SW-5	Total/NA	Water	PrecSep_0	
180-103782-6	SW-6	Total/NA	Water	PrecSep_0	
MB 160-465544/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-465544/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 468488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-7	SW-7	Total/NA	Water	PrecSep-21	
180-103782-8	SW-8	Total/NA	Water	PrecSep-21	
180-103782-9	DUP-01	Total/NA	Water	PrecSep-21	
180-103785-1	APMW-1R	Total/NA	Water	PrecSep-21	
180-103785-2	APMW-2	Total/NA	Water	PrecSep-21	
180-103785-3	APMW-3	Total/NA	Water	PrecSep-21	
180-103785-4	APMW-4	Total/NA	Water	PrecSep-21	
180-103785-5	APMW-5	Total/NA	Water	PrecSep-21	
180-103785-6	APMW-6R	Total/NA	Water	PrecSep-21	
180-103785-7	APMW-7	Total/NA	Water	PrecSep-21	
180-103785-8	APMW-8	Total/NA	Water	PrecSep-21	
180-103785-9	APMW-9	Total/NA	Water	PrecSep-21	
180-103785-10	APMW-10	Total/NA	Water	PrecSep-21	
180-103785-11	APMW-11	Total/NA	Water	PrecSep-21	
180-103785-12	APMW-12	Total/NA	Water	PrecSep-21	
180-103785-13	FB-01	Total/NA	Water	PrecSep-21	
180-103785-14	EB-01	Total/NA	Water	PrecSep-21	
180-103785-15	DUP-02	Total/NA	Water	PrecSep-21	
180-103785-16	DUP-03	Total/NA	Water	PrecSep-21	
MB 160-468488/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-468488/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-468488/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 468573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103782-7	SW-7	Total/NA	Water	PrecSep_0	
180-103782-8	SW-8	Total/NA	Water	PrecSep_0	
180-103782-9	DUP-01	Total/NA	Water	PrecSep_0	
180-103785-1	APMW-1R	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 468573 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103785-2	APMW-2	Total/NA	Water	PrecSep_0	
180-103785-3	APMW-3	Total/NA	Water	PrecSep_0	
180-103785-4	APMW-4	Total/NA	Water	PrecSep_0	
180-103785-5	APMW-5	Total/NA	Water	PrecSep_0	
180-103785-6	APMW-6R	Total/NA	Water	PrecSep_0	
180-103785-7	APMW-7	Total/NA	Water	PrecSep_0	
180-103785-8	APMW-8	Total/NA	Water	PrecSep_0	
180-103785-9	APMW-9	Total/NA	Water	PrecSep_0	
180-103785-10	APMW-10	Total/NA	Water	PrecSep_0	
180-103785-11	APMW-11	Total/NA	Water	PrecSep_0	
180-103785-12	APMW-12	Total/NA	Water	PrecSep_0	
180-103785-13	FB-01	Total/NA	Water	PrecSep_0	
180-103785-14	EB-01	Total/NA	Water	PrecSep_0	
180-103785-15	DUP-02	Total/NA	Water	PrecSep_0	
180-103785-16	DUP-03	Total/NA	Water	PrecSep_0	
MB 160-468573/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-468573/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-468573/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information

Client Contact: Rick Hagendorfer	Sampler: Rick Hagendorfer/ Phillip Evans	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-59233-10600.3
Company: RDH Environmental Services Inc	Phone: 1-(850)-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 1
Address: 5720 Dove Drive	Due Date Requested:			Job #:
City: Pace	TAT Requested (days):			
State, Zip: FL, 32571				
Phone: 205-992-5417(Tel)	PO #: SCS10382606			
Email: rickhagendorfer@gmail.com	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd, 300_ORGFM_28D	6020 - BCaSbAsBaBeCdCoPbLiMoSeTl	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Chloride, Fluoride, Sulfate, TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
SW-1	3/16/20	1655	G	Water			X	X	X	X		
SW-2	3/16/20	1635	G	Water			X	X	X	X		
SW-3	3/16/20	1500	G	Water			X	X	X	X		
SW-4	3/16/20	1230	G	Water			X	X	X	X		
SW-5	3/16/20	1255	G	Water			X	X	X	X		
SW-6	3/16/20	1310	G	Water			X	X	X	X		
SW-7	3/16/20	1335	G	Water			X	X	X	X		
SW-8	3/16/20	1355	G	Water			X	X	X	X		
DUP-01	3/16/20	1400	G	Water			X	X	X	X		

180-103782 Chain of Custody

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: TMW MW	Date/Time: 3/18/20 1400	Company: RDH	Received by:	Date/Time: 03/19/2020 0830	Company: EMA PITT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Trevor Braddock/ Phillip Evans	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-59233-10600.3
Client Contact: Rick Hagendorfer	Phone: 1-(850)-336-0192	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: RDH Environmental Services Inc				Job #:
Address: 5720 Dove Drive	Due Date Requested:			
City: Pace	TAT Requested (days):			
State, Zip: FL, 32571				
Phone: 205-992-5417(Tel)	PO #: SCS10382606			
Email: rickhagendorfer@gmail.com	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd, 300_ORGFM_28D	6020 - BCaSbAsBaBeCdCoPbLiMoSeTl	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Chloride, Fluoride, Sulfate, TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
APMW-1R	3/16/20	1330	G	Water			X	X	X	X		
APMW-2	3/16/20	1450	G	Water			X	X	X	X		
APMW-3	3/16/20	1625	G	Water			X	X	X	X		
APMW-4	3/16/20	1740	G	Water			X	X	X	X		
APMW-5	3/17/20	0755	G	Water			X	X	X	X		
APMW-6R	3/17/20	1050	G	Water			X	X	X	X		
APMW-7	3/17/20	1200	G	Water			X	X	X	X		
APMW-8	3/17/20	1300	G	Water			X	X	X	X		
APMW-9	3/17/20	1040	G	Water			X	X	X	X		
APMW-10	3/17/20	1120	G	Water			X	X	X	X		
APMW-11	3/17/20	0805	G	Water			X	X	X	X		

180-103785 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/18/20 1400	RDH	[signature]	03/19/2020 0830	Lab Post
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

ORI ID:PNSA (850) 336-0192
RDH VIRONMENTAL
TRE BRADDOCK
SEE ERS : BEFORE BILL
301 HA DR
PITT RGH, PA 15238
UNI STATES US

SHIP DATE: 18MAR20
ACTWGT: 67.85 LB
CAD: 6994796/SSFE2101
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) -6222 REF:
INV:
PO: DEPT:

FedEx Express E

J201020011301uv

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT

FedEx MPS# 0263 3912 1600 4460

15238
PA-US
PIT

XH AGCA

Uncorrected temp 1.3 °C
Thermometer ID 17
CF 0 Initials B
PT-WI-SR-001 effective 11/8/18

180-103782 Waybill

ORIGIN ID:PNSA (850) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 1
ACTWGT: 69.50
CAD: 6994796/S
DIMS: 24x14x14

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-6222 REF:
INV:
PO: DEPT:

FedEx Express E

J201020011301uv

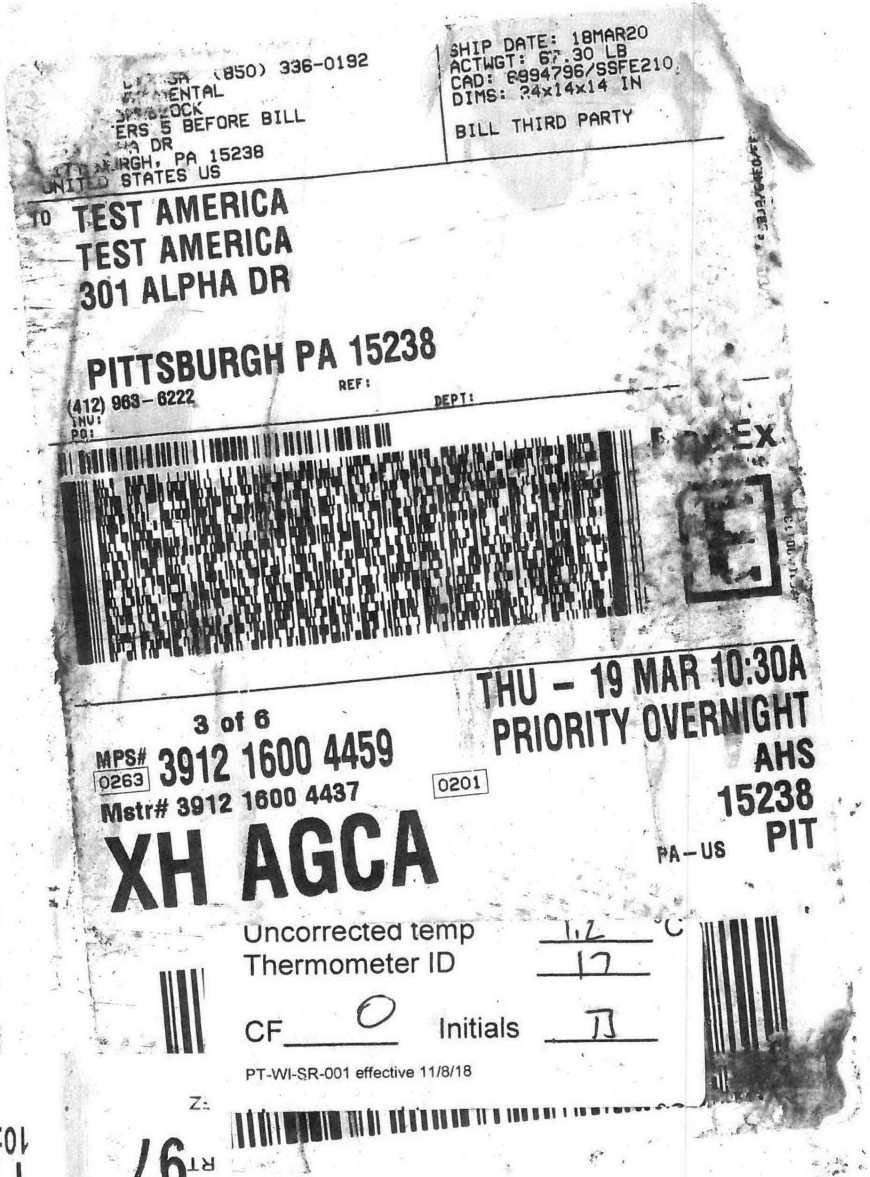
FedEx MPS# 0263 3912 1600 4470

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT

15238
PA-US
PIT

XH AGCA

Uncorrected temp
Thermometer ID
CF 0 Initials B
PT-WI-SR-001 effective 11/8/18



SHIP DATE: 18MAR20
ACTWGT: 67.30 LB
CAD: 6994796/SSFE210
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-6222 REF:
INV:
PO: DEPT:

FedEx Express

3 of 6
MPS# 3912 1600 4459
0263
Mstr# 3912 1600 4437
0201

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT
AHS
15238
PIT
PA-US

XH AGCA

Uncorrected temp 1.2 °C
Thermometer ID 17
CF 0 Initials JJ

PT-WI-SR-001 effective 11/8/18

RT97

10:30 A
03.19

ORIGIN ID:FNSA (850) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP
ACTWGT:
CAD: 6994
DIMS: 24x14x

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-6222 REF:
INV:
PO: DEPT:

FedEx Express

1 of 6
TRK# 3912 1600 4437
0201
MASTER

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT
AHS
15238
PIT
PA-US

XH AGCA

Uncorrected temp 2.4 °C
Thermometer ID 17
CF 0 Initials JJ

PT-WI-SR-001 effective 11/8/18

RT97

10:30 A

ORIGIN ID:PNSA (850) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 18MAR20
ACTWGT: 70.70 LB
CAD: 6994796/SSFE2101
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO **TEST AMERICA**
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-6222 REF:
INV: PO: DEPT:

FedEx Express

6 of 6
MPS# 0263 3912 1600 4481
Mstr# 3912 1600 4437 0201

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT
AHS
15238
PIT

XH AGCA
PA-US

Uncorrected temp 1.9 °C
Thermometer ID 17
CF 0 Initials JB
PT-WI-SR-001 effective 11/8/18

ORIGIN ID:PNSA (850) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 18MAR20
ACTWGT: 74.80 LB
CAD: 6994796/SSFE2101
DIMS: 24x14x14 IN

BILL THIRD PARTY

TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-6222 REF:
INV: PO: DEPT:

FedEx Express

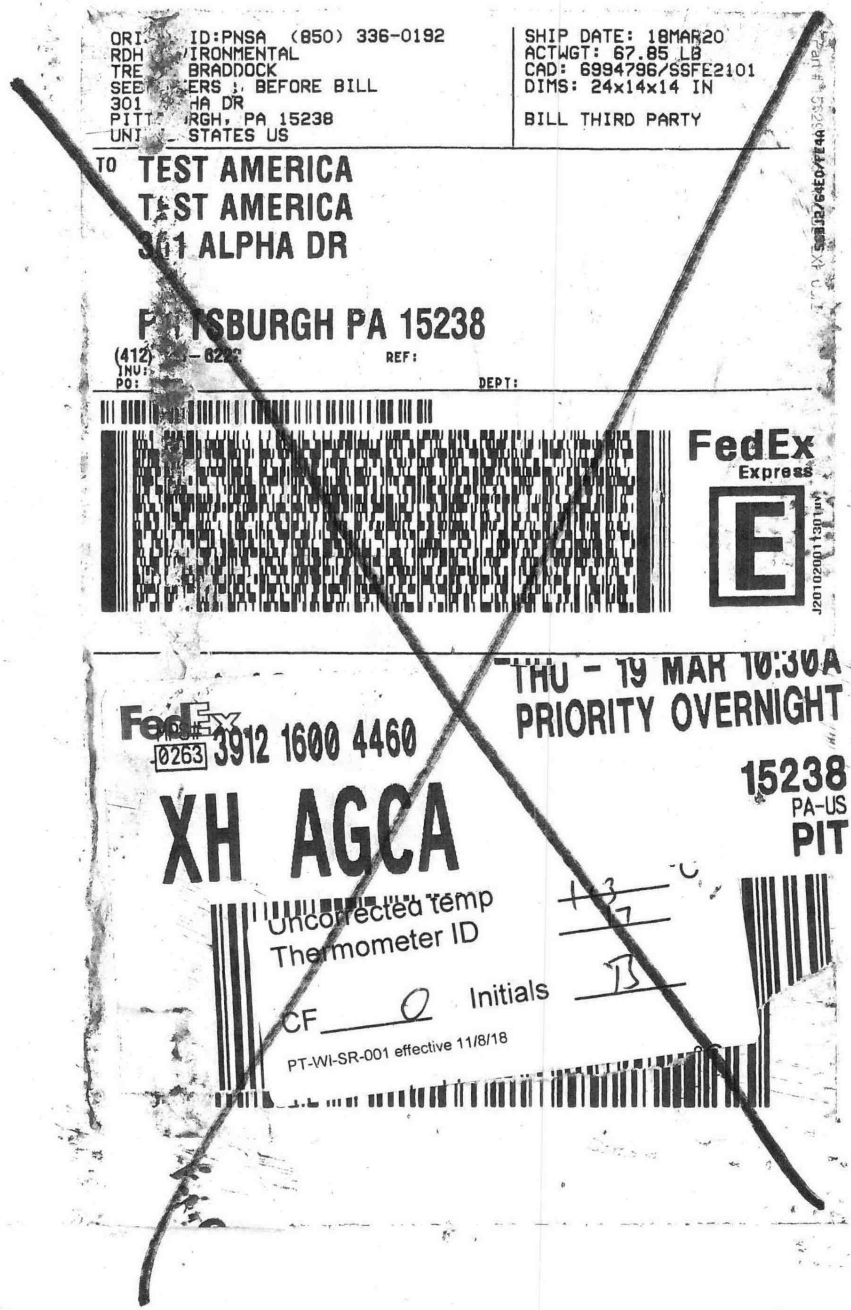
2 of 6
MPS# 0263 3912 1600 4448
Mstr# 3912 1600 4437 0201

THU - 19 MAR 10:30
PRIORITY OVERNIGHT
AHS
15238
PIT

XH AGCA
PA-US

Uncorrected temp 3.9 °C
Thermometer ID 17
CF 0 Initials JB
PT-WI-SR-001 effective 11/8/18

180-103785 Waybill



ORI[illegible] ID:PNSA (850) 336-0192
RDH [illegible]VIRONMENTAL
TRE[illegible] BRADDOCK
SEE [illegible]ERS ; BEFORE BILL
301 [illegible]HA DR
PITT[illegible]RGH, PA 15238
UNI[illegible] STATES US

SHIP DATE: 18MAR20
ACTWGT: 67.85 LB
CAD: 6994796/SSFE2101
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

P[illegible]TSBURGH PA 15238
(412) [illegible]-6222 REF:
INV:
PO: DEPT:

FedEx Express

J201020011301[illegible]

FedEx
0263 3912 1600 4460

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT

XH AGCA

15238
PA-US
PIT

Uncorrected temp
Thermometer ID
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

ORIGIN ID:PNSA (850) 336-0192
RDH ENVIRONMENTAL
TREVOR BRADDOCK
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 1[illegible]
ACTWGT: 69.50
CAD: 6994796/S
DIMS: 24x14x14

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-6222 REF:
INV:
PO: DEPT:

FedEx Express

J201020011301[illegible]

FedEx
MPS#
0263 3912 1600 4470

THU - 19 MAR 10:30A
PRIORITY OVERNIGHT

XH AGCA

15238
PA-US
PIT

Uncorrected temp
Thermometer ID 1.6
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-388549.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-103782-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/16/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Watson	Project #: 18020186			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium 226	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SW-1 (180-103782-1)	3/16/20	16:55 Eastern		Water			X	X	X	1	
SW-2 (180-103782-2)	3/16/20	16:35 Eastern		Water			X	X	X	1	
SW-3 (180-103782-3)	3/16/20	15:00 Eastern		Water			X	X	X	1	
SW-4 (180-103782-4)	3/16/20	12:30 Eastern		Water			X	X	X	1	
SW-5 (180-103782-5)	3/16/20	12:55 Eastern		Water			X	X	X	1	
SW-6 (180-103782-6)	3/16/20	13:10 Eastern		Water			X	X	X	1	
SW-7 (180-103782-7)	3/16/20	13:35 Eastern		Water			X	X	X	1	
SW-8 (180-103782-8)	3/16/20	13:55 Eastern		Water			X	X	X	1	
DUP-01 (180-103782-9)	3/16/20	14:00 Eastern		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] FE	3/23/20 1700	PITT	FE		
2	Relinquished by: FE	Date/Time:	Company	Received by: [signature]	Date/Time: 3/24/2020 08:15	Company ETA STL
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

5/15/2020

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103782-2

Login Number: 103782
List Number: 1
Creator: DiNardo, Nicholas J

List Source: Eurofins TestAmerica, Pittsburgh

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103782-2

Login Number: 103782
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 03/24/20 06:57 PM

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103782-2

Login Number: 103785
List Number: 1
Creator: DiNardo, Nicholas J

List Source: Eurofins TestAmerica, Pittsburgh

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103782-2

Login Number: 103785
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 03/24/20 06:44 PM

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

Product Name: Low-Flow System

Date: 2020-03-16 13:33:43

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	36.1 ft

Well Information:		Pumping Information:	
Well ID	APMW-1R	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	38.6 ft	Calculated Sample Rate	300 sec
Screen Length	5 ft	Stabilization Drawdown	0 in
Depth to Water	24.89 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:09:47	300.09	24.62	6.40	7887.87	0.71	24.89	0.12	-118.27
Last 5	13:14:47	600.01	24.64	6.48	7925.62	0.60	24.89	0.10	-125.44
Last 5	13:19:47	900.01	24.68	6.50	7934.11	0.52	24.89	0.09	-128.81
Last 5	13:24:47	1200.01	24.58	6.51	7950.77	0.47	24.89	0.08	-131.58
Last 5									
Variance 0			0.02	0.08	37.75			-0.02	-7.17
Variance 1			0.03	0.02	8.49			-0.01	-3.37
Variance 2			-0.09	0.02	16.66			-0.01	-2.77

Notes

Cloudy 76 sample time 1330. Dup-02 sample time 1230

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-16 14:48:00

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	BP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	37.9 ft

Well Information:		Pumping Information:	
Well ID	APMW-2	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	42.9 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	22.30 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	14:24:59	300.04	23.41	5.65	7769.72	1.87	22.30	0.37	13.75
Last 5	14:29:59	600.02	23.17	5.82	7800.39	0.76	22.30	0.22	-9.53
Last 5	14:34:59	900.02	23.26	5.88	7831.67	0.55	22.30	0.16	-19.26
Last 5	14:40:00	1201.02	23.19	5.90	7861.16	0.61	22.30	0.14	-22.36
Last 5	14:45:00	1501.00	23.29	5.91	7880.59	0.59	22.30	0.13	-23.80
Variance 0			0.09	0.06	31.28			-0.07	-9.73
Variance 1			-0.07	0.02	29.49			-0.01	-3.10
Variance 2			0.10	0.01	19.43			-0.01	-1.44

Notes

Cloudy 76. Sample time 1450

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-16 16:22:55

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	BP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	31.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-3	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	36.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	8.14 ft	Total Volume Pumped	16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	15:59:50	1200.01	22.60	6.62	29195.75	6.18	8.14	0.17	-40.00
Last 5	16:04:50	1500.02	22.56	6.62	29171.97	3.49	8.14	0.16	-42.41
Last 5	16:09:50	1800.05	22.61	6.61	29147.41	2.58	8.14	0.16	-43.64
Last 5	16:14:50	2100.02	22.52	6.61	29117.75	2.20	8.14	0.15	-45.03
Last 5	16:19:50	2400.00	22.52	6.61	29053.20	1.97	8.14	0.15	-47.05
Variance 0			0.04	-0.00	-24.56			-0.00	-1.23
Variance 1			-0.09	-0.00	-29.66			-0.00	-1.39
Variance 2			-0.00	0.00	-64.55			-0.01	-2.02

Notes

Cloudy 76. Sample time 1625

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-16 17:37:09

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	32.05 ft

Well Information:		Pumping Information:	
Well ID	APMW-4	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	37.05 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	12.94 ft	Total Volume Pumped	18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	17:15:19	1500.01	22.27	6.71	10856.27	1.86	12.41	0.12	-154.80
Last 5	17:20:19	1800.01	22.24	6.77	10851.32	2.27	12.41	0.11	-178.08
Last 5	17:25:19	2100.01	22.52	6.77	10870.88	2.20	12.41	0.13	-191.16
Last 5	17:30:20	2401.01	22.48	6.73	10912.80	2.02	12.41	0.14	-192.06
Last 5	17:35:20	2701.01	22.42	6.71	10881.72	1.98	12.41	0.14	-195.72
Variance 0			0.28	0.00	19.57			0.02	-13.08
Variance 1			-0.03	-0.04	41.92			0.01	-0.90
Variance 2			-0.07	-0.02	-31.08			0.00	-3.65

Notes

Cloudy 73. Sample time 1740

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 07:52:12

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	31.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-5	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	36.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	7.80 ft	Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	07:29:54	600.02	20.62	6.24	25236.61	5.26	7.80	0.48	-21.35
Last 5	07:34:54	900.02	20.64	6.28	25286.68	2.80	7.80	0.32	-35.20
Last 5	07:39:54	1200.01	20.61	6.30	25334.76	2.09	7.80	0.26	-41.35
Last 5	07:44:54	1500.01	20.61	6.31	25361.70	1.25	7.80	0.23	-45.27
Last 5	07:49:54	1800.01	20.61	6.32	25349.85	0.98	7.80	0.21	-46.69
Variance 0			-0.03	0.02	48.08			-0.05	-6.15
Variance 1			-0.01	0.01	26.93			-0.04	-3.92
Variance 2			0.00	0.00	-11.85			-0.01	-1.42

Notes

Cloudy 70. Sample time 0755

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 08:05:21

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	56 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	46.6 ft

Well Information:		Pumping Information:	
Well ID	APMW-11	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.3399517 L
Well Total Depth	51.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.48 in
Depth to Water	18.68 ft	Total Volume Pumped	16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:41:53	1200.02	22.58	6.15	123.24	3.24	18.72	0.50	11.63
Last 5	07:46:53	1500.06	22.61	6.17	123.03	2.66	18.72	0.48	10.58
Last 5	07:51:54	1801.02	22.60	6.18	122.37	2.26	18.72	0.31	8.16
Last 5	07:56:54	2101.02	22.58	6.19	122.85	1.94	18.72	0.28	7.02
Last 5	08:01:54	2401.02	22.62	6.20	121.17	1.83	18.72	0.25	6.44
Variance 0			-0.01	0.02	-0.66			-0.18	-2.42
Variance 1			-0.02	0.01	0.48			-0.03	-1.14
Variance 2			0.04	0.01	-1.68			-0.03	-0.58

Notes

Sample time @ 0805. Cloudy 70. FB-01@ 0800.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 09:24:30

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	64 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	49.1 ft

Well Information:		Pumping Information:	
Well ID	APMW-12	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.3756591 L
Well Total Depth	54.1 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	16.35 ft	Total Volume Pumped	18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:01:18	1500.02	22.57	6.16	182.47	1.92	16.45	0.89	14.59
Last 5	09:06:19	1801.03	22.55	6.16	181.22	1.90	16.45	0.92	15.14
Last 5	09:11:19	2101.02	22.54	6.16	183.12	1.86	16.45	0.63	13.54
Last 5	09:16:19	2401.02	22.58	6.15	183.75	1.85	16.45	0.57	9.96
Last 5	09:21:19	2701.02	22.58	6.20	185.45	1.82	16.45	0.61	5.74
Variance 0			-0.01	-0.01	1.89			-0.28	-1.60
Variance 1			0.04	-0.00	0.63			-0.06	-3.58
Variance 2			-0.00	0.05	1.70			0.04	-4.22

Notes

Sample time @ 0925. Cloudy 72. EB-01@ 0815.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 10:39:08

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	50 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	37.5 ft

Well Information:		Pumping Information:	
Well ID	APMW-9	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.7031711 L
Well Total Depth	42.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.44 in
Depth to Water	22.58 ft	Total Volume Pumped	16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	10:15:19	1200.02	23.12	6.14	9975.80	6.08	22.70	0.16	3.28
Last 5	10:20:20	1501.02	23.30	6.16	9948.94	4.55	22.70	0.15	2.88
Last 5	10:25:20	1801.02	23.03	6.17	9970.70	3.01	22.70	0.16	1.59
Last 5	10:30:26	2107.02	23.06	6.18	9966.43	1.89	22.70	0.16	0.52
Last 5	10:35:26	2407.02	23.03	6.18	9975.84	1.81	22.70	0.16	-1.03
Variance 0			-0.27	0.01	21.76			0.00	-1.30
Variance 1			0.04	0.01	-4.27			-0.00	-1.06
Variance 2			-0.04	-0.00	9.40			-0.00	-1.55

Notes

Sample time @ 1040. PC 75.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 10:49:04

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	60 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	46.85 ft

Well Information:		Pumping Information:	
Well ID	APMW-6R	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.3578054 L
Well Total Depth	51.85 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	6.82 ft	Total Volume Pumped	48 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	10:22:10	5999.98	22.32	5.98	12947.45	3.62	8.96	0.06	-57.60
Last 5	10:27:10	6299.98	22.25	5.98	12968.88	3.21	8.96	0.06	-56.94
Last 5	10:32:10	6599.98	22.28	5.97	12962.67	2.51	8.96	0.06	-56.34
Last 5	10:37:10	6899.98	22.27	5.97	12944.09	2.23	8.96	0.05	-55.80
Last 5	10:42:10	7199.98	22.26	5.97	12955.52	1.99	8.96	0.05	-55.19
Variance 0			0.03	-0.01	-6.22			-0.00	0.61
Variance 1			-0.01	-0.00	-18.58			-0.00	0.54
Variance 2			-0.02	-0.00	11.43			-0.00	0.61

Notes

Cloudy 76. Sample time 1050

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 11:19:41

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	27.9 ft

Well Information:		Pumping Information:	
Well ID	APMW-10	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.6585369 L
Well Total Depth	32.9 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.6 in
Depth to Water	20.90 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	11:02:12	300.02	23.48	6.75	4333.09	0.85	21.20	0.08	-80.21
Last 5	11:07:12	600.02	23.52	6.84	4421.97	0.80	21.20	0.08	-84.40
Last 5	11:12:12	900.02	23.53	6.89	4473.86	0.67	21.20	0.08	-86.69
Last 5	11:17:13	1201.02	23.54	6.93	4496.39	0.60	21.20	0.08	-88.28
Last 5									
Variance 0			0.04	0.09	88.88			-0.00	-4.19
Variance 1			0.01	0.05	51.89			0.01	-2.28
Variance 2			0.01	0.04	22.53			-0.00	-1.60

Notes

Sample time @ 1120. PC 75.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 11:56:34

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	47 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	32.4 ft

Well Information:		Pumping Information:	
Well ID	APMW-7	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2997809 L
Well Total Depth	37.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	12.22 ft	Total Volume Pumped	18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	11:35:00	1500.02	22.35	6.59	13348.75	0.93	12.51	0.11	-225.51
Last 5	11:40:00	1800.01	22.37	6.59	13373.97	1.01	12.51	0.12	-235.40
Last 5	11:45:00	2100.01	22.52	6.58	13373.00	0.79	12.51	0.11	-243.31
Last 5	11:50:00	2400.01	22.43	6.58	13403.43	0.76	12.51	0.11	-248.63
Last 5	11:55:00	2700.01	22.36	6.57	13423.09	0.72	12.51	0.12	-253.05
Variance 0			0.15	-0.00	-0.96			-0.01	-7.90
Variance 1			-0.09	-0.01	30.43			0.01	-5.32
Variance 2			-0.07	-0.01	19.66			0.00	-4.42

Notes

Cloudy 76. Sample time 1200

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 12:56:56

Project Information:		Pump Information:	
Operator Name	Trevor Braddock	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Watson CCR	Tubing Diameter	.17 in
Site Name	Plant Watson	Tubing Length	52 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	625126		
Turbidity Make/Model	2100q	Pump placement from TOC	37.8 ft

Well Information:		Pumping Information:	
Well ID	APMW-8	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.322098 L
Well Total Depth	42.8 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	20.55 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	12:33:31	300.02	22.87	6.61	11269.83	1.83	20.55	0.76	-128.60
Last 5	12:38:31	600.02	23.01	6.67	11463.88	1.49	20.55	0.33	-161.15
Last 5	12:43:31	900.02	23.01	6.69	11551.28	1.45	20.55	0.22	-172.46
Last 5	12:48:31	1200.01	23.07	6.70	11604.92	1.41	20.55	0.19	-175.93
Last 5	12:53:31	1500.01	22.96	6.69	11632.97	1.09	20.55	0.18	-176.45
Variance 0			-0.01	0.02	87.40			-0.11	-11.32
Variance 1			0.06	0.01	53.65			-0.03	-3.46
Variance 2			-0.11	-0.00	28.04			-0.01	-0.52

Notes

Cloudy 76 sample time 1300. Dup-3 sample time 1230.

Grab Samples

Appendix C
Statistical Data Evaluation

Semiannual Assessment Monitoring Event 1 -

Statistical Analysis

GROUNDWATER STATS CONSULTING

January 13, 2020

Southern Company Services
Attn: Ms. Lauren Petty
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Watson Ash Pond
Statistical Analysis – August 2019

Dear Ms. Petty,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of data for the August 2019 sample event for Mississippi Power Company's Plant Watson Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) and follows the USEPA Unified Guidance (2009).

Sampling began for the CCR program in April 2018 for wells listed below except newer background wells APMW-11 and APMW-12, and downgradient well APMW-1R which is a replacement well for well APMW-1. Sampling began at these wells in March 2019. Sampling began in April 2019 for downgradient well APMW-6R which is a replacement well for APMW-6. At least 8 background samples have been collected at each of the groundwater monitoring wells.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** APMW-11 and APMW-12
- **Downgradient wells:** APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-7, APMW-8, APMW-9, APMW-10 and APMW-1R

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to 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.

Time series plots and box plots are included for all constituents at upgradient and downgradient wells. The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

Data at all wells were evaluated in April 2019 for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Interwell prediction limits were selected as the most appropriate statistical method to evaluate the Appendix III parameters at this site. Power curves were submitted at that time and demonstrated 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.

Appendix III Parameters – Statistical Evaluation

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for all Appendix III constituents--boron, calcium, chloride, fluoride, pH, sulfate and TDS--using all available upgradient well data to develop background limits. The most recent observation at each downgradient well is compared to its respective background limit during each subsequent semi-annual sampling event.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) 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 a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary.

During the background screening conducted in April 2019, Tukey's box plot method was used to screen for outliers and the findings were submitted at that time. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph and the accompanying data pages display the flagged value in a lighter font. A summary of flagged values also follows this letter. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. Note that for fluoride, the most recent detection limit in some of the downgradient wells of 5.0 mg/L, when substituted for nondetects in all wells, would result in a prediction limit that is higher than most of the detected values in both upgradient and downgradient wells. Therefore, the historical detection limit of 2 mg/L was substituted at all wells. This will be re-evaluated during the next background update.

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. The confidence levels associated with parametric prediction limits are based on an overall false positive rate of 5%. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized where the highest background value is used to establish the upper prediction limit (and lowest value in the case of pH). The associated confidence level is dependent on the number of available background, future comparisons and resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (USEPA Unified Guidance, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects.
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

When interwell prediction limits were constructed based on the interwell methods discussed above, several statistically significant increases were identified. Summary tables of the prediction limit findings follow this letter.

The Sen's Slope/Mann Kendall trend test was performed on wells/constituents with prediction limit exceedances. Upgradient wells were included in this analysis for a general comparison of how the groundwater behaves upgradient of the facility relative to downgradient. When the entire record of data was evaluated for each well discussed above, no statistically significant increasing trends were noted at any of the downgradient wells. A statistically significant decreasing trend was noted for boron in downgradient well APMW-4.

Evaluation of Appendix IV Parameters

Parametric tolerance limits were used to calculate background limits, when data followed a normal distribution, from pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage to determine the background limits. When data did not follow a normal or transformed-normal distribution, nonparametric tolerance limits were constructed and the confidence and coverage levels are dependent upon the number of background samples. These limits were compared to the Maximum Contaminant Levels (MCs) and CCR-Rule Specified Levels (RSL) in the GWPS table following this letter to determine the highest limit for use as the Groundwater Protection Standard (GWPS) in the Confidence Interval comparisons.

Confidence intervals were then constructed on downgradient wells for each of the Appendix IIV parameters using the highest limit of either the MCL, RSL, or background as discussed above. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. A summary of the significant results follows this letter.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Watson Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Kristina L. Rayner
Groundwater Statistician

Andrew Collins
Groundwater Analyst

Outlier Summary

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 10/21/2019, 10:09 AM

	APMW-2 Fluoride (mg/L)	APMW-7 Lithium (mg/L)	APMW-9 Lithium (mg/L)
11/1/2018			0.018 (o)
11/2/2018		0.014 (o)	
12/7/2018	4.3 (o)		

Interwell Prediction Limits - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 10/21/2019, 10:07 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	APMW-10	0.07568	n/a	8/30/2019	1.9	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-1R	0.07568	n/a	8/30/2019	6.2	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-2	0.07568	n/a	8/30/2019	3.7	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-3	0.07568	n/a	8/30/2019	5	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-4	0.07568	n/a	8/30/2019	1.6	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-5	0.07568	n/a	8/30/2019	6.1	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-7	0.07568	n/a	8/30/2019	0.88	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-8	0.07568	n/a	8/30/2019	19	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-9	0.07568	n/a	8/30/2019	7.1	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-6R	0.07568	n/a	8/30/2019	11	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-10	18.46	n/a	8/30/2019	53	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-1R	18.46	n/a	8/30/2019	160	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-2	18.46	n/a	8/30/2019	340	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-3	18.46	n/a	8/30/2019	320	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-4	18.46	n/a	8/30/2019	170	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-5	18.46	n/a	8/30/2019	320	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-7	18.46	n/a	8/30/2019	90	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-8	18.46	n/a	8/30/2019	460	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-9	18.46	n/a	8/30/2019	310	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-6R	18.46	n/a	8/30/2019	460	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	APMW-10	15	n/a	8/30/2019	1200	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-1R	15	n/a	8/30/2019	2100	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-2	15	n/a	8/30/2019	2500	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-3	15	n/a	8/30/2019	9800	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-4	15	n/a	8/30/2019	3600	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-5	15	n/a	8/30/2019	8700	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-7	15	n/a	8/30/2019	4000	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-8	15	n/a	8/30/2019	3400	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-9	15	n/a	8/30/2019	2800	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-6R	15	n/a	8/30/2019	4100	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
pH (SU)	APMW-10	6.9	5.982	8/30/2019	7.09	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-6R	6.9	5.982	8/30/2019	5.92	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
Sulfate (mg/L)	APMW-10	3.301	n/a	8/30/2019	160	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-1R	3.301	n/a	8/30/2019	13	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-2	3.301	n/a	8/30/2019	8.4	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-3	3.301	n/a	8/30/2019	1100	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-4	3.301	n/a	8/30/2019	330	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-5	3.301	n/a	8/30/2019	940	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-7	3.301	n/a	8/30/2019	83	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-8	3.301	n/a	8/30/2019	620	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-9	3.301	n/a	8/30/2019	280	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-6R	3.301	n/a	8/30/2019	800	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-10	189.9	n/a	8/30/2019	2200	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-1R	189.9	n/a	8/30/2019	3500	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-2	189.9	n/a	8/30/2019	4400	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-3	189.9	n/a	8/30/2019	18000	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-4	189.9	n/a	8/30/2019	5800	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-5	189.9	n/a	8/30/2019	16000	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-7	189.9	n/a	8/30/2019	6900	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-8	189.9	n/a	8/30/2019	6300	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2

Interwell Prediction Limits - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 10/21/2019, 10:07 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	**APMW-9**	**189.9**	**n/a**	**8/30/2019**	**4900**	**18**	**120.9**	**29.89**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**APMW-6R**	**189.9**	**n/a**	**8/30/2019**	**6600**	**18**	**120.9**	**29.89**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**

Upper Tolerance Limits - App IV

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 10:11 AM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.002	20	n/a	n/a	100	n/a	n/a	0.3585	NP Inter(NDs)
Arsenic (mg/L)	0.001698	20	0.0009255	0.0002753	40	None	No	0.01	Inter
Barium (mg/L)	0.1145	20	0.07335	0.01466	0	None	No	0.01	Inter
Beryllium (mg/L)	0.001	20	n/a	n/a	85	n/a	n/a	0.3585	NP Inter(NDs)
Cadmium (mg/L)	0.001	20	n/a	n/a	100	n/a	n/a	0.3585	NP Inter(NDs)
Chromium (mg/L)	0.0022	18	n/a	n/a	88.89	n/a	n/a	0.3972	NP Inter(NDs)
Cobalt (mg/L)	0.0005	20	n/a	n/a	100	n/a	n/a	0.3585	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	3.599	20	-0.7077	0.7084	10	None	ln(x)	0.01	Inter
Fluoride (mg/L)	0.49	20	n/a	n/a	20	n/a	n/a	0.3585	NP Inter(normality)
Lead (mg/L)	0.001	20	n/a	n/a	95	n/a	n/a	0.3585	NP Inter(NDs)
Lithium (mg/L)	0.01932	20	0.01118	0.002902	0	None	No	0.01	Inter
Mercury (mg/L)	0.0002	18	n/a	n/a	88.89	n/a	n/a	0.3972	NP Inter(NDs)
Molybdenum (mg/L)	0.005	20	n/a	n/a	100	n/a	n/a	0.3585	NP Inter(NDs)
Selenium (mg/L)	0.005	20	n/a	n/a	100	n/a	n/a	0.3585	NP Inter(NDs)
Thallium (mg/L)	0.001	20	n/a	n/a	90	n/a	n/a	0.3585	NP Inter(NDs)

WATSON ASH POND GWPS				
Constituent Name	**MCL**	**RSL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.002	0.006
Arsenic, Total (mg/L)	0.01		0.0017	0.01
Barium, Total (mg/L)	2		0.11	2
Beryllium, Total (mg/L)	0.004		0.001	0.004
Cadmium, Total (mg/L)	0.005		0.001	0.005
Chromium, Total (mg/L)	0.1		0.0022	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0005	0.006
Combined Radium, Total (pCi/L)	5		3.599	5
Fluoride, Total (mg/L)	4		0.49	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.019	0.04
Mercury, Total (mg/L)	0.002		0.002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.005	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indicates ACL is higher than MCL.*

**MCL = Maximum Contaminant Level*

**RSL = Rule Specified Level*

Confidence Intervals - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	APMW-10	0.1253	0.09815	0.01	Yes	10	0.1117	0.01519	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-3	0.08803	0.06657	0.01	Yes	10	0.0773	0.01203	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-4	0.01862	0.01698	0.01	Yes	10	0.0178	0.0009189	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-5	0.243	0.213	0.01	Yes	10	0.228	0.01687	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-6R	0.1558	0.114	0.01	Yes	10	0.1349	0.02343	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-8	0.09165	0.06355	0.01	Yes	10	0.0776	0.01575	0	None	No	0.01	Param.
Barium (mg/L)	APMW-2	3.413	2.785	2	Yes	10	3.1	0.3651	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-1R	7.957	5.725	5	Yes	10	6.841	1.251	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-2	20.41	17.51	5	Yes	10	18.96	1.624	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-3	7.243	5.605	5	Yes	10	6.424	0.918	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-7	7.272	5.942	5	Yes	10	6.607	0.7454	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-9	7.235	6.585	5	Yes	10	6.91	0.3638	0	None	No	0.01	Param.
Lithium (mg/L)	APMW-3	0.09121	0.07115	0.04	Yes	10	0.0813	0.01222	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	APMW-4	0.077	0.053	0.04	Yes	10	0.0605	0.009869	0	None	No	0.011	NP (normality)
Lithium (mg/L)	APMW-5	0.069	0.044	0.04	Yes	10	0.0517	0.01081	0	None	No	0.011	NP (normality)
Lithium (mg/L)	APMW-6R	0.06021	0.05119	0.04	Yes	10	0.0557	0.005056	0	None	No	0.01	Param.
Lithium (mg/L)	APMW-8	0.12	0.07466	0.04	Yes	10	0.0975	0.02735	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	APMW-6R	0.433	0.345	0.1	Yes	10	0.389	0.04932	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-8	0.1685	0.1275	0.1	Yes	10	0.148	0.023	0	None	No	0.01	Param.

Confidence Intervals - All Results

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	APMW-10	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-1R	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-2	0.002	0.002	0.006	No	10	0.00194	0.0001897	90	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-3	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-4	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-5	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-6R	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-7	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-8	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-9	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Arsenic (mg/L)	**APMW-10**	**0.1253**	**0.09815**	**0.01**	**Yes**	**10**	**0.1117**	**0.01519**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-1R	0.00242	0.0012	0.01	No	10	0.00181	0.0006839	10	None	No	0.01	Param.
Arsenic (mg/L)	APMW-2	0.00094	0.0005	0.01	No	10	0.000626	0.0002625	60	None	No	0.011	NP (normality)
Arsenic (mg/L)	**APMW-3**	**0.08803**	**0.06657**	**0.01**	**Yes**	**10**	**0.0773**	**0.01203**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-4**	**0.01862**	**0.01698**	**0.01**	**Yes**	**10**	**0.0178**	**0.0009189**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-5**	**0.243**	**0.213**	**0.01**	**Yes**	**10**	**0.228**	**0.01687**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-6R**	**0.1558**	**0.114**	**0.01**	**Yes**	**10**	**0.1349**	**0.02343**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-7	0.002415	0.0007991	0.01	No	10	0.001607	0.0009055	0	None	No	0.01	Param.
Arsenic (mg/L)	**APMW-8**	**0.09165**	**0.06355**	**0.01**	**Yes**	**10**	**0.0776**	**0.01575**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-9	0.001489	0.001091	0.01	No	10	0.00129	0.0002234	0	None	No	0.01	Param.
Barium (mg/L)	APMW-10	0.2681	0.2219	2	No	10	0.245	0.02593	0	None	No	0.01	Param.
Barium (mg/L)	APMW-1R	1.043	0.9085	2	No	10	0.976	0.0756	0	None	No	0.01	Param.
Barium (mg/L)	**APMW-2**	**3.413**	**2.785**	**2**	**Yes**	**10**	**3.1**	**0.3651**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Barium (mg/L)	APMW-3	0.11	0.1	2	No	10	0.1037	0.007243	0	None	No	0.011	NP (normality)
Barium (mg/L)	APMW-4	0.5273	0.3787	2	No	10	0.453	0.08327	0	None	No	0.01	Param.
Barium (mg/L)	APMW-5	0.11	0.09238	2	No	10	0.1012	0.009886	0	None	No	0.01	Param.
Barium (mg/L)	APMW-6R	0.06922	0.05758	2	No	10	0.0634	0.006518	0	None	No	0.01	Param.
Barium (mg/L)	APMW-7	0.8975	0.6125	2	No	10	0.755	0.1597	0	None	No	0.01	Param.
Barium (mg/L)	APMW-8	0.2208	0.2012	2	No	10	0.211	0.01101	0	None	No	0.01	Param.
Barium (mg/L)	APMW-9	0.45	0.42	2	No	10	0.432	0.01229	0	None	No	0.011	NP (normality)
Beryllium (mg/L)	APMW-10	0.001	0.001	0.004	No	10	0.000943	0.0001802	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-1R	0.001	0.001	0.004	No	10	0.000919	0.0002561	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-2	0.001	0.00061	0.004	No	10	0.000884	0.0002604	80	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-3	0.001	0.001	0.004	No	10	0.000918	0.0002593	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-4	0.001	0.001	0.004	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-5	0.001	0.001	0.004	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-6R	0.001	0.001	0.004	No	10	0.000936	0.0002024	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-7	0.001	0.001	0.004	No	10	0.000925	0.0002372	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-8	0.001	0.001	0.004	No	10	0.000938	0.0001961	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-9	0.001	0.001	0.004	No	10	0.000949	0.0001613	90	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-10	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-1R	0.001	0.001	0.005	No	10	0.000945	0.0001739	90	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-2	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-3	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-4	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-5	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-6R	0.001	0.00026	0.005	No	10	0.00084	0.0003385	80	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-7	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-8	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-9	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Chromium (mg/L)	APMW-10	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-1R	0.0032	0.002	0.1	No	9	0.002133	0.0004	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-2	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-3	0.002	0.0014	0.1	No	9	0.001933	0.0002	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-4	0.00257	0.001474	0.1	No	9	0.002022	0.0005674	11.11	None	No	0.01	Param.

Confidence Intervals - All Results

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	APMW-5	0.002607	0.001358	0.1	No	9	0.001756	0.0004126	44.44	Cohen`s	No	0.01	Param.
Chromium (mg/L)	APMW-6R	0.002	0.002	0.1	No	9	0.002	0	100	Cohen`s	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-7	0.002	0.0013	0.1	No	9	0.001622	0.0003032	33.33	None	No	0.002	NP (normality)
Chromium (mg/L)	APMW-8	0.0032	0.0014	0.1	No	9	0.002067	0.000469	77.78	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-9	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Cobalt (mg/L)	APMW-10	0.0005	0.00012	0.006	No	10	0.0004202	0.0001685	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	APMW-1R	0.0005586	0.0002774	0.006	No	10	0.000398	0.000133	20	Cohen`s	No	0.01	Param.
Cobalt (mg/L)	APMW-2	0.0005	0.0005	0.006	No	10	0.0005	0	100	Cohen`s	No	0.011	NP (NDs)
Cobalt (mg/L)	APMW-3	0.002789	0.002271	0.006	No	10	0.00253	0.0002908	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-4	0.003812	0.003108	0.006	No	10	0.00346	0.000395	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-5	0.0005	0.000079	0.006	No	10	0.0004154	0.0001784	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	APMW-6R	0.004057	0.001683	0.006	No	10	0.00287	0.001331	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-7	0.0005	0.00025	0.006	No	10	0.000441	0.0001083	70	None	No	0.011	NP (normality)
Cobalt (mg/L)	APMW-8	0.0005	0.0005	0.006	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Cobalt (mg/L)	APMW-9	0.0005	0.000089	0.006	No	10	0.0004173	0.0001744	80	None	No	0.011	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	APMW-10	3.216	2.342	5	No	10	2.779	0.4896	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-1R**	**7.957**	**5.725**	**5**	**Yes**	**10**	**6.841**	**1.251**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**APMW-2**	**20.41**	**17.51**	**5**	**Yes**	**10**	**18.96**	**1.624**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**APMW-3**	**7.243**	**5.605**	**5**	**Yes**	**10**	**6.424**	**0.918**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	APMW-4	2.92	1.82	5	No	10	2.37	0.6169	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-5	4.823	3.617	5	No	10	4.22	0.6755	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-6R	3.403	2.811	5	No	10	3.107	0.332	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-7**	**7.272**	**5.942**	**5**	**Yes**	**10**	**6.607**	**0.7454**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	APMW-8	4.124	3.398	5	No	10	3.761	0.4072	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-9**	**7.235**	**6.585**	**5**	**Yes**	**10**	**6.91**	**0.3638**	**0**	**None**	**No**	**0.01**	**Param.**
Fluoride (mg/L)	APMW-10	0.795	0.6123	4	No	11	0.7036	0.1097	0	None	No	0.01	Param.
Fluoride (mg/L)	APMW-1R	5	0.14	4	No	10	2.585	2.546	50	None	No	0.011	NP (normality)
Fluoride (mg/L)	APMW-2	0.1357	0.05627	4	No	10	0.097	0.05034	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	APMW-3	0.8	0.35	4	No	11	0.8973	1.37	9.091	None	No	0.006	NP (normality)
Fluoride (mg/L)	APMW-4	0.5511	0.4718	4	No	11	0.5055	0.06962	0	None	x^4	0.01	Param.
Fluoride (mg/L)	APMW-5	5	0.09	4	No	10	1.564	2.371	30	None	No	0.011	NP (normality)
Fluoride (mg/L)	APMW-6R	5	0.32	4	No	10	4.059	1.984	80	None	No	0.011	NP (NDs)
Fluoride (mg/L)	APMW-7	0.41	0.11	4	No	11	0.6009	1.462	9.091	None	No	0.006	NP (normality)
Fluoride (mg/L)	APMW-8	1.058	0.8665	4	No	11	0.9536	0.1435	0	None	x^3	0.01	Param.
Fluoride (mg/L)	APMW-9	0.2	0.06	4	No	10	0.583	1.553	10	None	No	0.011	NP (normality)
Lead (mg/L)	APMW-10	0.001	0.001	0.015	No	10	0.00097	0.0001337	80	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-1R	0.001	0.001	0.015	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-2	0.001	0.001	0.015	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-3	0.001	0.001	0.015	No	10	0.000948	0.0001644	90	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-4	0.001	0.001	0.015	No	10	0.000962	0.0001202	90	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-5	0.001	0.00041	0.015	No	10	0.000887	0.0002667	70	None	No	0.011	NP (normality)
Lead (mg/L)	APMW-6R	0.001	0.001	0.015	No	10	0.000932	0.000215	90	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-7	0.001	0.001	0.015	No	10	0.00109	0.0002846	90	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-8	0.0013	0.001	0.015	No	10	0.00109	0.0002025	80	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-9	0.001	0.00039	0.015	No	10	0.000852	0.000318	80	None	No	0.011	NP (NDs)
Lithium (mg/L)	APMW-10	0.02282	0.01089	0.04	No	10	0.017	0.00811	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	APMW-1R	0.01334	0.009221	0.04	No	10	0.01105	0.003218	10	None	x^2	0.01	Param.
Lithium (mg/L)	APMW-2	0.02729	0.02111	0.04	No	10	0.0242	0.003458	0	None	No	0.01	Param.
Lithium (mg/L)	**APMW-3**	**0.09121**	**0.07115**	**0.04**	**Yes**	**10**	**0.0813**	**0.01222**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Lithium (mg/L)	**APMW-4**	**0.077**	**0.053**	**0.04**	**Yes**	**10**	**0.0605**	**0.009869**	**0**	**None**	**No**	**0.011**	**NP (normality)**
Lithium (mg/L)	**APMW-5**	**0.069**	**0.044**	**0.04**	**Yes**	**10**	**0.0517**	**0.01081**	**0**	**None**	**No**	**0.011**	**NP (normality)**
Lithium (mg/L)	**APMW-6R**	**0.06021**	**0.05119**	**0.04**	**Yes**	**10**	**0.0557**	**0.005056**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	APMW-7	0.005549	0.00214	0.04	No	9	0.002656	0.0006227	33.33	Cohen`s	No	0.01	Param.
Lithium (mg/L)	**APMW-8**	**0.12**	**0.07466**	**0.04**	**Yes**	**10**	**0.0975**	**0.02735**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	APMW-9	0.005313	0.003022	0.04	No	9	0.003456	0.0009645	22.22	Cohen`s	No	0.01	Param.

Confidence Intervals - All Results

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	APMW-10	0.0002	0.000085	0.002	No	9	0.0001872	0.00003833	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-1R	0.0002	0.00015	0.002	No	9	0.0001944	0.00001667	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-2	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-3	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-4	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-5	0.0002	0.000093	0.002	No	9	0.0001881	0.00003567	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-6R	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-7	0.0002	0.00009	0.002	No	9	0.0001878	0.00003667	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-8	0.0002	0.000077	0.002	No	9	0.0001863	0.000041	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-9	0.00035	0.0002	0.002	No	9	0.0002167	0.00005	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	APMW-10	0.11	0.085	0.1	No	10	0.1003	0.01206	0	None	No	0.011	NP (normality)
Molybdenum (mg/L)	APMW-1R	0.005	0.005	0.1	No	10	0.005	0	100	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	APMW-2	0.005	0.005	0.1	No	10	0.004579	0.001331	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	APMW-3	0.06996	0.05804	0.1	No	10	0.064	0.006683	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-4	0.01069	0.008049	0.1	No	10	0.00937	0.00148	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-5	0.1096	0.05836	0.1	No	10	0.084	0.02873	0	None	No	0.01	Param.
Molybdenum (mg/L)	**APMW-6R**	**0.433**	**0.345**	**0.1**	**Yes**	**10**	**0.389**	**0.04932**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	APMW-7	0.0063	0.0047	0.1	No	10	0.005096	0.001614	40	None	No	0.011	NP (Cohens/xfrm)
Molybdenum (mg/L)	**APMW-8**	**0.1685**	**0.1275**	**0.1**	**Yes**	**10**	**0.148**	**0.023**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	APMW-9	0.005	0.00093	0.1	No	10	0.004183	0.001722	80	None	No	0.011	NP (NDs)
Selenium (mg/L)	APMW-10	0.005	0.00035	0.05	No	10	0.00363	0.002207	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-1R	0.005	0.005	0.05	No	10	0.005	0	100	None	No	0.011	NP (NDs)
Selenium (mg/L)	APMW-2	0.005	0.00061	0.05	No	10	0.00367	0.002143	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-3	0.005	0.001	0.05	No	10	0.002417	0.001814	30	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-4	0.005	0.00055	0.05	No	10	0.003659	0.002161	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-5	0.005	0.0006	0.05	No	10	0.003691	0.002108	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-6R	0.005	0.005	0.05	No	10	0.005	0	100	None	No	0.011	NP (NDs)
Selenium (mg/L)	APMW-7	0.005	0.00039	0.05	No	10	0.003621	0.002221	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-8	0.005	0.00049	0.05	No	10	0.003651	0.002173	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-9	0.005	0.00041	0.05	No	10	0.003649	0.002179	70	None	No	0.011	NP (normality)
Thallium (mg/L)	APMW-10	0.001	0.00058	0.002	No	10	0.000873	0.0002863	80	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-1R	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-2	0.001	0.001	0.002	No	10	0.000984	0.0000506	90	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-3	0.001	0.001	0.002	No	10	0.000912	0.0002783	90	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-4	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-5	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-6R	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-7	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-8	0.001	0.001	0.002	No	10	0.000955	0.000265	80	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-9	0.001	0.001	0.002	No	10	0.00106	0.0001897	90	None	No	0.011	NP (NDs)

Prediction Limits - Appendix III

Interwell Prediction Limits - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 10/21/2019, 10:07 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	APMW-10	0.07568	n/a	8/30/2019	1.9	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-1R	0.07568	n/a	8/30/2019	6.2	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-2	0.07568	n/a	8/30/2019	3.7	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-3	0.07568	n/a	8/30/2019	5	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-4	0.07568	n/a	8/30/2019	1.6	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-5	0.07568	n/a	8/30/2019	6.1	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-7	0.07568	n/a	8/30/2019	0.88	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-8	0.07568	n/a	8/30/2019	19	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-9	0.07568	n/a	8/30/2019	7.1	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-6R	0.07568	n/a	8/30/2019	11	18	0.3287	0.04083	38.89	Kaplan-Meier	x^(1/3)	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-10	18.46	n/a	8/30/2019	53	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-1R	18.46	n/a	8/30/2019	160	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-2	18.46	n/a	8/30/2019	340	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-3	18.46	n/a	8/30/2019	320	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-4	18.46	n/a	8/30/2019	170	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-5	18.46	n/a	8/30/2019	320	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-7	18.46	n/a	8/30/2019	90	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-8	18.46	n/a	8/30/2019	460	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-9	18.46	n/a	8/30/2019	310	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-6R	18.46	n/a	8/30/2019	460	18	13.13	2.309	0	None	No	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	APMW-10	15	n/a	8/30/2019	1200	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-1R	15	n/a	8/30/2019	2100	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-2	15	n/a	8/30/2019	2500	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-3	15	n/a	8/30/2019	9800	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-4	15	n/a	8/30/2019	3600	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-5	15	n/a	8/30/2019	8700	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-7	15	n/a	8/30/2019	4000	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-8	15	n/a	8/30/2019	3400	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-9	15	n/a	8/30/2019	2800	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-6R	15	n/a	8/30/2019	4100	18	n/a	n/a	0	n/a	n/a	0.004559	NP Inter (normality) 1 of 2
pH (SU)	APMW-10	6.9	5.982	8/30/2019	7.09	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-6R	6.9	5.982	8/30/2019	5.92	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
Sulfate (mg/L)	APMW-10	3.301	n/a	8/30/2019	160	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-1R	3.301	n/a	8/30/2019	13	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-2	3.301	n/a	8/30/2019	8.4	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-3	3.301	n/a	8/30/2019	1100	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-4	3.301	n/a	8/30/2019	330	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-5	3.301	n/a	8/30/2019	940	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-7	3.301	n/a	8/30/2019	83	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-8	3.301	n/a	8/30/2019	620	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-9	3.301	n/a	8/30/2019	280	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-6R	3.301	n/a	8/30/2019	800	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-10	189.9	n/a	8/30/2019	2200	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-1R	189.9	n/a	8/30/2019	3500	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-2	189.9	n/a	8/30/2019	4400	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-3	189.9	n/a	8/30/2019	18000	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-4	189.9	n/a	8/30/2019	5800	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-5	189.9	n/a	8/30/2019	16000	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-7	189.9	n/a	8/30/2019	6900	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-8	189.9	n/a	8/30/2019	6300	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2

Interwell Prediction Limits - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 10/21/2019, 10:07 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	**APMW-9**	**189.9**	**n/a**	**8/30/2019**	**4900**	**18**	**120.9**	**29.89**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**APMW-6R**	**189.9**	**n/a**	**8/30/2019**	**6600**	**18**	**120.9**	**29.89**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**

Interwell Prediction Limits - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 10/21/2019, 10:07 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**APMW-10**	**0.07568**	**n/a**	**8/30/2019**	**1.9**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-1R**	**0.07568**	**n/a**	**8/30/2019**	**6.2**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-2**	**0.07568**	**n/a**	**8/30/2019**	**3.7**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-3**	**0.07568**	**n/a**	**8/30/2019**	**5**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-4**	**0.07568**	**n/a**	**8/30/2019**	**1.6**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-5**	**0.07568**	**n/a**	**8/30/2019**	**6.1**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-7**	**0.07568**	**n/a**	**8/30/2019**	**0.88**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-8**	**0.07568**	**n/a**	**8/30/2019**	**19**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-9**	**0.07568**	**n/a**	**8/30/2019**	**7.1**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-6R**	**0.07568**	**n/a**	**8/30/2019**	**11**	**18**	**0.3287**	**0.04083**	**38.89**	**Kaplan-Meier**	**x^(1/3)**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-10**	**18.46**	**n/a**	**8/30/2019**	**53**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-1R**	**18.46**	**n/a**	**8/30/2019**	**160**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-2**	**18.46**	**n/a**	**8/30/2019**	**340**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-3**	**18.46**	**n/a**	**8/30/2019**	**320**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-4**	**18.46**	**n/a**	**8/30/2019**	**170**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-5**	**18.46**	**n/a**	**8/30/2019**	**320**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-7**	**18.46**	**n/a**	**8/30/2019**	**90**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-8**	**18.46**	**n/a**	**8/30/2019**	**460**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-9**	**18.46**	**n/a**	**8/30/2019**	**310**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-6R**	**18.46**	**n/a**	**8/30/2019**	**460**	**18**	**13.13**	**2.309**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Chloride (mg/L)	**APMW-10**	**15**	**n/a**	**8/30/2019**	**1200**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-1R**	**15**	**n/a**	**8/30/2019**	**2100**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-2**	**15**	**n/a**	**8/30/2019**	**2500**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-3**	**15**	**n/a**	**8/30/2019**	**9800**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-4**	**15**	**n/a**	**8/30/2019**	**3600**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-5**	**15**	**n/a**	**8/30/2019**	**8700**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-7**	**15**	**n/a**	**8/30/2019**	**4000**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-8**	**15**	**n/a**	**8/30/2019**	**3400**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-9**	**15**	**n/a**	**8/30/2019**	**2800**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-6R**	**15**	**n/a**	**8/30/2019**	**4100**	**18**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004559**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	APMW-10	2	n/a	8/30/2019	0.5	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-1R	2	n/a	8/30/2019	0.21	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-2	2	n/a	8/30/2019	0.17	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-3	2	n/a	8/30/2019	2ND	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-4	2	n/a	8/30/2019	0.54	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-5	2	n/a	8/30/2019	2ND	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-7	2	n/a	8/30/2019	0.41	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-8	2	n/a	8/30/2019	0.85	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-9	2	n/a	8/30/2019	0.18	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-6R	2	n/a	8/30/2019	0.27	20	n/a	n/a	20	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
pH (SU)	**APMW-10**	**6.9**	**5.982**	**8/30/2019**	**7.09**	**18**	**6.441**	**0.1989**	**0**	**None**	**No**	**0.0003761**	**Param Inter 1 of 2**
pH (SU)	APMW-1R	6.9	5.982	8/30/2019	6.72	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-2	6.9	5.982	8/30/2019	6.1	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-3	6.9	5.982	8/30/2019	6.75	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-4	6.9	5.982	8/30/2019	6.68	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-5	6.9	5.982	8/30/2019	6.47	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-7	6.9	5.982	8/30/2019	6.31	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-8	6.9	5.982	8/30/2019	6.68	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-9	6.9	5.982	8/30/2019	6.1	18	6.441	0.1989	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	**APMW-6R**	**6.9**	**5.982**	**8/30/2019**	**5.92**	**18**	**6.441**	**0.1989**	**0**	**None**	**No**	**0.0003761**	**Param Inter 1 of 2**

Interwell Prediction Limits - All Results

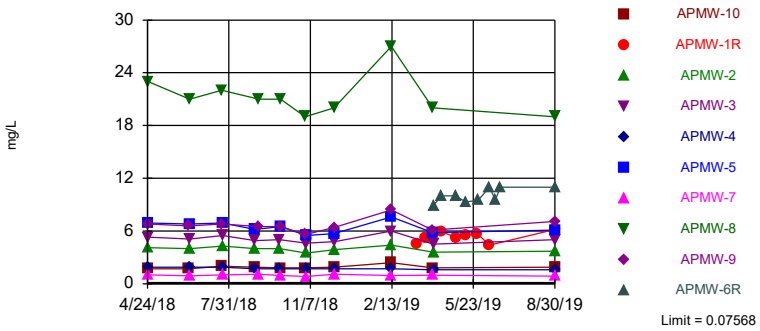
Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 10/21/2019, 10:07 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	APMW-10	3.301	n/a	8/30/2019	160	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-1R	3.301	n/a	8/30/2019	13	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-2	3.301	n/a	8/30/2019	8.4	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-3	3.301	n/a	8/30/2019	1100	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-4	3.301	n/a	8/30/2019	330	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-5	3.301	n/a	8/30/2019	940	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-7	3.301	n/a	8/30/2019	83	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-8	3.301	n/a	8/30/2019	620	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-9	3.301	n/a	8/30/2019	280	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-6R	3.301	n/a	8/30/2019	800	18	1.576	0.7475	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-10	189.9	n/a	8/30/2019	2200	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-1R	189.9	n/a	8/30/2019	3500	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-2	189.9	n/a	8/30/2019	4400	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-3	189.9	n/a	8/30/2019	18000	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-4	189.9	n/a	8/30/2019	5800	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-5	189.9	n/a	8/30/2019	16000	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-7	189.9	n/a	8/30/2019	6900	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-8	189.9	n/a	8/30/2019	6300	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-9	189.9	n/a	8/30/2019	4900	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-6R	189.9	n/a	8/30/2019	6600	18	120.9	29.89	0	None	No	0.0007523	Param Inter 1 of 2

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, AP

Prediction Limit

Interwell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.3287, Std. Dev.=0.04083, n=18, 38.89% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8708, critical = 0.858. Kappa = 2.308 (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 10/21/2019 10:04 AM View: PL's

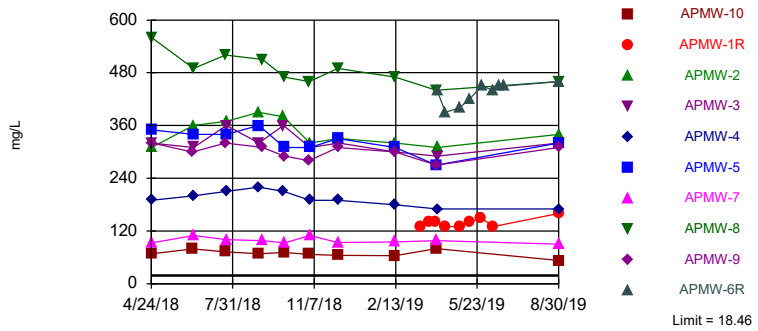
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, AP

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=13.13, Std. Dev.=2.309, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9109, critical = 0.858. Kappa = 2.308 (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 10/21/2019 10:04 AM View: PL's

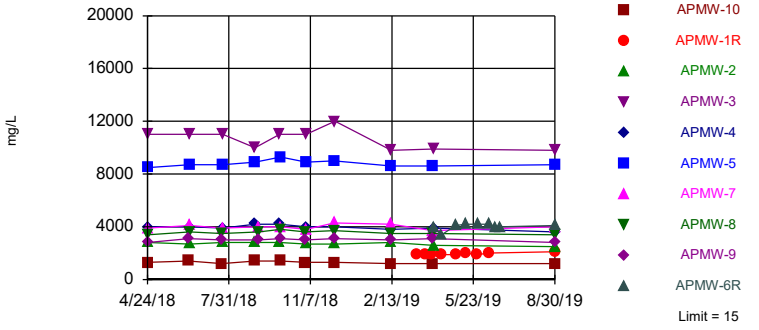
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, AP

Prediction Limit

Interwell Non-parametric



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 18 background values. Annual per-constituent alpha = 0.08734. Individual comparison alpha = 0.004559 (1 of 2). Comparing 10 points to limit.

Constituent: Chloride Analysis Run 10/21/2019 10:04 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

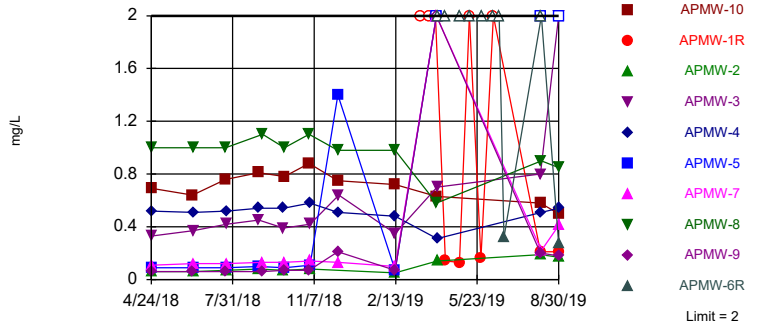
Sanitas™ v.9.6.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 20% NDs. Annual per-constituent alpha = 0.07248. Individual comparison alpha = 0.003755 (1 of 2). Comparing 10 points to limit.

Constituent: Fluoride Analysis Run 10/21/2019 10:04 AM View: PL's

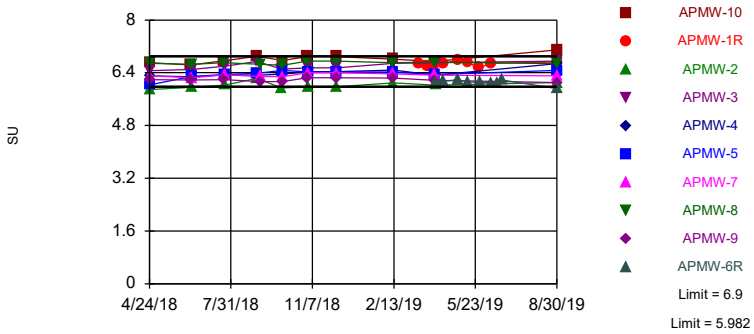
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limits: APMW-10, APMW-6R

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=6.441, Std. Dev.=0.1989, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9212, critical = 0.858. Kappa = 2.308 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0003761. Comparing 10 points to limit.

Constituent: pH Analysis Run 10/21/2019 10:04 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

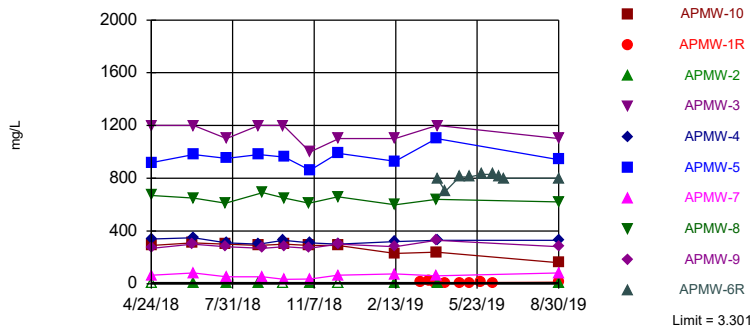
Sanitas™ v.9.6.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, AP

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=1.576, Std. Dev.=0.7475, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8783, critical = 0.858. Kappa = 2.308 (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: Sulfate Analysis Run 10/21/2019 10:04 AM View: PL's

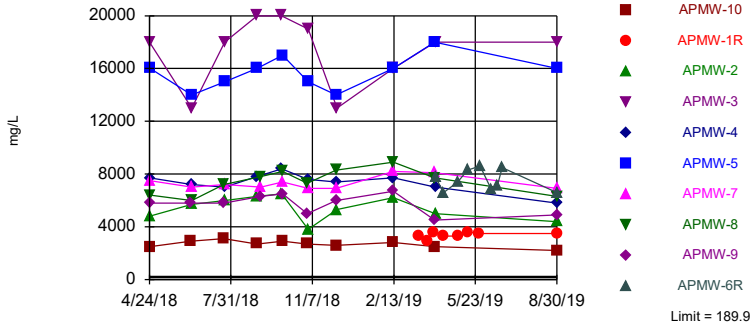
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, AP

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=120.9, Std. Dev.=29.89, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.974, critical = 0.858. Kappa = 2.308 (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 10/21/2019 10:04 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-3	APMW-2	APMW-4	APMW-10	APMW-9	APMW-7	APMW-8	APMW-5	APMW-1R
4/24/2018	5.3	4.1	1.9						
4/25/2018				1.7	6.8	1	23	6.9	
6/13/2018				1.7	6.6				
6/14/2018	5.1	4	1.9			0.91	21	6.8	
7/23/2018				2	6.8		22		
7/24/2018	5.5	4.3	1.9			1		6.9	
9/1/2018	4.9	4	1.7	1.9				6.2	
9/6/2018					6.5	1.1	21		
10/1/2018	5	4	1.7						
10/2/2018				1.8	6.5	0.95	21	6.5	
11/1/2018				1.8	5.6		19		
11/2/2018	4.6	3.5	1.7			0.82		5.5	
12/6/2018			1.7	1.9	6.4	1.1	20	5.7	
12/7/2018	4.8	3.9							
2/13/2019	6	4.4	1.7	2.4	8.4	0.95	27	7.6	
3/16/2019									4.5
3/27/2019									5.2
4/3/2019									5.3
4/4/2019				1.8	6.1	0.98	20	5.8	
4/5/2019	4.5	3.6	1.6						
4/15/2019									5.9
4/16/2019									
5/2/2019									5.3
5/3/2019									
5/14/2019									5.5
5/28/2019									5.7
5/29/2019									
6/12/2019									4.4
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	5	3.7	1.6	1.9	7.1	0.88	19	6.1	6.2

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-12 (bg)	APMW-11 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	0.035 (J)	0.028 (J)	
3/27/2019	0.033 (J)	0.027 (J)	
4/3/2019	0.023 (J)	0.089	
4/4/2019			
4/5/2019			8.9
4/15/2019			10
4/16/2019	<0.08	<0.08	
5/2/2019			10
5/3/2019	0.021 (J)	<0.08	
5/14/2019	<0.08	<0.08	9.3
5/28/2019			
5/29/2019	0.044 (J)	0.034 (J)	9.5
6/12/2019	0.047 (J)	0.05 (J)	11
6/19/2019			9.5
6/25/2019			11
8/29/2019	<0.08	<0.08	
8/30/2019			11

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-3	APMW-2	APMW-4	APMW-10	APMW-9	APMW-7	APMW-8	APMW-5	APMW-1R
4/24/2018	320	310	190						
4/25/2018				68	320	93	560	350	
6/13/2018				79	300				
6/14/2018	310	360	200			110	490	340	
7/23/2018				73	320		520		
7/24/2018	360	370	210			100		340	
9/1/2018	320	390	220	68				360	
9/6/2018					310	98	510		
10/1/2018	360	380	210						
10/2/2018				71	290	93	470	310	
11/1/2018				67	280		460		
11/2/2018	310	320	190			110		310	
12/6/2018			190	65	310	94	490	330	
12/7/2018	320	330							
2/13/2019	300	320	180	64	300	95	470	310	
3/16/2019									130
3/27/2019									140
4/3/2019									140
4/4/2019				80	270	98	440	270	
4/5/2019	290	310	170						
4/15/2019									130
4/16/2019									
5/2/2019									130
5/3/2019									
5/14/2019									140
5/28/2019									150
5/29/2019									
6/12/2019									130
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	320	340	170	53	310	90	460	320	160

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-12 (bg)	APMW-11 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	13	17	
3/27/2019	15	16	
4/3/2019	13	15	
4/4/2019			
4/5/2019			440
4/15/2019			390
4/16/2019	12	13	
5/2/2019			400
5/3/2019	13	12	
5/14/2019	13	14	420
5/28/2019			
5/29/2019	15	7	450
6/12/2019	14	13	440
6/19/2019			450
6/25/2019			450
8/29/2019	12	9.4	
8/30/2019			460

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-3	APMW-2	APMW-4	APMW-10	APMW-9	APMW-7	APMW-8	APMW-5	APMW-1R
4/24/2018	11000	2800	4000						
4/25/2018				1300	2800	3900	3400	8500	
6/13/2018				1400	3100				
6/14/2018	11000	2700	4000			4100	3600	8700	
7/23/2018				1200	3000		3500		
7/24/2018	11000	2800	3900			3900		8700	
9/1/2018	10000	2800	4200	1400				8900	
9/6/2018					3000	4000	3600		
10/1/2018	11000	2800	4200						
10/2/2018				1400	3100	4000	3800	9300	
11/1/2018				1300	3000		3600		
11/2/2018	11000	2700	4000			3800		8900	
12/6/2018			4000	1300	3100	4300	3700	9000	
12/7/2018	12000	2700							
2/13/2019	9800	2800	3800	1200	3000	4200	3500	8600	
3/16/2019									1900
3/27/2019									1900
4/3/2019									1900
4/4/2019				1200	3100	3700	3500	8600	
4/5/2019	9900	2600	3900						
4/15/2019									1900
4/16/2019									
5/2/2019									1900
5/3/2019									
5/14/2019									2000
5/28/2019									1900
5/29/2019									
6/12/2019									2000
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	9800	2500	3600	1200	2800	4000	3400	8700	2100

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-12 (bg)	APMW-11 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	14	9.3	
3/27/2019	15	8.2	
4/3/2019	15	8.7	
4/4/2019			
4/5/2019			4000
4/15/2019			3400
4/16/2019	14	8.7	
5/2/2019			4100
5/3/2019	15	9.3	
5/14/2019	15	8.8	4200
5/28/2019			
5/29/2019	14	8.8	4200
6/12/2019	15	8.8	4200
6/19/2019			4000
6/25/2019			4000
8/29/2019	14	8.1	
8/30/2019			4100

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-4	APMW-3	APMW-2	APMW-10	APMW-5	APMW-7	APMW-9	APMW-8	APMW-12 (bg)
4/24/2018	0.52	0.33	0.06 (J)						
4/25/2018				0.69	0.09 (J)	0.11	0.06 (J)	1	
6/13/2018				0.64			0.06 (J)		
6/14/2018	0.51	0.37	0.06 (J)		0.09 (J)	0.12		1	
7/23/2018				0.76			0.06 (J)	1	
7/24/2018	0.52	0.42	0.07 (J)		0.09 (J)	0.12			
9/1/2018	0.54	0.45	0.08 (J)	0.81	0.1				
9/6/2018						0.13	0.06 (J)	1.1	
10/1/2018	0.54	0.39	0.07 (J)						
10/2/2018				0.78	0.09 (J)	0.13	0.07 (J)	1	
11/1/2018				0.88			0.07 (J)	1.1	
11/2/2018	0.58	0.42	0.08 (J)		0.11	0.14			
12/6/2018	0.51			0.75	1.4	0.13	0.21	0.98	
12/7/2018		0.64	4.3 (o)						
2/13/2019	0.48	0.35	0.05 (J)	0.72	0.07 (J)	0.1	0.07 (J)	0.98	
3/16/2019									0.041 (J)
3/27/2019									0.49
4/3/2019									0.086 (J)
4/4/2019				0.63	<2	<2	<2	0.58 (J)	
4/5/2019	0.31 (J)	0.7 (J)	0.14 (J)						
4/15/2019									
4/16/2019									0.055 (J)
5/2/2019									
5/3/2019									0.058 (J)
5/14/2019									0.071 (J)
5/28/2019									
5/29/2019									0.042 (J)
6/12/2019									0.037 (J)
6/19/2019									
6/25/2019									
8/8/2019		0.8 (J)	0.19 (J)	0.58			0.2 (J)		0.072 (J)
8/9/2019	0.51				<2	0.22 (J)		0.9 (J)	
8/29/2019									0.065 (J)
8/30/2019	0.54 (J)	<2	0.17 (J)	0.5	<2	0.41 (J)	0.18 (J)	0.85 (J)	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-1R	APMW-11 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	<2	0.047 (J)	
3/27/2019	<2	<2	
4/3/2019	<2	<2	
4/4/2019			
4/5/2019			<2
4/15/2019	0.14 (J)		<2
4/16/2019		0.034 (J)	
5/2/2019	0.13 (J)		<2
5/3/2019		0.042 (J)	
5/14/2019	<2	0.039 (J)	<2
5/28/2019	0.16 (J)		
5/29/2019		<2	<2
6/12/2019	<2	<2	<2
6/19/2019			<2
6/25/2019			0.32 (J)
8/8/2019	0.21 (J)	0.051 (J)	
8/9/2019			<2
8/29/2019		0.061 (J)	
8/30/2019	0.21 (J)		0.27 (J)

Prediction Limit

Constituent: pH (SU) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-3	APMW-2	APMW-4	APMW-10	APMW-9	APMW-7	APMW-8	APMW-5	APMW-1R
4/24/2018	6.46	5.89	6.31						
4/25/2018				6.7	6.19	6.31	6.69	6.04	
6/13/2018				6.64	6.18				
6/14/2018	6.5	5.96	6.28			6.25	6.66	6.29	
7/23/2018				6.76	6.19		6.7		
7/24/2018	6.6	6.03	6.34			6.34		6.35	
9/1/2018	6.74	6.23	6.33	6.9				6.38	
9/6/2018					6.13	6.29	6.66		
10/1/2018	6.51	5.94	6.36						
10/2/2018				6.77	6.13	6.28	6.63	6.47	
11/1/2018				6.89	6.25		6.75		
11/2/2018	6.55	5.98	6.43			6.4		6.42	
12/6/2018			6.43	6.89	6.25	6.4	6.75	6.42	
12/7/2018	6.55	5.98							
2/13/2019	6.69	6.09	6.48	6.81	6.24	6.37	6.7	6.42	
3/16/2019									6.67
3/27/2019									6.59
4/3/2019									6.56
4/4/2019				6.74	6.17	6.33	6.72	6.35	
4/5/2019	6.7	6.03	6.33						
4/15/2019									6.68
4/16/2019									
5/2/2019									6.78
5/3/2019									
5/14/2019									6.7
5/28/2019									6.56
5/29/2019									
6/12/2019									6.69
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	6.75	6.1	6.68	7.09	6.1	6.31	6.68	6.47	6.72

Prediction Limit

Constituent: pH (SU) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-12 (bg)	APMW-11 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	6.44	6.97	
3/27/2019	6.38	6.7	
4/3/2019	6.19	6.45	
4/4/2019			
4/5/2019			6.12
4/15/2019			6.14
4/16/2019	6.3	6.52	
5/2/2019			6.19
5/3/2019	6.33	6.37	
5/14/2019	6.64	6.57	6.12
5/28/2019			
5/29/2019	6.6	6.31	6.11
6/12/2019	6.31	6.41	6.09
6/19/2019			6.1
6/25/2019			6.18
8/29/2019	6.24	6.2	
8/30/2019			5.92

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-3	APMW-2	APMW-4	APMW-10	APMW-9	APMW-7	APMW-8	APMW-5	APMW-1R
4/24/2018	1200	<5	340						
4/25/2018				290	270	65	670	920	
6/13/2018				310	300				
6/14/2018	1200	7.2	350			81	650	980	
7/23/2018				300	280		610		
7/24/2018	1100	2.7 (J)	310			52		950	
9/1/2018	1200	1.5 (J)	300	290				980	
9/6/2018					270	53	690		
10/1/2018	1200	<5	330						
10/2/2018				300	280	34	650	960	
11/1/2018				290	270		610		
11/2/2018	1000	1.9 (J)	310			35		860	
12/6/2018			300	290	300	65	660	990	
12/7/2018	1100	<5							
2/13/2019	1100	1.5 (J)	320	230	280	74	600	930	
3/16/2019									14
3/27/2019									19
4/3/2019									4.6 (J)
4/4/2019				240	330	61	640	1100	
4/5/2019	1200	7	330						
4/15/2019									8.6
4/16/2019									
5/2/2019									6
5/3/2019									
5/14/2019									5.8
5/28/2019									9.4
5/29/2019									
6/12/2019									8.8
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	1100	8.4	330	160	280	83	620	940	13

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-12 (bg)	APMW-11 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	0.88 (J)	3.6	
3/27/2019	1.3	0.81 (J)	
4/3/2019	1.9	1.1	
4/4/2019			
4/5/2019			800
4/15/2019			700
4/16/2019	2.5	0.68 (J)	
5/2/2019			810
5/3/2019	1.3	1.1	
5/14/2019	2.2	1.3	810
5/28/2019			
5/29/2019	1.2	2.1	830
6/12/2019	1.1	1.9	830
6/19/2019			810
6/25/2019			800
8/29/2019	1.1	2.3	
8/30/2019			800

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-2	APMW-3	APMW-4	APMW-10	APMW-5	APMW-8	APMW-9	APMW-7	APMW-1R
4/24/2018	4800	18000	7700						
4/25/2018				2500	16000	6400	5800	7500	
6/13/2018				2900			5800		
6/14/2018	5700	13000	7200		14000	6000		7000	
7/23/2018				3100		7200	5800		
7/24/2018	6000	18000	7000		15000			7200	
9/1/2018	6300	20000	7800	2700	16000				
9/6/2018						7800	6300	7000	
10/1/2018	6500	20000	8400						
10/2/2018				2900	17000	8200	6500	7400	
11/1/2018				2700		7300	5000		
11/2/2018	3800	19000	7600		15000			6900	
12/6/2018			7400	2600	14000	8300	6000	6900	
12/7/2018	5300	13000							
2/13/2019	6200	16000	7700	2800	16000	8900	6700	8200	
3/16/2019									3300
3/27/2019									2900
4/3/2019									3600
4/4/2019				2500	18000	7700	4500	8100	
4/5/2019	5000	18000	7000						
4/15/2019									3300
4/16/2019									
5/2/2019									3300
5/3/2019									
5/14/2019									3600
5/28/2019									3500
5/29/2019									
6/12/2019									
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	4400	18000	5800	2200	16000	6300	4900	6900	3500

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/21/2019 10:07 AM View: PL's

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-11 (bg)	APMW-12 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	120	150	
3/27/2019	63	110	
4/3/2019	100	150	
4/4/2019			
4/5/2019			7800
4/15/2019			6600
4/16/2019	110	150	
5/2/2019			7400
5/3/2019	91	130	
5/14/2019	120	150	8300
5/28/2019			
5/29/2019	140	180	8600
6/12/2019	100	130	6800
6/19/2019			7100
6/25/2019			8500
8/29/2019	73	110	
8/30/2019			6600

Confidence Intervals - Appendix IV

Confidence Intervals - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	APMW-10	0.1253	0.09815	0.01	Yes	10	0.1117	0.01519	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-3	0.08803	0.06657	0.01	Yes	10	0.0773	0.01203	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-4	0.01862	0.01698	0.01	Yes	10	0.0178	0.0009189	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-5	0.243	0.213	0.01	Yes	10	0.228	0.01687	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-6R	0.1558	0.114	0.01	Yes	10	0.1349	0.02343	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-8	0.09165	0.06355	0.01	Yes	10	0.0776	0.01575	0	None	No	0.01	Param.
Barium (mg/L)	APMW-2	3.413	2.785	2	Yes	10	3.1	0.3651	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-1R	7.957	5.725	5	Yes	10	6.841	1.251	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-2	20.41	17.51	5	Yes	10	18.96	1.624	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-3	7.243	5.605	5	Yes	10	6.424	0.918	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-7	7.272	5.942	5	Yes	10	6.607	0.7454	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-9	7.235	6.585	5	Yes	10	6.91	0.3638	0	None	No	0.01	Param.
Lithium (mg/L)	APMW-3	0.09121	0.07115	0.04	Yes	10	0.0813	0.01222	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	APMW-4	0.077	0.053	0.04	Yes	10	0.0605	0.009869	0	None	No	0.011	NP (normality)
Lithium (mg/L)	APMW-5	0.069	0.044	0.04	Yes	10	0.0517	0.01081	0	None	No	0.011	NP (normality)
Lithium (mg/L)	APMW-6R	0.06021	0.05119	0.04	Yes	10	0.0557	0.005056	0	None	No	0.01	Param.
Lithium (mg/L)	APMW-8	0.12	0.07466	0.04	Yes	10	0.0975	0.02735	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	APMW-6R	0.433	0.345	0.1	Yes	10	0.389	0.04932	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-8	0.1685	0.1275	0.1	Yes	10	0.148	0.023	0	None	No	0.01	Param.

Confidence Intervals - All Results

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	APMW-10	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-1R	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-2	0.002	0.002	0.006	No	10	0.00194	0.0001897	90	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-3	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-4	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-5	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-6R	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-7	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-8	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Antimony (mg/L)	APMW-9	0.002	0.002	0.006	No	10	0.002	0	100	None	No	0.011	NP (NDs)
Arsenic (mg/L)	**APMW-10**	**0.1253**	**0.09815**	**0.01**	**Yes**	**10**	**0.1117**	**0.01519**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-1R	0.00242	0.0012	0.01	No	10	0.00181	0.0006839	10	None	No	0.01	Param.
Arsenic (mg/L)	APMW-2	0.00094	0.0005	0.01	No	10	0.000626	0.0002625	60	None	No	0.011	NP (normality)
Arsenic (mg/L)	**APMW-3**	**0.08803**	**0.06657**	**0.01**	**Yes**	**10**	**0.0773**	**0.01203**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-4**	**0.01862**	**0.01698**	**0.01**	**Yes**	**10**	**0.0178**	**0.0009189**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-5**	**0.243**	**0.213**	**0.01**	**Yes**	**10**	**0.228**	**0.01687**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-6R**	**0.1558**	**0.114**	**0.01**	**Yes**	**10**	**0.1349**	**0.02343**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-7	0.002415	0.0007991	0.01	No	10	0.001607	0.0009055	0	None	No	0.01	Param.
Arsenic (mg/L)	**APMW-8**	**0.09165**	**0.06355**	**0.01**	**Yes**	**10**	**0.0776**	**0.01575**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-9	0.001489	0.001091	0.01	No	10	0.00129	0.0002234	0	None	No	0.01	Param.
Barium (mg/L)	APMW-10	0.2681	0.2219	2	No	10	0.245	0.02593	0	None	No	0.01	Param.
Barium (mg/L)	APMW-1R	1.043	0.9085	2	No	10	0.976	0.0756	0	None	No	0.01	Param.
Barium (mg/L)	**APMW-2**	**3.413**	**2.785**	**2**	**Yes**	**10**	**3.1**	**0.3651**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Barium (mg/L)	APMW-3	0.11	0.1	2	No	10	0.1037	0.007243	0	None	No	0.011	NP (normality)
Barium (mg/L)	APMW-4	0.5273	0.3787	2	No	10	0.453	0.08327	0	None	No	0.01	Param.
Barium (mg/L)	APMW-5	0.11	0.09238	2	No	10	0.1012	0.009886	0	None	No	0.01	Param.
Barium (mg/L)	APMW-6R	0.06922	0.05758	2	No	10	0.0634	0.006518	0	None	No	0.01	Param.
Barium (mg/L)	APMW-7	0.8975	0.6125	2	No	10	0.755	0.1597	0	None	No	0.01	Param.
Barium (mg/L)	APMW-8	0.2208	0.2012	2	No	10	0.211	0.01101	0	None	No	0.01	Param.
Barium (mg/L)	APMW-9	0.45	0.42	2	No	10	0.432	0.01229	0	None	No	0.011	NP (normality)
Beryllium (mg/L)	APMW-10	0.001	0.001	0.004	No	10	0.000943	0.0001802	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-1R	0.001	0.001	0.004	No	10	0.000919	0.0002561	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-2	0.001	0.00061	0.004	No	10	0.000884	0.0002604	80	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-3	0.001	0.001	0.004	No	10	0.000918	0.0002593	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-4	0.001	0.001	0.004	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-5	0.001	0.001	0.004	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-6R	0.001	0.001	0.004	No	10	0.000936	0.0002024	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-7	0.001	0.001	0.004	No	10	0.000925	0.0002372	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-8	0.001	0.001	0.004	No	10	0.000938	0.0001961	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	APMW-9	0.001	0.001	0.004	No	10	0.000949	0.0001613	90	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-10	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-1R	0.001	0.001	0.005	No	10	0.000945	0.0001739	90	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-2	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-3	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-4	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-5	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-6R	0.001	0.00026	0.005	No	10	0.00084	0.0003385	80	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-7	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-8	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Cadmium (mg/L)	APMW-9	0.001	0.001	0.005	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Chromium (mg/L)	APMW-10	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-1R	0.0032	0.002	0.1	No	9	0.002133	0.0004	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-2	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-3	0.002	0.0014	0.1	No	9	0.001933	0.0002	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-4	0.00257	0.001474	0.1	No	9	0.002022	0.0005674	11.11	None	No	0.01	Param.

Confidence Intervals - All Results

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	APMW-5	0.002607	0.001358	0.1	No	9	0.001756	0.0004126	44.44	Cohen`s	No	0.01	Param.
Chromium (mg/L)	APMW-6R	0.002	0.002	0.1	No	9	0.002	0	100	Cohen`s	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-7	0.002	0.0013	0.1	No	9	0.001622	0.0003032	33.33	None	No	0.002	NP (normality)
Chromium (mg/L)	APMW-8	0.0032	0.0014	0.1	No	9	0.002067	0.000469	77.78	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-9	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Cobalt (mg/L)	APMW-10	0.0005	0.00012	0.006	No	10	0.0004202	0.0001685	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	APMW-1R	0.0005586	0.0002774	0.006	No	10	0.000398	0.000133	20	Cohen`s	No	0.01	Param.
Cobalt (mg/L)	APMW-2	0.0005	0.0005	0.006	No	10	0.0005	0	100	Cohen`s	No	0.011	NP (NDs)
Cobalt (mg/L)	APMW-3	0.002789	0.002271	0.006	No	10	0.00253	0.0002908	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-4	0.003812	0.003108	0.006	No	10	0.00346	0.000395	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-5	0.0005	0.000079	0.006	No	10	0.0004154	0.0001784	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	APMW-6R	0.004057	0.001683	0.006	No	10	0.00287	0.001331	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-7	0.0005	0.00025	0.006	No	10	0.000441	0.0001083	70	None	No	0.011	NP (normality)
Cobalt (mg/L)	APMW-8	0.0005	0.0005	0.006	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Cobalt (mg/L)	APMW-9	0.0005	0.000089	0.006	No	10	0.0004173	0.0001744	80	None	No	0.011	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	APMW-10	3.216	2.342	5	No	10	2.779	0.4896	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-1R**	**7.957**	**5.725**	**5**	**Yes**	**10**	**6.841**	**1.251**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**APMW-2**	**20.41**	**17.51**	**5**	**Yes**	**10**	**18.96**	**1.624**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**APMW-3**	**7.243**	**5.605**	**5**	**Yes**	**10**	**6.424**	**0.918**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	APMW-4	2.92	1.82	5	No	10	2.37	0.6169	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-5	4.823	3.617	5	No	10	4.22	0.6755	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-6R	3.403	2.811	5	No	10	3.107	0.332	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-7**	**7.272**	**5.942**	**5**	**Yes**	**10**	**6.607**	**0.7454**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	APMW-8	4.124	3.398	5	No	10	3.761	0.4072	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-9**	**7.235**	**6.585**	**5**	**Yes**	**10**	**6.91**	**0.3638**	**0**	**None**	**No**	**0.01**	**Param.**
Fluoride (mg/L)	APMW-10	0.795	0.6123	4	No	11	0.7036	0.1097	0	None	No	0.01	Param.
Fluoride (mg/L)	APMW-1R	5	0.14	4	No	10	2.585	2.546	50	None	No	0.011	NP (normality)
Fluoride (mg/L)	APMW-2	0.1357	0.05627	4	No	10	0.097	0.05034	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	APMW-3	0.8	0.35	4	No	11	0.8973	1.37	9.091	None	No	0.006	NP (normality)
Fluoride (mg/L)	APMW-4	0.5511	0.4718	4	No	11	0.5055	0.06962	0	None	x^4	0.01	Param.
Fluoride (mg/L)	APMW-5	5	0.09	4	No	10	1.564	2.371	30	None	No	0.011	NP (normality)
Fluoride (mg/L)	APMW-6R	5	0.32	4	No	10	4.059	1.984	80	None	No	0.011	NP (NDs)
Fluoride (mg/L)	APMW-7	0.41	0.11	4	No	11	0.6009	1.462	9.091	None	No	0.006	NP (normality)
Fluoride (mg/L)	APMW-8	1.058	0.8665	4	No	11	0.9536	0.1435	0	None	x^3	0.01	Param.
Fluoride (mg/L)	APMW-9	0.2	0.06	4	No	10	0.583	1.553	10	None	No	0.011	NP (normality)
Lead (mg/L)	APMW-10	0.001	0.001	0.015	No	10	0.00097	0.0001337	80	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-1R	0.001	0.001	0.015	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-2	0.001	0.001	0.015	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-3	0.001	0.001	0.015	No	10	0.000948	0.0001644	90	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-4	0.001	0.001	0.015	No	10	0.000962	0.0001202	90	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-5	0.001	0.00041	0.015	No	10	0.000887	0.0002667	70	None	No	0.011	NP (normality)
Lead (mg/L)	APMW-6R	0.001	0.001	0.015	No	10	0.000932	0.000215	90	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-7	0.001	0.001	0.015	No	10	0.00109	0.0002846	90	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-8	0.0013	0.001	0.015	No	10	0.00109	0.0002025	80	None	No	0.011	NP (NDs)
Lead (mg/L)	APMW-9	0.001	0.00039	0.015	No	10	0.000852	0.000318	80	None	No	0.011	NP (NDs)
Lithium (mg/L)	APMW-10	0.02282	0.01089	0.04	No	10	0.017	0.00811	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	APMW-1R	0.01334	0.009221	0.04	No	10	0.01105	0.003218	10	None	x^2	0.01	Param.
Lithium (mg/L)	APMW-2	0.02729	0.02111	0.04	No	10	0.0242	0.003458	0	None	No	0.01	Param.
Lithium (mg/L)	**APMW-3**	**0.09121**	**0.07115**	**0.04**	**Yes**	**10**	**0.0813**	**0.01222**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Lithium (mg/L)	**APMW-4**	**0.077**	**0.053**	**0.04**	**Yes**	**10**	**0.0605**	**0.009869**	**0**	**None**	**No**	**0.011**	**NP (normality)**
Lithium (mg/L)	**APMW-5**	**0.069**	**0.044**	**0.04**	**Yes**	**10**	**0.0517**	**0.01081**	**0**	**None**	**No**	**0.011**	**NP (normality)**
Lithium (mg/L)	**APMW-6R**	**0.06021**	**0.05119**	**0.04**	**Yes**	**10**	**0.0557**	**0.005056**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	APMW-7	0.005549	0.00214	0.04	No	9	0.002656	0.0006227	33.33	Cohen`s	No	0.01	Param.
Lithium (mg/L)	**APMW-8**	**0.12**	**0.07466**	**0.04**	**Yes**	**10**	**0.0975**	**0.02735**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	APMW-9	0.005313	0.003022	0.04	No	9	0.003456	0.0009645	22.22	Cohen`s	No	0.01	Param.

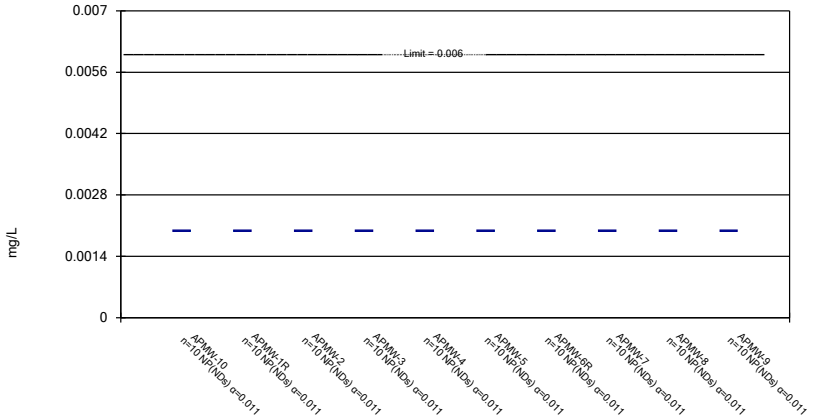
Confidence Intervals - All Results

Plant Watson Client: Southern Company Data: Plant Watson CCR Printed 1/13/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	APMW-10	0.0002	0.000085	0.002	No	9	0.0001872	0.00003833	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-1R	0.0002	0.00015	0.002	No	9	0.0001944	0.00001667	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-2	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-3	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-4	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-5	0.0002	0.000093	0.002	No	9	0.0001881	0.00003567	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-6R	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-7	0.0002	0.00009	0.002	No	9	0.0001878	0.00003667	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-8	0.0002	0.000077	0.002	No	9	0.0001863	0.000041	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-9	0.00035	0.0002	0.002	No	9	0.0002167	0.00005	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	APMW-10	0.11	0.085	0.1	No	10	0.1003	0.01206	0	None	No	0.011	NP (normality)
Molybdenum (mg/L)	APMW-1R	0.005	0.005	0.1	No	10	0.005	0	100	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	APMW-2	0.005	0.005	0.1	No	10	0.004579	0.001331	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	APMW-3	0.06996	0.05804	0.1	No	10	0.064	0.006683	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-4	0.01069	0.008049	0.1	No	10	0.00937	0.00148	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-5	0.1096	0.05836	0.1	No	10	0.084	0.02873	0	None	No	0.01	Param.
Molybdenum (mg/L)	**APMW-6R**	**0.433**	**0.345**	**0.1**	**Yes**	**10**	**0.389**	**0.04932**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	APMW-7	0.0063	0.0047	0.1	No	10	0.005096	0.001614	40	None	No	0.011	NP (Cohens/xfrm)
Molybdenum (mg/L)	**APMW-8**	**0.1685**	**0.1275**	**0.1**	**Yes**	**10**	**0.148**	**0.023**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	APMW-9	0.005	0.00093	0.1	No	10	0.004183	0.001722	80	None	No	0.011	NP (NDs)
Selenium (mg/L)	APMW-10	0.005	0.00035	0.05	No	10	0.00363	0.002207	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-1R	0.005	0.005	0.05	No	10	0.005	0	100	None	No	0.011	NP (NDs)
Selenium (mg/L)	APMW-2	0.005	0.00061	0.05	No	10	0.00367	0.002143	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-3	0.005	0.001	0.05	No	10	0.002417	0.001814	30	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-4	0.005	0.00055	0.05	No	10	0.003659	0.002161	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-5	0.005	0.0006	0.05	No	10	0.003691	0.002108	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-6R	0.005	0.005	0.05	No	10	0.005	0	100	None	No	0.011	NP (NDs)
Selenium (mg/L)	APMW-7	0.005	0.00039	0.05	No	10	0.003621	0.002221	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-8	0.005	0.00049	0.05	No	10	0.003651	0.002173	70	None	No	0.011	NP (normality)
Selenium (mg/L)	APMW-9	0.005	0.00041	0.05	No	10	0.003649	0.002179	70	None	No	0.011	NP (normality)
Thallium (mg/L)	APMW-10	0.001	0.00058	0.002	No	10	0.000873	0.0002863	80	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-1R	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-2	0.001	0.001	0.002	No	10	0.000984	0.0000506	90	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-3	0.001	0.001	0.002	No	10	0.000912	0.0002783	90	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-4	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-5	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-6R	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-7	0.001	0.001	0.002	No	10	0.001	0	100	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-8	0.001	0.001	0.002	No	10	0.000955	0.000265	80	None	No	0.011	NP (NDs)
Thallium (mg/L)	APMW-9	0.001	0.001	0.002	No	10	0.00106	0.0001897	90	None	No	0.011	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

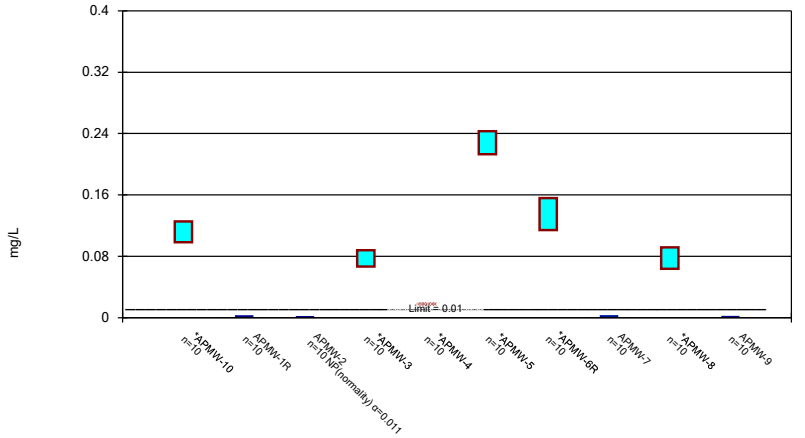


Constituent: Antimony Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

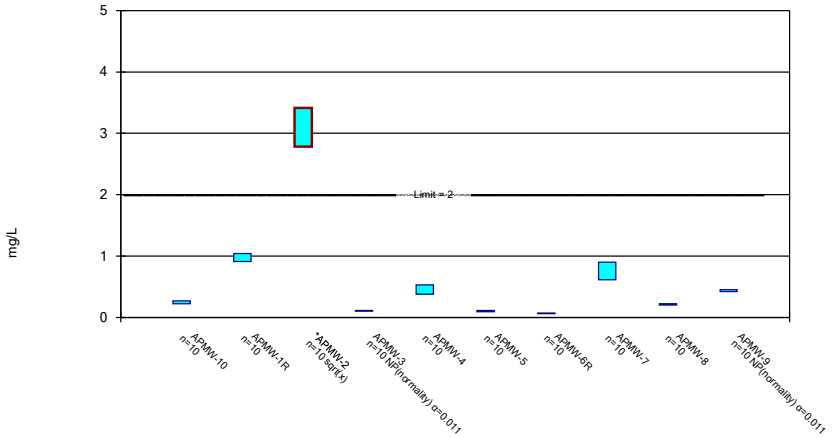


Constituent: Arsenic Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

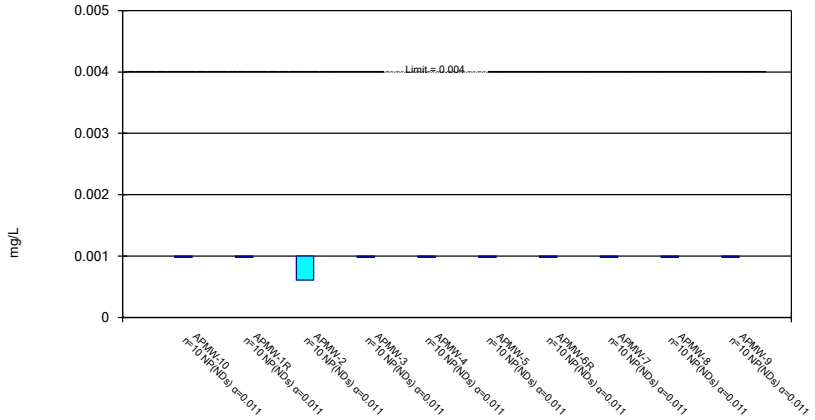


Constituent: Barium Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



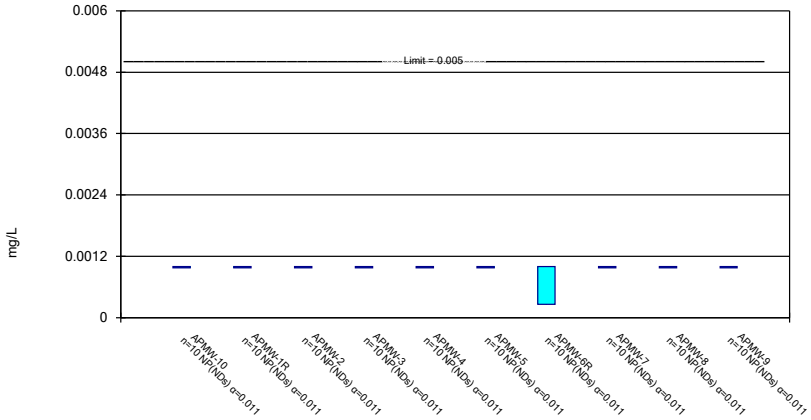
Constituent: Beryllium Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



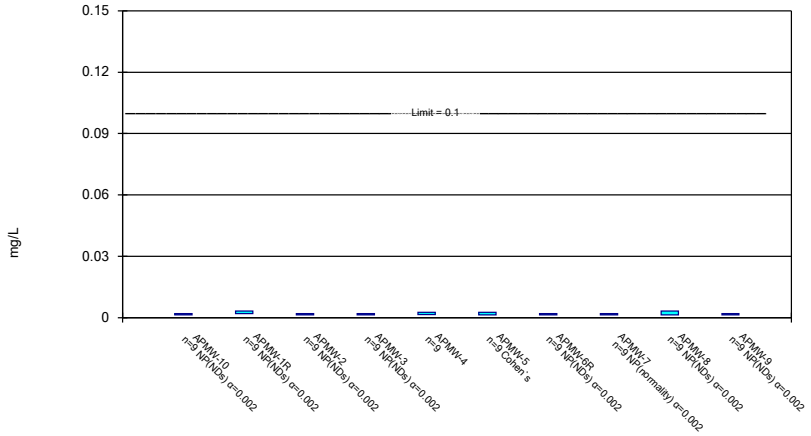
Constituent: Cadmium Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 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.



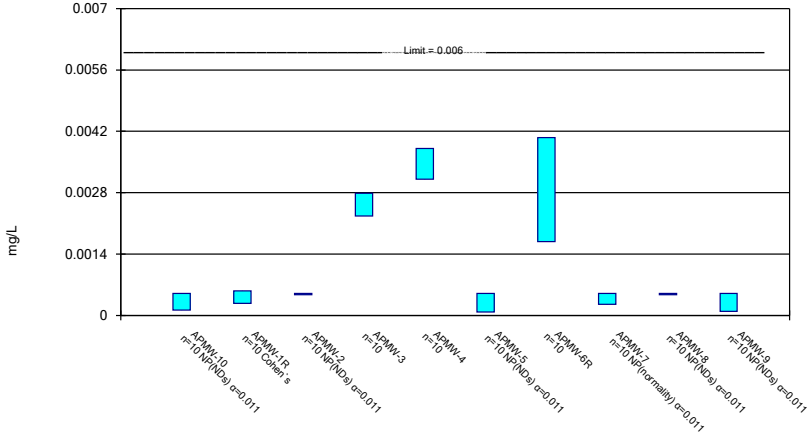
Constituent: Chromium Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 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.



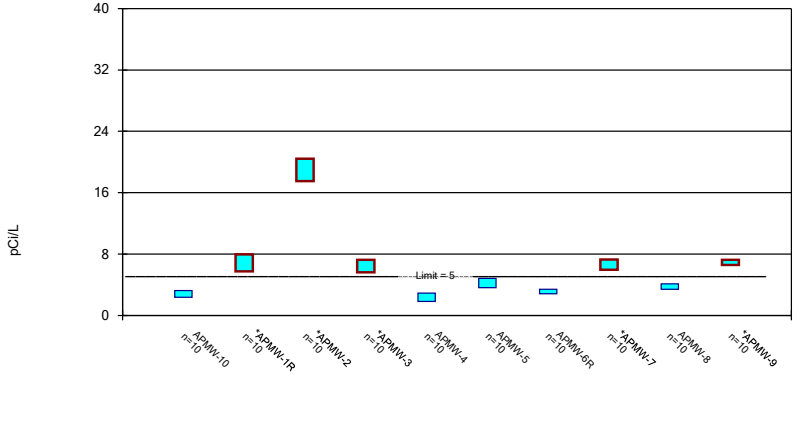
Constituent: Cobalt Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

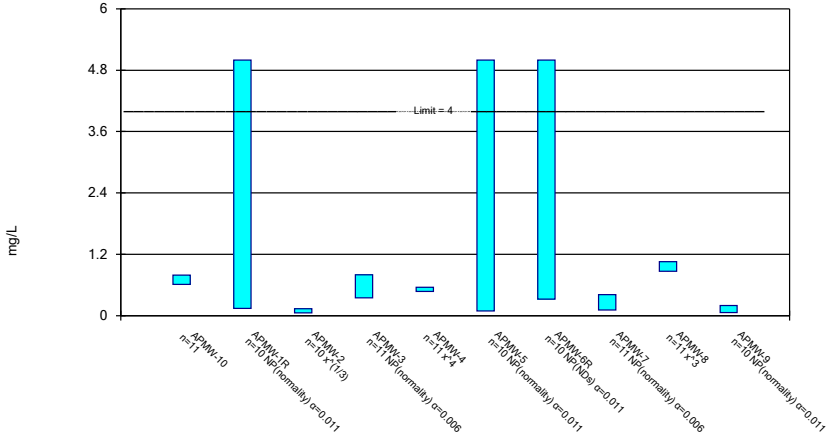


Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson 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.

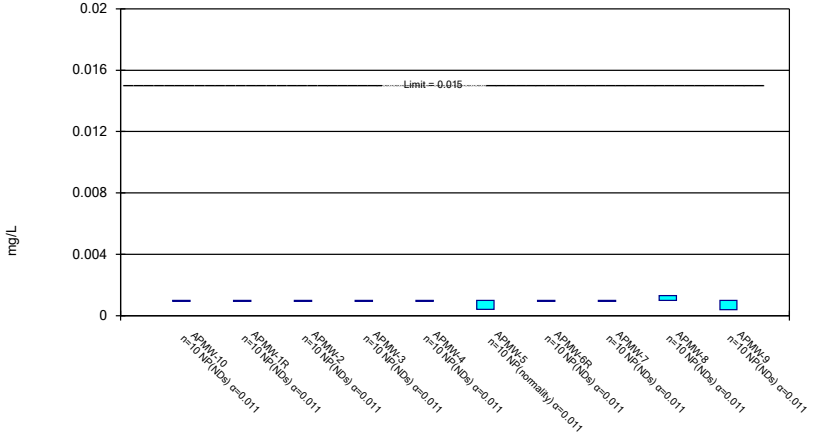


Constituent: Fluoride Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

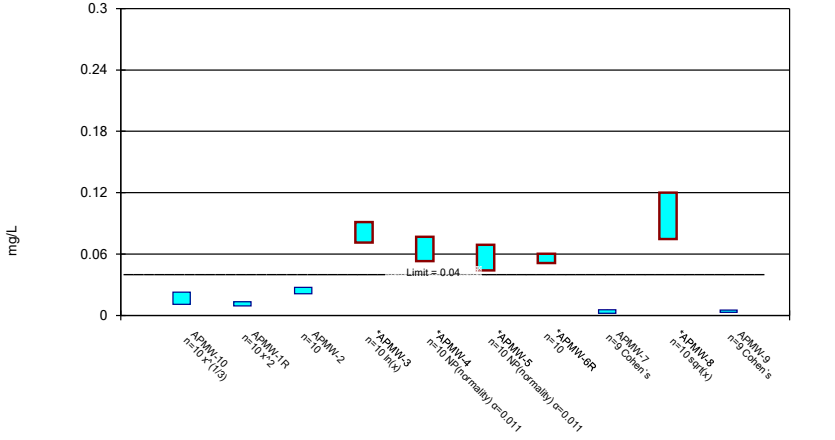


Constituent: Lead Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

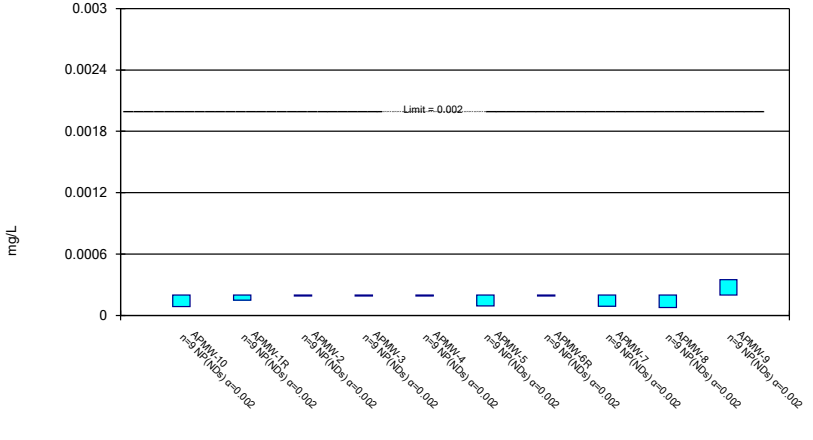


Constituent: Lithium Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

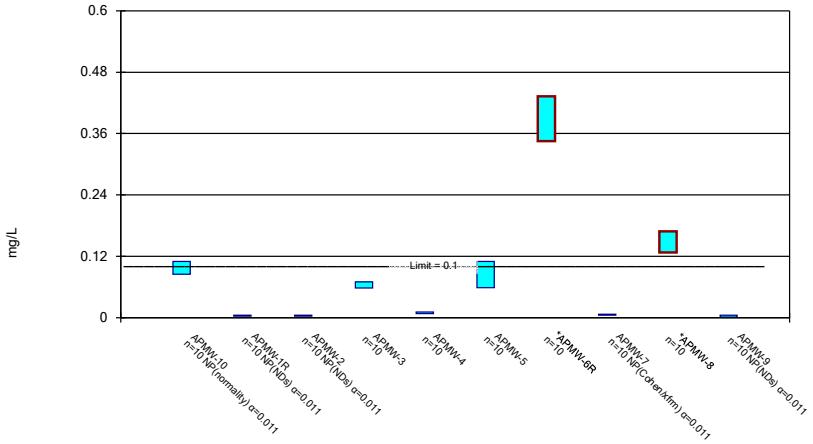


Constituent: Mercury Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



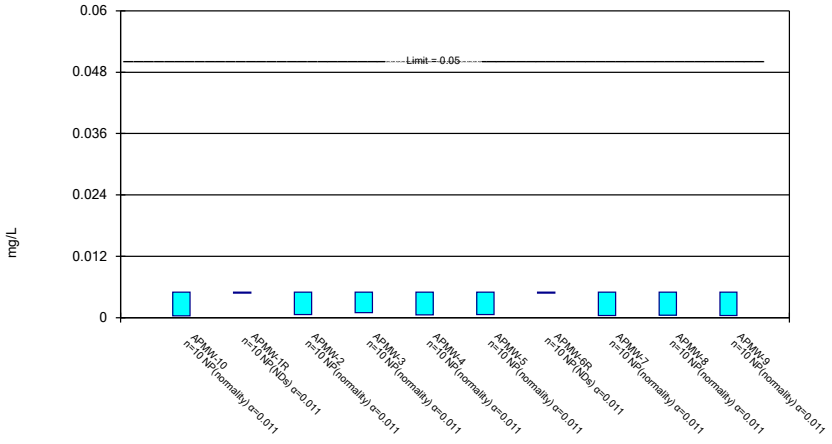
Constituent: Molybdenum Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



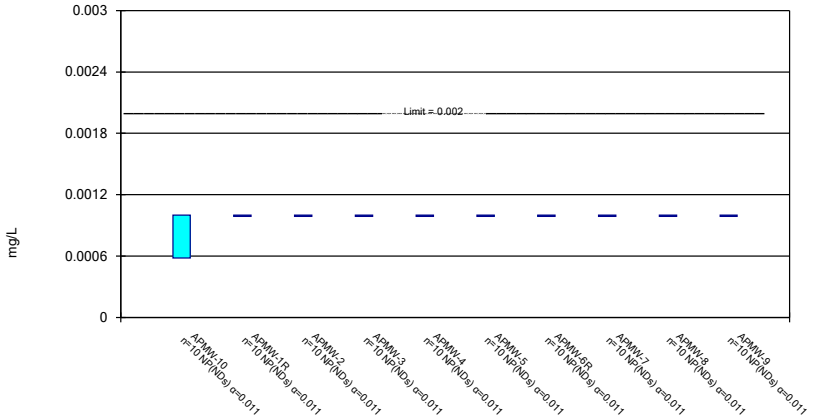
Constituent: Selenium Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



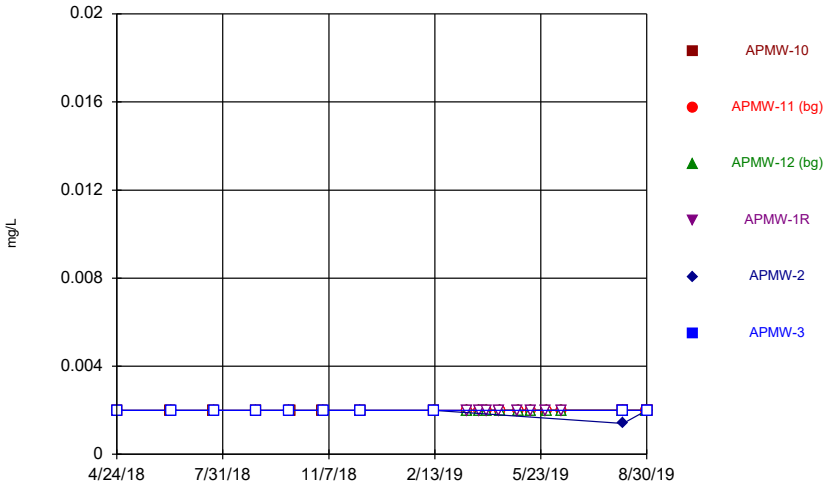
Constituent: Thallium Analysis Run 1/13/2020 1:10 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

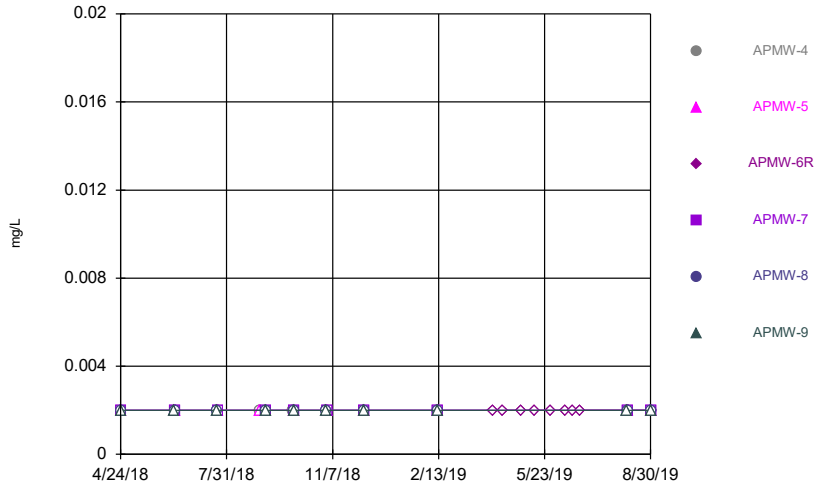
Time Series



Constituent: Antimony Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

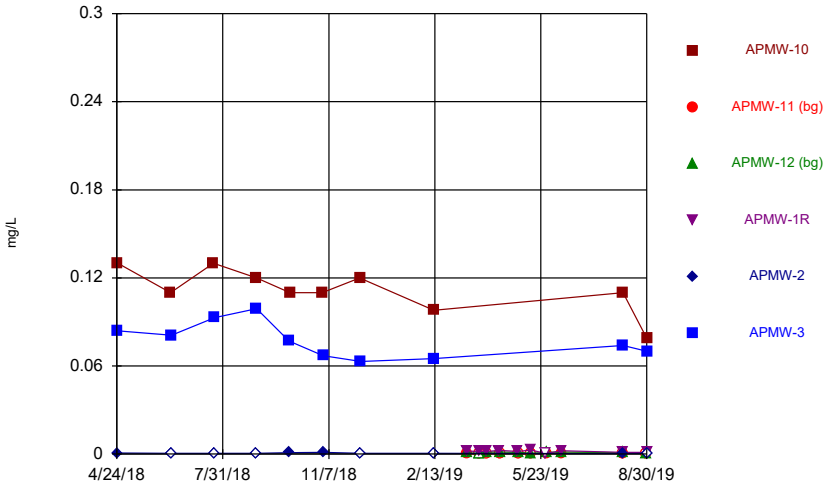
Time Series



Constituent: Antimony Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

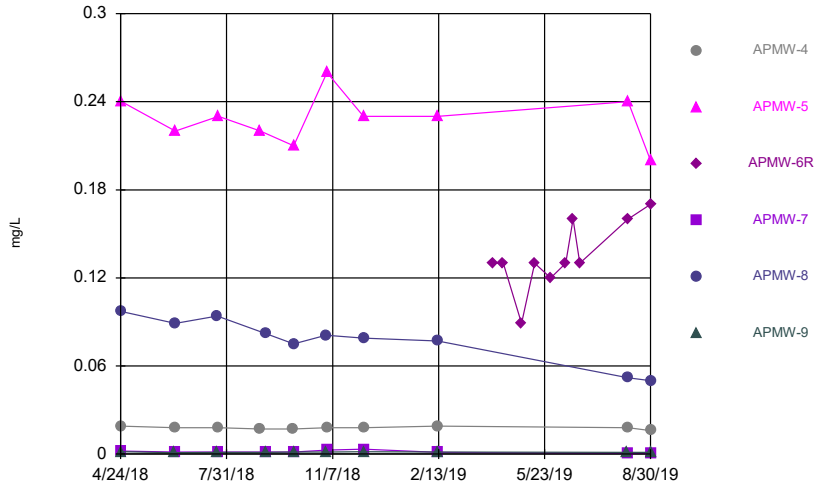
Time Series



Constituent: Arsenic Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series



Constituent: Arsenic Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.002	<0.002
4/25/2018	<0.002					
6/13/2018	<0.002					
6/14/2018					<0.002	<0.002
7/23/2018	<0.002					
7/24/2018					<0.002	<0.002
9/1/2018	<0.002				<0.002	<0.002
10/1/2018					<0.002	<0.002
10/2/2018	<0.002					
11/1/2018	<0.002					
11/2/2018					<0.002	<0.002
12/6/2018	<0.002					
12/7/2018					<0.002	<0.002
2/13/2019	<0.002				<0.002	<0.002
3/16/2019		<0.002	<0.002	<0.002		
3/27/2019		<0.002 (D)	<0.002 (D)	<0.002		
4/3/2019		<0.002 (D)	<0.002 (D)	<0.002		
4/15/2019				<0.002		
4/16/2019		<0.002	<0.002			
5/2/2019				<0.002		
5/3/2019		<0.002	<0.002			
5/14/2019		<0.002	<0.002	<0.002		
5/28/2019				<0.002		
5/29/2019		<0.002	<0.002			
6/12/2019		<0.002	<0.002	<0.002		
8/8/2019	<0.002	<0.002	<0.002	<0.002	0.0014 (J)	<0.002
8/29/2019		<0.002	<0.002			
8/30/2019	<0.002			<0.002	<0.002	<0.002

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	<0.002					
4/25/2018		<0.002		<0.002	<0.002	<0.002
6/13/2018						<0.002
6/14/2018	<0.002	<0.002		<0.002	<0.002	
7/23/2018					<0.002	<0.002
7/24/2018	<0.002	<0.002		<0.002		
9/1/2018	<0.002	<0.002				
9/6/2018				<0.002	<0.002	<0.002
10/1/2018	<0.002					
10/2/2018		<0.002		<0.002	<0.002	<0.002
11/1/2018					<0.002	<0.002
11/2/2018	<0.002	<0.002		<0.002		
12/6/2018	<0.002	<0.002		<0.002	<0.002	<0.002
2/13/2019	<0.002	<0.002		<0.002	<0.002	<0.002
4/5/2019			<0.002 (D)			
4/15/2019			<0.002			
5/2/2019			<0.002			
5/14/2019			<0.002			
5/29/2019			<0.002			
6/12/2019			<0.002			
6/19/2019			<0.002			
6/25/2019			<0.002			
8/8/2019						<0.002
8/9/2019	<0.002	<0.002	<0.002	<0.002	<0.002	
8/30/2019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					0.00077 (J)	0.084
4/25/2018	0.13					
6/13/2018	0.11					
6/14/2018					<0.001	0.081
7/23/2018	0.13					
7/24/2018					<0.001	0.093
9/1/2018	0.12				<0.001	0.099
10/1/2018					0.00094 (J)	0.077
10/2/2018	0.11					
11/1/2018	0.11					
11/2/2018					0.0012 (J)	0.067
12/6/2018	0.12					
12/7/2018					<0.001	0.063
2/13/2019	0.098				<0.001	0.065
3/16/2019		0.00062 (J)	0.00084 (J)	0.0021		
3/27/2019		<0.001 (D)	<0.001 (D)	0.0019		
4/3/2019		<0.001 (D)	0.0013 (D)	0.0019		
4/15/2019				0.0025		
4/16/2019		<0.001	0.0013			
5/2/2019				0.0019		
5/3/2019		<0.001	0.0011 (J)			
5/14/2019		<0.001	0.00061 (J)	0.0027		
5/28/2019				<0.001		
5/29/2019		0.00037 (J)	0.0011			
6/12/2019		0.00056 (J)	0.0013	0.0023		
8/8/2019	0.11	<0.001	0.001	0.0012	0.00035 (J)	0.074
8/29/2019		<0.001	0.00041 (J)			
8/30/2019	0.079			0.0011	<0.001	0.07

Time Series

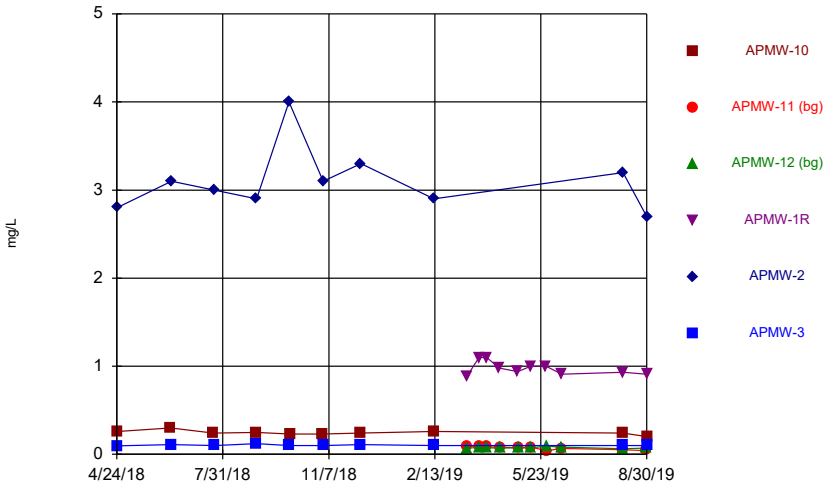
Constituent: Arsenic (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	0.019					
4/25/2018		0.24		0.0021	0.097	0.0016
6/13/2018						0.001 (J)
6/14/2018	0.018	0.22		0.0015	0.089	
7/23/2018					0.094	0.0011 (J)
7/24/2018	0.018	0.23		0.0015		
9/1/2018	0.017	0.22				
9/6/2018				0.0013	0.082	0.0011 (J)
10/1/2018	0.017					
10/2/2018		0.21		0.0014	0.075	0.0015
11/1/2018					0.081	0.0014
11/2/2018	0.018	0.26		0.0028		
12/6/2018	0.018	0.23		0.0033	0.079	0.0016
2/13/2019	0.019	0.23		0.0012 (J)	0.077	0.0013
4/5/2019			0.13 (D)			
4/15/2019			0.13			
5/2/2019			0.089			
5/14/2019			0.13			
5/29/2019			0.12			
6/12/2019			0.13			
6/19/2019			0.16			
6/25/2019			0.13			
8/8/2019						0.0012
8/9/2019	0.018	0.24	0.16	0.00053 (J)	0.052	
8/30/2019	0.016	0.2	0.17	0.00044 (J)	0.05	0.0011

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series

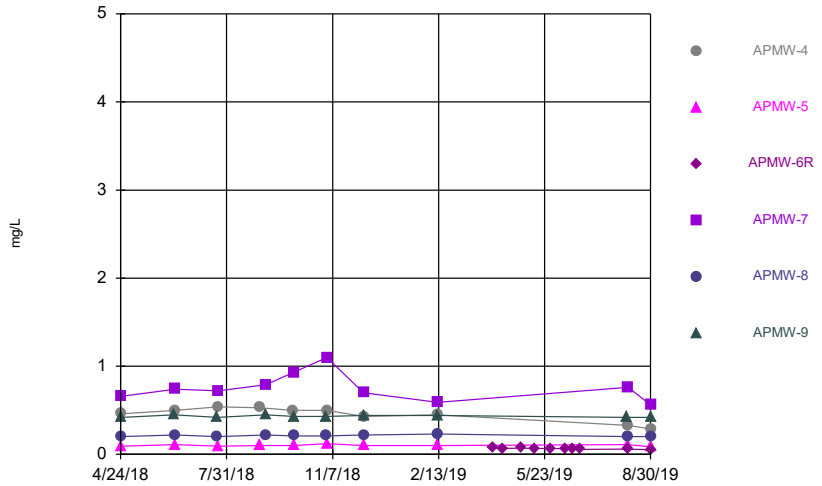


Constituent: Barium Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series



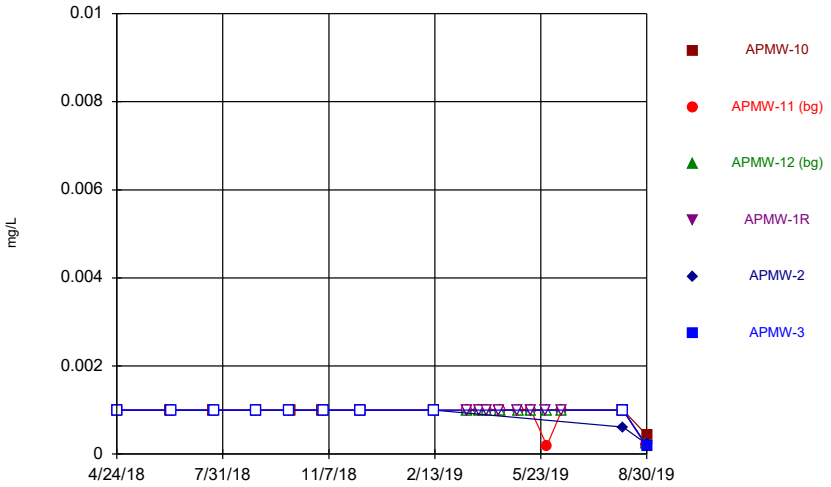
Constituent: Barium Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



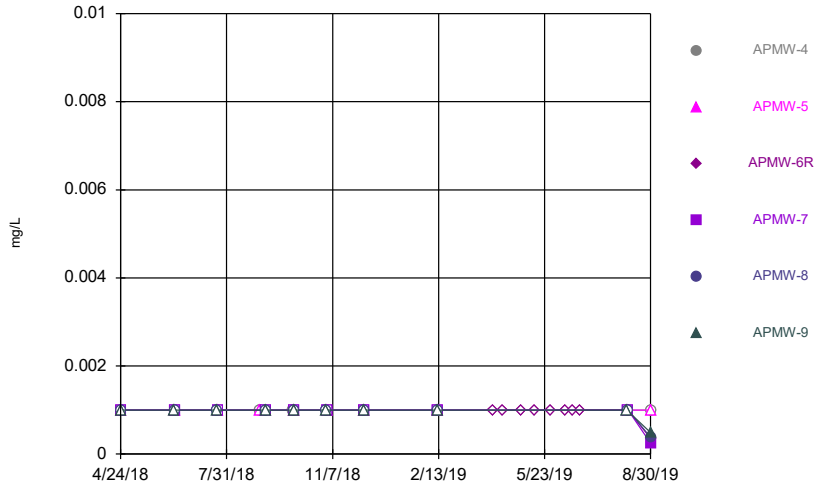
Constituent: Beryllium Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					2.8	0.097
4/25/2018	0.26					
6/13/2018	0.3					
6/14/2018					3.1	0.11
7/23/2018	0.24					
7/24/2018					3	0.1
9/1/2018	0.25				2.9	0.12
10/1/2018					4	0.1
10/2/2018	0.23					
11/1/2018	0.23					
11/2/2018					3.1	0.1
12/6/2018	0.24					
12/7/2018					3.3	0.11
2/13/2019	0.26				2.9	0.1
3/16/2019		0.09	0.069	0.89		
3/27/2019		0.095 (D)	0.079 (D)	1.1		
4/3/2019		0.085 (D)	0.075 (D)	1.1		
4/15/2019				0.98		
4/16/2019		0.081	0.072			
5/2/2019				0.94		
5/3/2019		0.074	0.076			
5/14/2019		0.083	0.076	1		
5/28/2019				1		
5/29/2019		0.04	0.091			
6/12/2019		0.066	0.083	0.91		
8/8/2019	0.24	0.053	0.065	0.93	3.2	0.1
8/29/2019		0.043	0.071			
8/30/2019	0.2			0.91	2.7	0.1

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	0.46					
4/25/2018		0.093		0.66	0.2	0.42
6/13/2018						0.45
6/14/2018	0.5	0.11		0.74	0.22	
7/23/2018					0.2	0.42
7/24/2018	0.54	0.093		0.72		
9/1/2018	0.53	0.1				
9/6/2018				0.79	0.22	0.45
10/1/2018	0.5					
10/2/2018		0.1		0.93	0.21	0.43
11/1/2018					0.21	0.43
11/2/2018	0.5	0.12		1.1		
12/6/2018	0.43	0.1		0.7	0.22	0.44
2/13/2019	0.45	0.1		0.59	0.23	0.44
4/5/2019			0.071 (D)			
4/15/2019			0.067			
5/2/2019			0.071			
5/14/2019			0.068			
5/29/2019			0.067 (J)			
6/12/2019			0.064 (J)			
6/19/2019			0.059 (J)			
6/25/2019			0.057 (J)			
8/8/2019						0.42
8/9/2019	0.33	0.11	0.058	0.76	0.2	
8/30/2019	0.29	0.086	0.052	0.56	0.2	0.42

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.001	<0.001
4/25/2018	<0.001					
6/13/2018	<0.001					
6/14/2018					<0.001	<0.001
7/23/2018	<0.001					
7/24/2018					<0.001	<0.001
9/1/2018	<0.001				<0.001	<0.001
10/1/2018					<0.001	<0.001
10/2/2018	<0.001					
11/1/2018	<0.001					
11/2/2018					<0.001	<0.001
12/6/2018	<0.001					
12/7/2018					<0.001	<0.001
2/13/2019	<0.001				<0.001	<0.001
3/16/2019		<0.001	<0.001	<0.001		
3/27/2019		<0.001 (D)	<0.001 (D)	<0.001		
4/3/2019		<0.001 (D)	<0.001 (D)	<0.001		
4/15/2019				<0.001		
4/16/2019		<0.001	<0.001			
5/2/2019				<0.001		
5/3/2019		<0.001	<0.001			
5/14/2019		<0.001	<0.001	<0.001		
5/28/2019				<0.001		
5/29/2019		0.00019 (J)	<0.001			
6/12/2019		<0.001	<0.001	<0.001		
8/8/2019	<0.001	<0.001	<0.001	<0.001	0.00061 (J)	<0.001
8/29/2019		0.0002 (J)	0.00023 (J)			
8/30/2019	0.00043 (J)			0.00019 (J)	0.00023 (J)	0.00018 (J)

Time Series

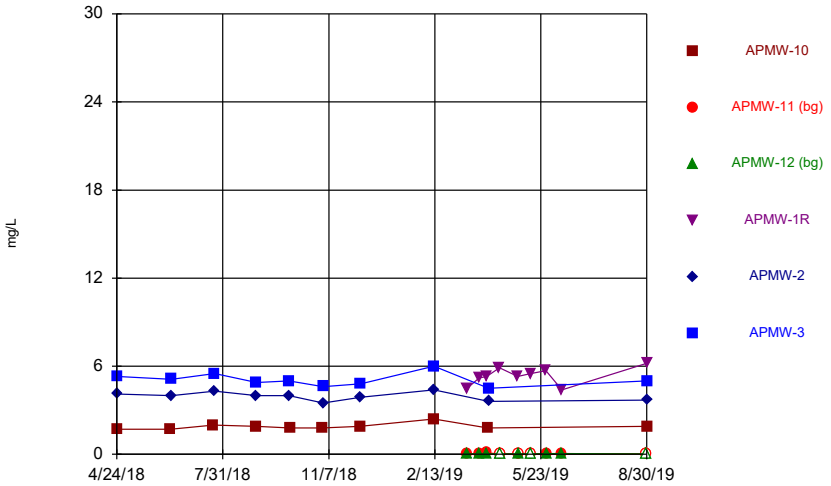
Constituent: Beryllium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	<0.001					
4/25/2018		<0.001		<0.001	<0.001	<0.001
6/13/2018						<0.001
6/14/2018	<0.001	<0.001		<0.001	<0.001	
7/23/2018					<0.001	<0.001
7/24/2018	<0.001	<0.001		<0.001		
9/1/2018	<0.001	<0.001				
9/6/2018				<0.001	<0.001	<0.001
10/1/2018	<0.001					
10/2/2018		<0.001		<0.001	<0.001	<0.001
11/1/2018					<0.001	<0.001
11/2/2018	<0.001	<0.001		<0.001		
12/6/2018	<0.001	<0.001		<0.001	<0.001	<0.001
2/13/2019	<0.001	<0.001		<0.001	<0.001	<0.001
4/5/2019			<0.001 (D)			
4/15/2019			<0.001			
5/2/2019			<0.001			
5/14/2019			<0.001			
5/29/2019			<0.001			
6/12/2019			<0.001			
6/19/2019			<0.001			
6/25/2019			<0.001			
8/8/2019						<0.001
8/9/2019	<0.001	<0.001	<0.001	<0.001	<0.001	
8/30/2019	<0.001	<0.001	0.00036 (J)	0.00025 (J)	0.00038 (J)	0.00049 (J)

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

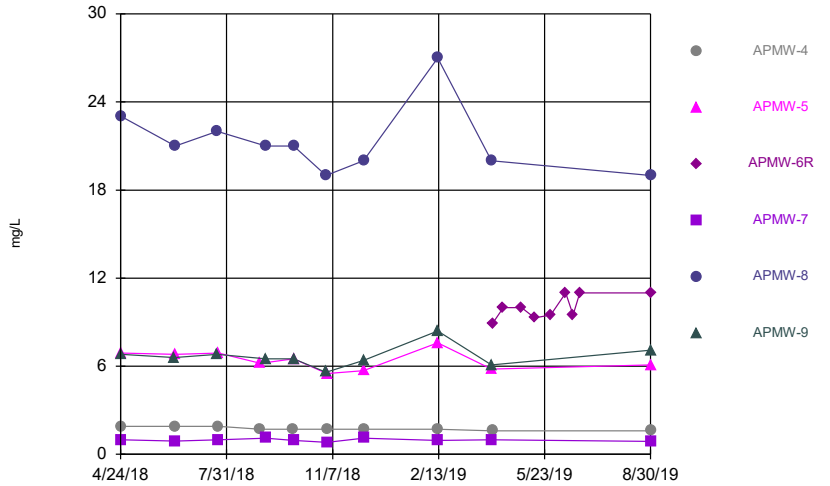
Time Series



Constituent: Boron Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

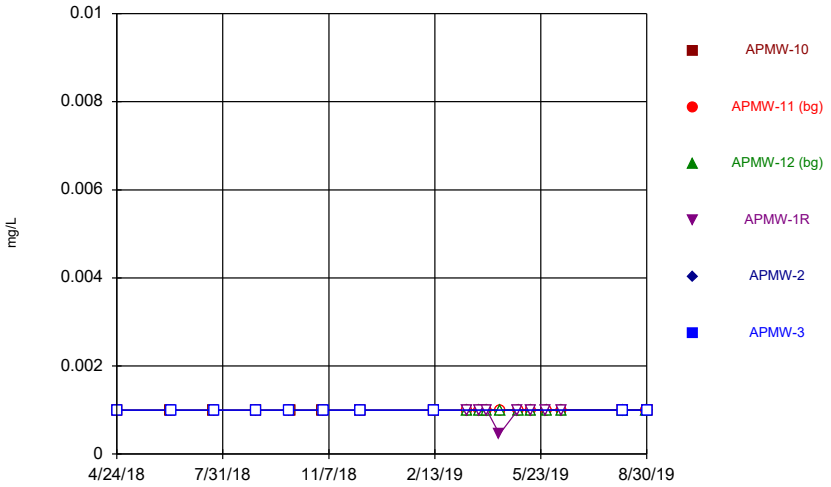
Time Series



Constituent: Boron Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

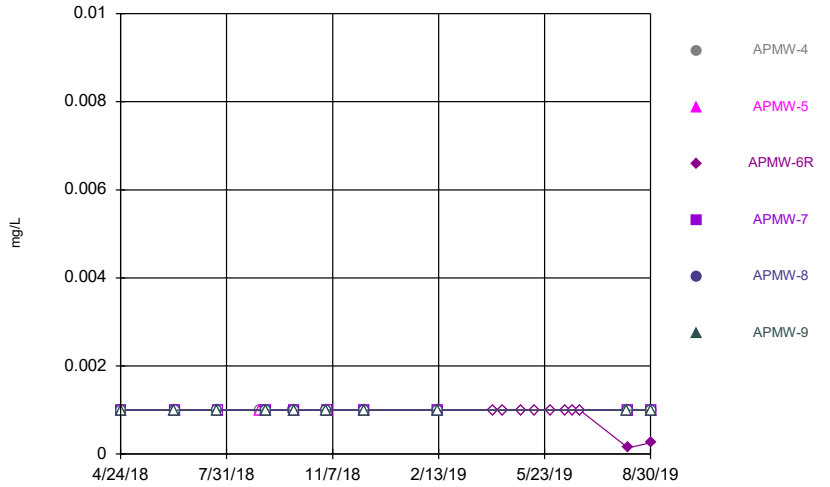
Time Series



Constituent: Cadmium Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					4.1	5.3
4/25/2018	1.7					
6/13/2018	1.7					
6/14/2018					4	5.1
7/23/2018	2					
7/24/2018					4.3	5.5
9/1/2018	1.9				4	4.9
10/1/2018					4	5
10/2/2018	1.8					
11/1/2018	1.8					
11/2/2018					3.5	4.6
12/6/2018	1.9					
12/7/2018					3.9	4.8
2/13/2019	2.4				4.4	6
3/16/2019		0.028 (J)	0.035 (J)	4.5		
3/27/2019		0.027 (JD)	0.033 (JD)	5.2		
4/3/2019		0.089 (D)	0.023 (JD)	5.3		
4/4/2019	1.8					
4/5/2019					3.6	4.5
4/15/2019				5.9		
4/16/2019		<0.08	<0.08			
5/2/2019				5.3		
5/3/2019		<0.08	0.021 (J)			
5/14/2019		<0.08	<0.08	5.5		
5/28/2019				5.7		
5/29/2019		0.034 (J)	0.044 (J)			
6/12/2019		0.05 (J)	0.047 (J)	4.4		
8/29/2019		<0.08	<0.08			
8/30/2019	1.9			6.2	3.7	5

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	1.9					
4/25/2018		6.9		1	23	6.8
6/13/2018						6.6
6/14/2018	1.9	6.8		0.91	21	
7/23/2018					22	6.8
7/24/2018	1.9	6.9		1		
9/1/2018	1.7	6.2				
9/6/2018				1.1	21	6.5
10/1/2018	1.7					
10/2/2018		6.5		0.95	21	6.5
11/1/2018					19	5.6
11/2/2018	1.7	5.5		0.82		
12/6/2018	1.7	5.7		1.1	20	6.4
2/13/2019	1.7	7.6		0.95	27	8.4
4/4/2019		5.8		0.98	20	6.1
4/5/2019	1.6		8.9 (D)			
4/15/2019			10			
5/2/2019			10			
5/14/2019			9.3			
5/29/2019			9.5			
6/12/2019			11			
6/19/2019			9.5			
6/25/2019			11			
8/30/2019	1.6	6.1	11	0.88	19	7.1

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.001	<0.001
4/25/2018	<0.001					
6/13/2018	<0.001					
6/14/2018					<0.001	<0.001
7/23/2018	<0.001					
7/24/2018					<0.001	<0.001
9/1/2018	<0.001				<0.001	<0.001
10/1/2018					<0.001	<0.001
10/2/2018	<0.001					
11/1/2018	<0.001					
11/2/2018					<0.001	<0.001
12/6/2018	<0.001					
12/7/2018					<0.001	<0.001
2/13/2019	<0.001				<0.001	<0.001
3/16/2019		<0.001	<0.001	<0.001		
3/27/2019		<0.001 (D)	<0.001 (D)	<0.001		
4/3/2019		<0.001 (D)	<0.001 (D)	<0.001		
4/15/2019				0.00045 (J)		
4/16/2019		<0.001	<0.001			
5/2/2019				<0.001		
5/3/2019		<0.001	<0.001			
5/14/2019		<0.001	<0.001	<0.001		
5/28/2019				<0.001		
5/29/2019		<0.001	<0.001			
6/12/2019		<0.001	<0.001	<0.001		
8/8/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/29/2019		<0.001	<0.001			
8/30/2019	<0.001			<0.001	<0.001	<0.001

Time Series

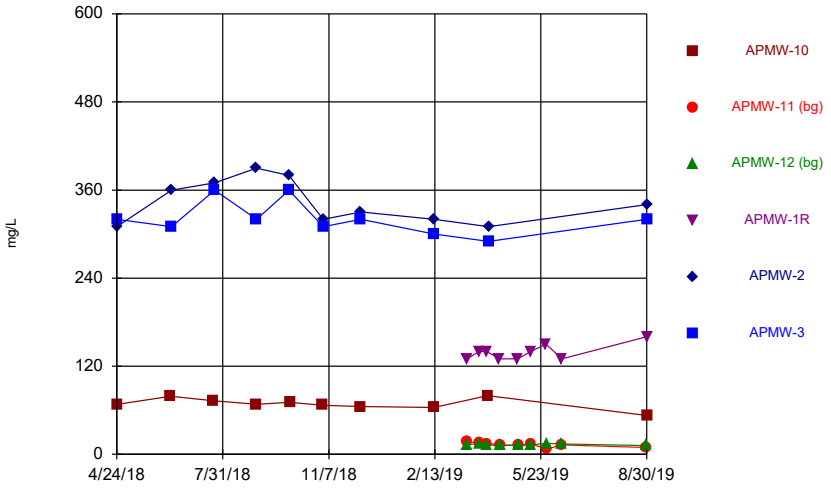
Constituent: Cadmium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	<0.001					
4/25/2018		<0.001		<0.001	<0.001	<0.001
6/13/2018						<0.001
6/14/2018	<0.001	<0.001		<0.001	<0.001	
7/23/2018					<0.001	<0.001
7/24/2018	<0.001	<0.001		<0.001		
9/1/2018	<0.001	<0.001				
9/6/2018				<0.001	<0.001	<0.001
10/1/2018	<0.001					
10/2/2018		<0.001		<0.001	<0.001	<0.001
11/1/2018					<0.001	<0.001
11/2/2018	<0.001	<0.001		<0.001		
12/6/2018	<0.001	<0.001		<0.001	<0.001	<0.001
2/13/2019	<0.001	<0.001		<0.001	<0.001	<0.001
4/5/2019			<0.001 (D)			
4/15/2019			<0.001			
5/2/2019			<0.001			
5/14/2019			<0.001			
5/29/2019			<0.001			
6/12/2019			<0.001			
6/19/2019			<0.001			
6/25/2019			<0.001			
8/8/2019						<0.001
8/9/2019	<0.001	<0.001	0.00014 (J)	<0.001	<0.001	
8/30/2019	<0.001	<0.001	0.00026 (J)	<0.001	<0.001	<0.001

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series

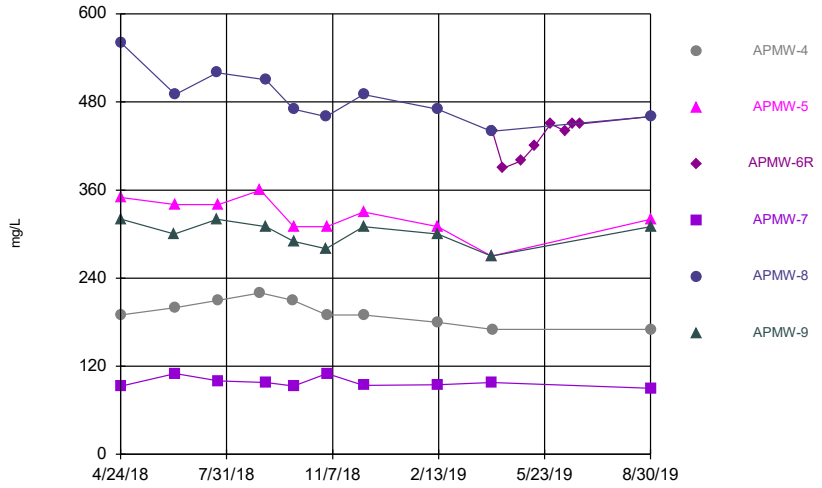


Constituent: Calcium Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series

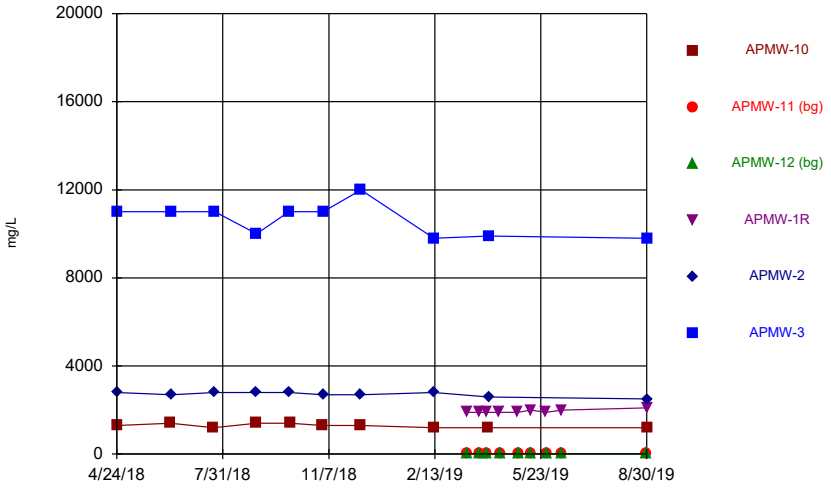


Constituent: Calcium Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series

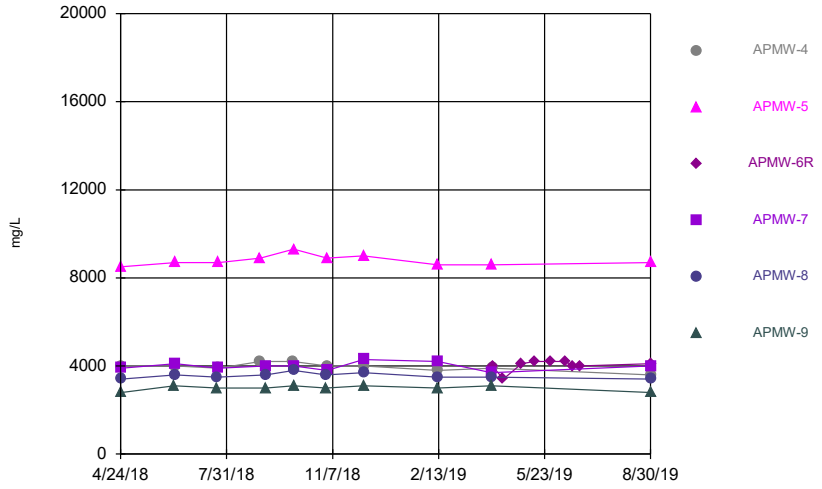


Constituent: Chloride Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series



Constituent: Chloride Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					310	320
4/25/2018	68					
6/13/2018	79					
6/14/2018					360	310
7/23/2018	73					
7/24/2018					370	360
9/1/2018	68				390	320
10/1/2018					380	360
10/2/2018	71					
11/1/2018	67					
11/2/2018					320	310
12/6/2018	65					
12/7/2018					330	320
2/13/2019	64				320	300
3/16/2019		17	13	130		
3/27/2019		16 (D)	15 (D)	140		
4/3/2019		15 (D)	13 (D)	140		
4/4/2019	80					
4/5/2019					310	290
4/15/2019				130		
4/16/2019		13	12			
5/2/2019				130		
5/3/2019		12	13			
5/14/2019		14	13	140		
5/28/2019				150		
5/29/2019		7	15			
6/12/2019		13	14	130		
8/29/2019		9.4	12			
8/30/2019	53			160	340	320

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	190					
4/25/2018		350		93	560	320
6/13/2018						300
6/14/2018	200	340		110	490	
7/23/2018					520	320
7/24/2018	210	340		100		
9/1/2018	220	360				
9/6/2018				98	510	310
10/1/2018	210					
10/2/2018		310		93	470	290
11/1/2018					460	280
11/2/2018	190	310		110		
12/6/2018	190	330		94	490	310
2/13/2019	180	310		95	470	300
4/4/2019		270		98	440	270
4/5/2019	170		440 (D)			
4/15/2019			390			
5/2/2019			400			
5/14/2019			420			
5/29/2019			450			
6/12/2019			440			
6/19/2019			450			
6/25/2019			450			
8/30/2019	170	320	460	90	460	310

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					2800	11000
4/25/2018	1300					
6/13/2018	1400					
6/14/2018					2700	11000
7/23/2018	1200					
7/24/2018					2800	11000
9/1/2018	1400				2800	10000
10/1/2018					2800	11000
10/2/2018	1400					
11/1/2018	1300					
11/2/2018					2700	11000
12/6/2018	1300					
12/7/2018					2700	12000
2/13/2019	1200				2800	9800
3/16/2019		9.3	14	1900		
3/27/2019		8.2 (D)	15 (D)	1900		
4/3/2019		8.7 (D)	15 (D)	1900		
4/4/2019	1200					
4/5/2019					2600	9900
4/15/2019				1900		
4/16/2019		8.7	14			
5/2/2019				1900		
5/3/2019		9.3	15			
5/14/2019		8.8	15	2000		
5/28/2019				1900		
5/29/2019		8.8	14			
6/12/2019		8.8	15	2000		
8/29/2019		8.1	14			
8/30/2019	1200			2100	2500	9800

Time Series

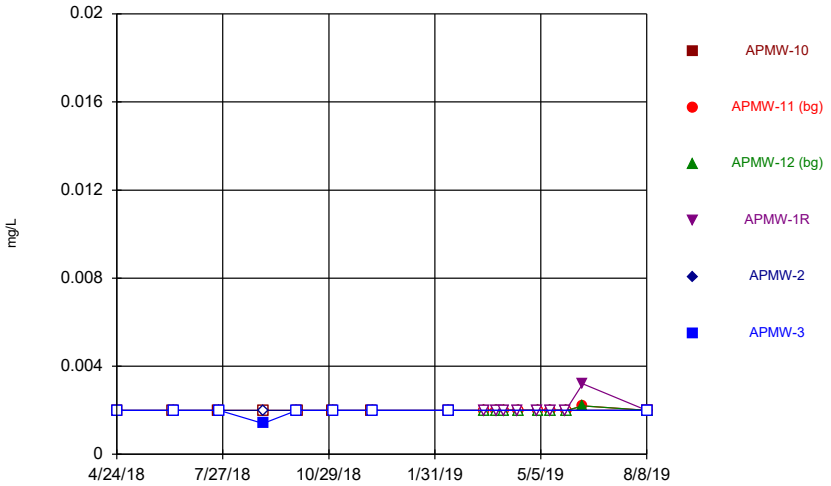
Constituent: Chloride (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	4000					
4/25/2018		8500		3900	3400	2800
6/13/2018						3100
6/14/2018	4000	8700		4100	3600	
7/23/2018					3500	3000
7/24/2018	3900	8700		3900		
9/1/2018	4200	8900				
9/6/2018				4000	3600	3000
10/1/2018	4200					
10/2/2018		9300		4000	3800	3100
11/1/2018					3600	3000
11/2/2018	4000	8900		3800		
12/6/2018	4000	9000		4300	3700	3100
2/13/2019	3800	8600		4200	3500	3000
4/4/2019		8600		3700	3500	3100
4/5/2019	3900		4000 (D)			
4/15/2019			3400			
5/2/2019			4100			
5/14/2019			4200			
5/29/2019			4200			
6/12/2019			4200			
6/19/2019			4000			
6/25/2019			4000			
8/30/2019	3600	8700	4100	4000	3400	2800

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

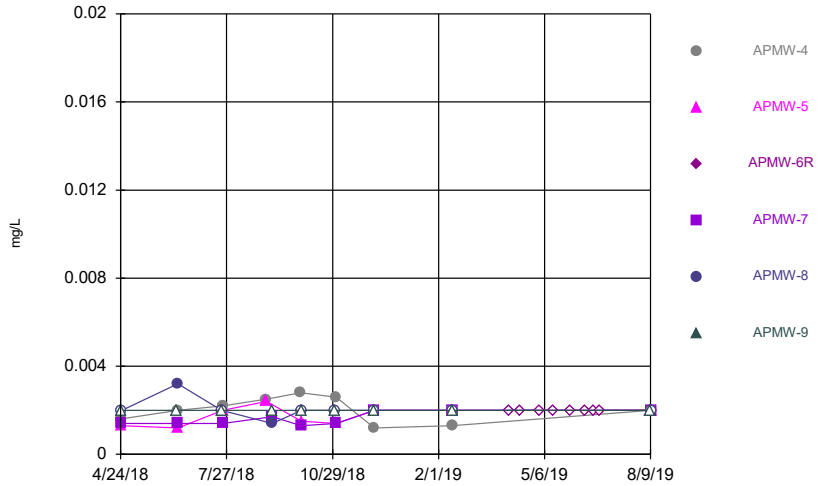
Time Series



Constituent: Chromium Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

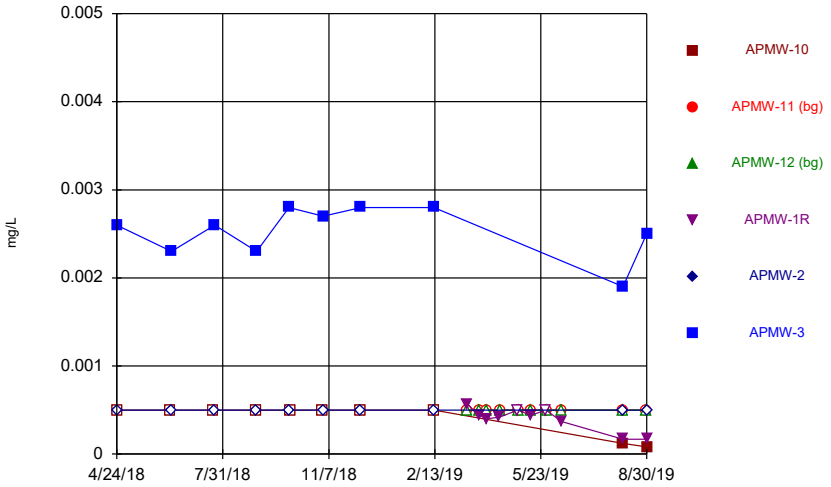
Time Series



Constituent: Chromium Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

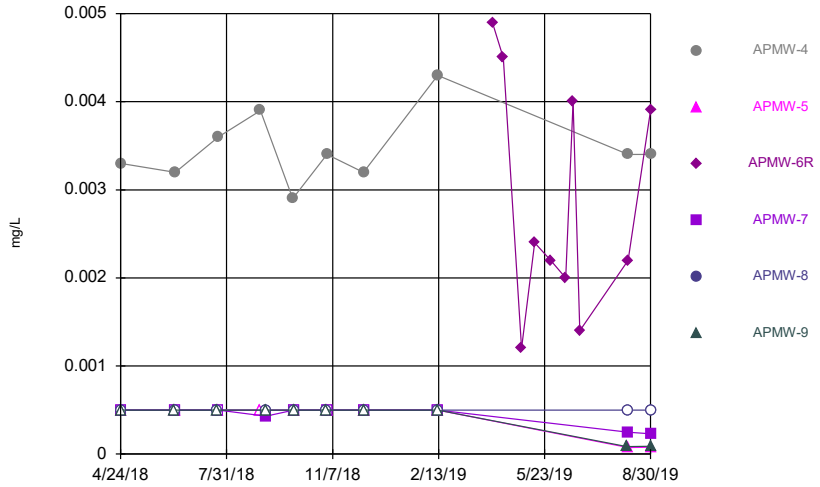
Time Series



Constituent: Cobalt Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.002	<0.002
4/25/2018	<0.002					
6/13/2018	<0.002					
6/14/2018					<0.002	<0.002
7/23/2018	<0.002					
7/24/2018					<0.002	<0.002
9/1/2018	<0.002				<0.002	0.0014 (J)
10/1/2018					<0.002	<0.002
10/2/2018	<0.002					
11/1/2018	<0.002					
11/2/2018					<0.002	<0.002
12/6/2018	<0.002					
12/7/2018					<0.002	<0.002
2/13/2019	<0.002				<0.002	<0.002
3/16/2019		<0.002	<0.002	<0.002		
3/27/2019		<0.002 (D)	<0.002 (D)	<0.002		
4/3/2019		<0.002 (D)	<0.002 (D)	<0.002		
4/15/2019				<0.002		
4/16/2019		<0.002	<0.002			
5/2/2019				<0.002		
5/3/2019		<0.002	<0.002			
5/14/2019		<0.002	<0.002	<0.002		
5/28/2019				<0.002		
5/29/2019		<0.002	<0.002			
6/12/2019		0.0022	0.0022	0.0032		
8/8/2019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	0.0016 (J)					
4/25/2018		0.0013 (J)		0.0014 (J)	<0.002	<0.002
6/13/2018						<0.002
6/14/2018	0.002 (J)	0.0012 (J)		0.0014 (J)	0.0032	
7/23/2018					<0.002	<0.002
7/24/2018	0.0022 (J)	<0.002		0.0014 (J)		
9/1/2018	0.0025	0.0024 (J)				
9/6/2018				0.0017 (J)	0.0014 (J)	<0.002
10/1/2018	0.0028					
10/2/2018		0.0015 (J)		0.0013 (J)	<0.002	<0.002
11/1/2018					<0.002	<0.002
11/2/2018	0.0026	0.0014 (J)		0.0014 (J)		
12/6/2018	0.0012 (J)	<0.002		<0.002	<0.002	<0.002
2/13/2019	0.0013 (J)	<0.002		<0.002	<0.002	<0.002
4/5/2019			<0.002 (D)			
4/15/2019			<0.002			
5/2/2019			<0.002			
5/14/2019			<0.002			
5/29/2019			<0.002			
6/12/2019			<0.002			
6/19/2019			<0.002			
6/25/2019			<0.002			
8/8/2019						<0.002
8/9/2019	<0.002	<0.002	<0.002	<0.002	<0.002	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.0005	0.0026
4/25/2018	<0.0005					
6/13/2018	<0.0005					
6/14/2018					<0.0005	0.0023 (J)
7/23/2018	<0.0005					
7/24/2018					<0.0005	0.0026
9/1/2018	<0.0005				<0.0005	0.0023 (J)
10/1/2018					<0.0005	0.0028
10/2/2018	<0.0005					
11/1/2018	<0.0005					
11/2/2018					<0.0005	0.0027
12/6/2018	<0.0005					
12/7/2018					<0.0005	0.0028
2/13/2019	<0.0005				<0.0005	0.0028
3/16/2019		<0.0005	<0.0005	0.00057 (J)		
3/27/2019		<0.0005 (D)	<0.0005 (D)	0.00044 (J)		
4/3/2019		<0.0005 (D)	<0.0005 (D)	0.0004 (J)		
4/15/2019				0.00042 (J)		
4/16/2019		<0.0005	<0.0005			
5/2/2019				<0.0005		
5/3/2019		<0.0005	<0.0005			
5/14/2019		<0.0005	<0.0005	0.00044 (J)		
5/28/2019				<0.0005		
5/29/2019		<0.0005	<0.0005			
6/12/2019		<0.0005	<0.0005	0.00037 (J)		
8/8/2019	0.00012 (J)	<0.0005	<0.0005	0.00017 (J)	<0.0005	0.0019
8/29/2019		<0.0005	<0.0005			
8/30/2019	8.2E-05 (J)			0.00017 (J)	<0.0005	0.0025

Time Series

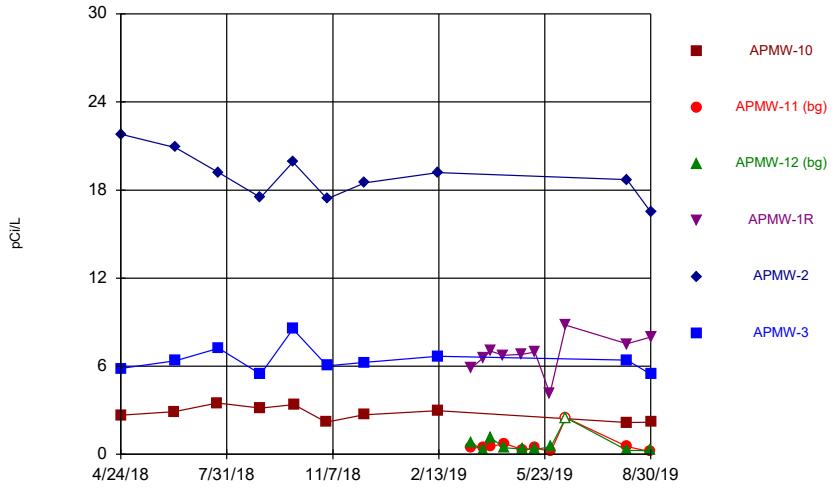
Constituent: Cobalt (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	0.0033					
4/25/2018		<0.0005		<0.0005	<0.0005	<0.0005
6/13/2018						<0.0005
6/14/2018	0.0032	<0.0005		<0.0005	<0.0005	
7/23/2018					<0.0005	<0.0005
7/24/2018	0.0036	<0.0005		<0.0005		
9/1/2018	0.0039	<0.0005				
9/6/2018				0.00043 (J)	<0.0005	<0.0005
10/1/2018	0.0029					
10/2/2018		<0.0005		<0.0005	<0.0005	<0.0005
11/1/2018					<0.0005	<0.0005
11/2/2018	0.0034	<0.0005		<0.0005		
12/6/2018	0.0032	<0.0005		<0.0005	<0.0005	<0.0005
2/13/2019	0.0043	<0.0005		<0.0005	<0.0005	<0.0005
4/5/2019			0.0049 (D)			
4/15/2019			0.0045			
5/2/2019			0.0012 (J)			
5/14/2019			0.0024 (J)			
5/29/2019			0.0022 (J)			
6/12/2019			0.002 (J)			
6/19/2019			0.004 (J)			
6/25/2019			0.0014 (J)			
8/8/2019						8.4E-05 (J)
8/9/2019	0.0034	7.5E-05 (J)	0.0022	0.00025 (J)	<0.0005	
8/30/2019	0.0034	7.9E-05 (J)	0.0039	0.00023 (J)	<0.0005	8.9E-05 (J)

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

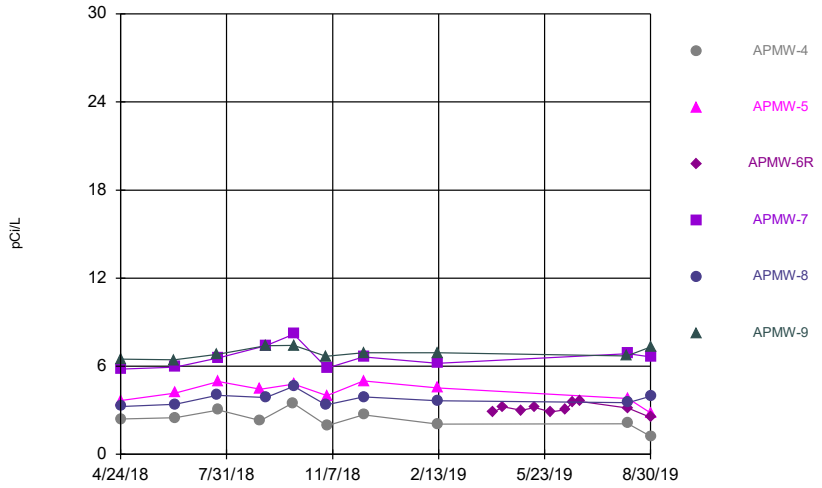
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

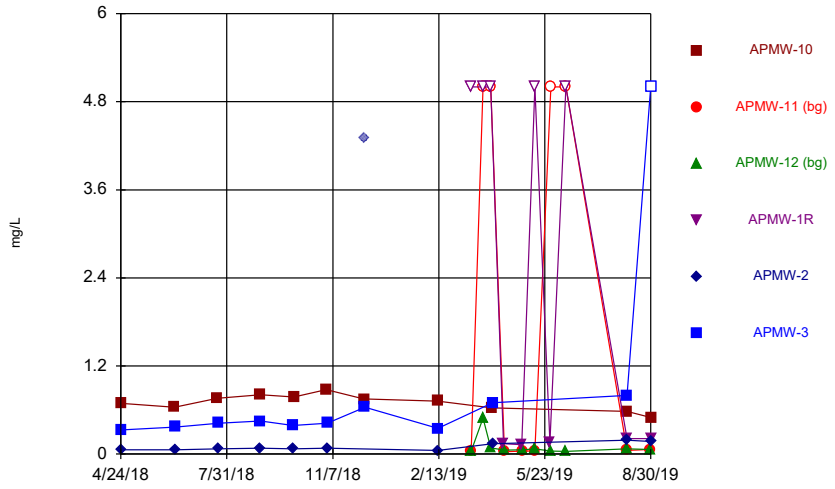
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

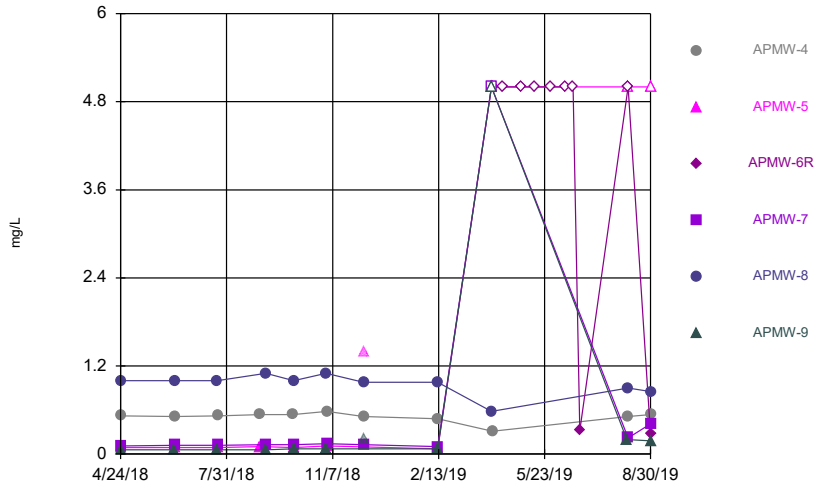
Time Series



Constituent: Fluoride Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					21.8	5.84
4/25/2018	2.66					
6/13/2018	2.91					
6/14/2018					20.9	6.37
7/23/2018	3.49					
7/24/2018					19.2	7.22
9/1/2018	3.15				17.5	5.46
10/1/2018					19.9	8.54
10/2/2018	3.38					
11/1/2018	2.19					
11/2/2018					17.4	6.02
12/6/2018	2.69					
12/7/2018					18.5	6.26
2/13/2019	2.97				19.2	6.67
3/16/2019		0.421	0.765	5.87		
3/27/2019		0.499	0.306 (U)	6.56		
4/3/2019		0.526	1.12	7.03		
4/15/2019				6.75		
4/16/2019		0.73	0.447			
5/2/2019				6.82		
5/3/2019		0.32 (U)	0.357			
5/14/2019		0.431 (U)	0.342 (U)	6.96		
5/28/2019				4.12		
5/29/2019		0.205 (U)	0.519 (U)			
6/12/2019		<5	<5	8.8		
8/8/2019	2.16	0.535	0.262 (U)	7.52	18.7	6.41
8/29/2019		0.19 (U)	0.253 (U)			
8/30/2019	2.19			7.98	16.5	5.45

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	2.4					
4/25/2018		3.67		5.8	3.26	6.49
6/13/2018						6.43
6/14/2018	2.5	4.18		5.94	3.41	
7/23/2018					4.02	6.82
7/24/2018	3.01	4.95		6.56		
9/1/2018	2.3	4.44				
9/6/2018				7.39	3.86	7.4
10/1/2018	3.49					
10/2/2018		4.79		8.19	4.63	7.43
11/1/2018					3.37	6.67
11/2/2018	1.94	4		5.87		
12/6/2018	2.68	5.01		6.64	3.92	6.92
2/13/2019	2.05	4.53		6.19	3.66	6.91
4/5/2019			2.85			
4/15/2019			3.24			
5/2/2019			3			
5/14/2019			3.2			
5/29/2019			2.88			
6/12/2019			3.04			
6/19/2019			3.59			
6/25/2019			3.61			
8/8/2019						6.71
8/9/2019	2.09	3.81	3.14	6.86	3.52	
8/30/2019	1.24	2.82	2.52	6.63	3.96	7.32

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					0.06 (J)	0.33
4/25/2018	0.69					
6/13/2018	0.64					
6/14/2018					0.06 (J)	0.37
7/23/2018	0.76					
7/24/2018					0.07 (J)	0.42
9/1/2018	0.81				0.08 (J)	0.45
10/1/2018					0.07 (J)	0.39
10/2/2018	0.78					
11/1/2018	0.88					
11/2/2018					0.08 (J)	0.42
12/6/2018	0.75					
12/7/2018					4.3 (o)	0.64
2/13/2019	0.72				0.05 (J)	0.35
3/16/2019		0.047 (J)	0.041 (J)	<5		
3/27/2019		<5 (D)	0.49 (D)	<5		
4/3/2019		<5 (D)	0.086 (JD)	<5		
4/4/2019	0.63					
4/5/2019					0.14 (J)	0.7 (J)
4/15/2019				0.14 (J)		
4/16/2019		0.034 (J)	0.055 (J)			
5/2/2019				0.13 (J)		
5/3/2019		0.042 (J)	0.058 (J)			
5/14/2019		0.039 (J)	0.071 (J)	<5		
5/28/2019				0.16 (J)		
5/29/2019		<5	0.042 (J)			
6/12/2019		<5	0.037 (J)	<5		
8/8/2019	0.58	0.051 (J)	0.072 (J)	0.21 (J)	0.19 (J)	0.8 (J)
8/29/2019		0.061 (J)	0.065 (J)			
8/30/2019	0.5			0.21 (J)	0.17 (J)	<5

Time Series

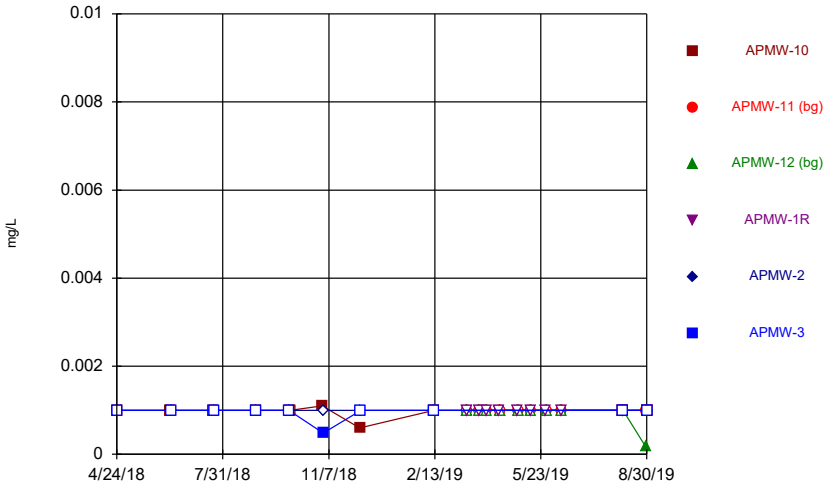
Constituent: Fluoride (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	0.52					
4/25/2018		0.09 (J)		0.11	1	0.06 (J)
6/13/2018						0.06 (J)
6/14/2018	0.51	0.09 (J)		0.12	1	
7/23/2018					1	0.06 (J)
7/24/2018	0.52	0.09 (J)		0.12		
9/1/2018	0.54	0.1				
9/6/2018				0.13	1.1	0.06 (J)
10/1/2018	0.54					
10/2/2018		0.09 (J)		0.13	1	0.07 (J)
11/1/2018					1.1	0.07 (J)
11/2/2018	0.58	0.11		0.14		
12/6/2018	0.51	1.4 (o)		0.13	0.98	0.21 (o)
2/13/2019	0.48	0.07 (J)		0.1	0.98	0.07 (J)
4/4/2019		<5		<5	0.58 (J)	<5
4/5/2019	0.31 (J)		<5 (D)			
4/15/2019			<5			
5/2/2019			<5			
5/14/2019			<5			
5/29/2019			<5			
6/12/2019			<5			
6/19/2019			<5			
6/25/2019			0.32 (J)			
8/8/2019						0.2 (J)
8/9/2019	0.51	<5	<5	0.22 (J)	0.9 (J)	
8/30/2019	0.54 (J)	<5	0.27 (J)	0.41 (J)	0.85 (J)	0.18 (J)

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

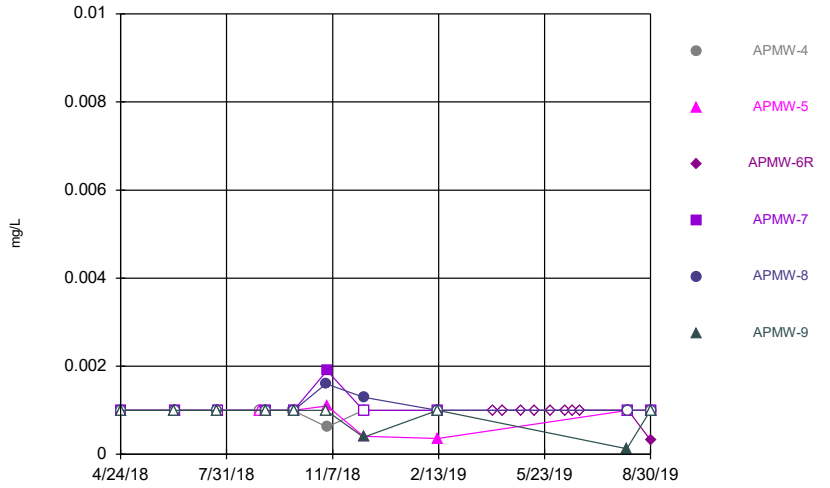
Time Series



Constituent: Lead Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

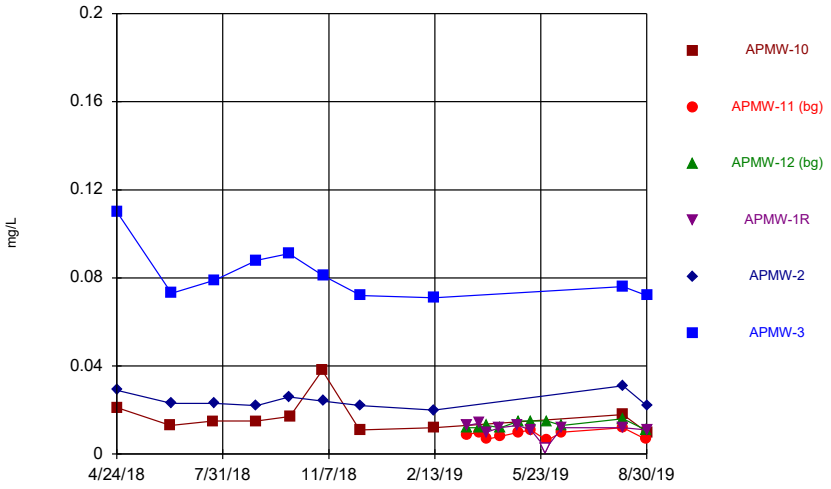
Time Series



Constituent: Lead Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

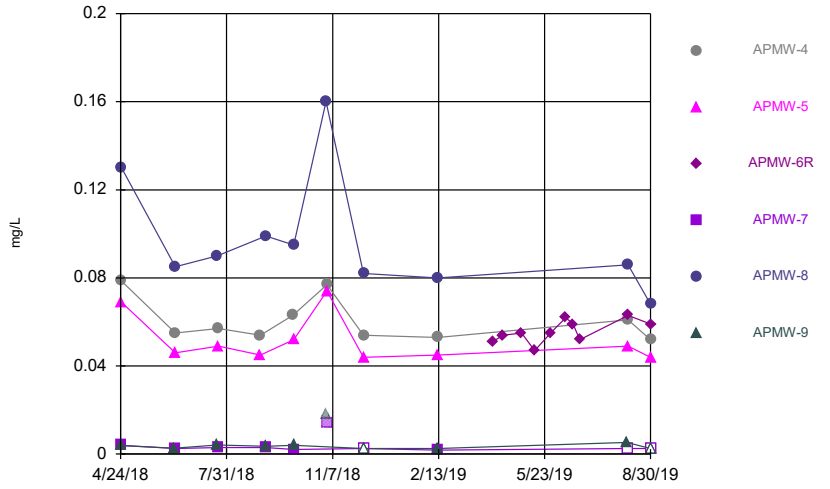
Time Series



Constituent: Lithium Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lithium Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.001	<0.001
4/25/2018	<0.001					
6/13/2018	<0.001					
6/14/2018					<0.001	<0.001
7/23/2018	<0.001					
7/24/2018					<0.001	<0.001
9/1/2018	<0.001				<0.001	<0.001
10/1/2018					<0.001	<0.001
10/2/2018	<0.001					
11/1/2018	0.0011 (J)					
11/2/2018					<0.001	0.00048 (J)
12/6/2018	0.0006 (J)					
12/7/2018					<0.001	<0.001
2/13/2019	<0.001				<0.001	<0.001
3/16/2019		<0.001	<0.001	<0.001		
3/27/2019		<0.001 (D)	<0.001 (D)	<0.001		
4/3/2019		<0.001 (D)	<0.001 (D)	<0.001		
4/15/2019				<0.001		
4/16/2019		<0.001	<0.001			
5/2/2019				<0.001		
5/3/2019		<0.001	<0.001			
5/14/2019		<0.001	<0.001	<0.001		
5/28/2019				<0.001		
5/29/2019		<0.001	<0.001			
6/12/2019		<0.001	<0.001	<0.001		
8/8/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/29/2019		<0.001	0.00017 (J)			
8/30/2019	<0.001			<0.001	<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	<0.001					
4/25/2018		<0.001		<0.001	<0.001	<0.001
6/13/2018						<0.001
6/14/2018	<0.001	<0.001		<0.001	<0.001	
7/23/2018					<0.001	<0.001
7/24/2018	<0.001	<0.001		<0.001		
9/1/2018	<0.001	<0.001				
9/6/2018				<0.001	<0.001	<0.001
10/1/2018	<0.001					
10/2/2018		<0.001		<0.001	<0.001	<0.001
11/1/2018					0.0016	<0.001
11/2/2018	0.00062 (J)	0.0011 (J)		0.0019		
12/6/2018	<0.001	0.00041 (J)		<0.001	0.0013	0.00039 (J)
2/13/2019	<0.001	0.00036 (J)		<0.001	<0.001	<0.001
4/5/2019			<0.001 (D)			
4/15/2019			<0.001			
5/2/2019			<0.001			
5/14/2019			<0.001			
5/29/2019			<0.001			
6/12/2019			<0.001			
6/19/2019			<0.001			
6/25/2019			<0.001			
8/8/2019						0.00013 (J)
8/9/2019	<0.001	<0.001	<0.001	<0.001	<0.001	
8/30/2019	<0.001	<0.001	0.00032 (J)	<0.001	<0.001	<0.001

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					0.029	0.11
4/25/2018	0.021					
6/13/2018	0.013					
6/14/2018					0.023	0.073
7/23/2018	0.015					
7/24/2018					0.023	0.079
9/1/2018	0.015				0.022	0.088
10/1/2018					0.026	0.091
10/2/2018	0.017					
11/1/2018	0.038					
11/2/2018					0.024 (J)	0.081
12/6/2018	0.011					
12/7/2018					0.022	0.072
2/13/2019	0.012				0.02	0.071
3/16/2019		0.0088	0.012	0.013		
3/27/2019		0.01 (D)	0.012 (D)	0.014		
4/3/2019		0.0068 (D)	0.013 (D)	0.01		
4/15/2019				0.012		
4/16/2019		0.0081	0.012			
5/2/2019				0.013		
5/3/2019		0.01	0.015			
5/14/2019		0.011	0.015	0.011		
5/28/2019				<0.005		
5/29/2019		0.0062	0.015			
6/12/2019		0.0099	0.013	0.012		
8/8/2019	0.018	0.012	0.016	0.012	0.031	0.076
8/29/2019		0.0067	0.011			
8/30/2019	0.01			0.011	0.022	0.072

Time Series

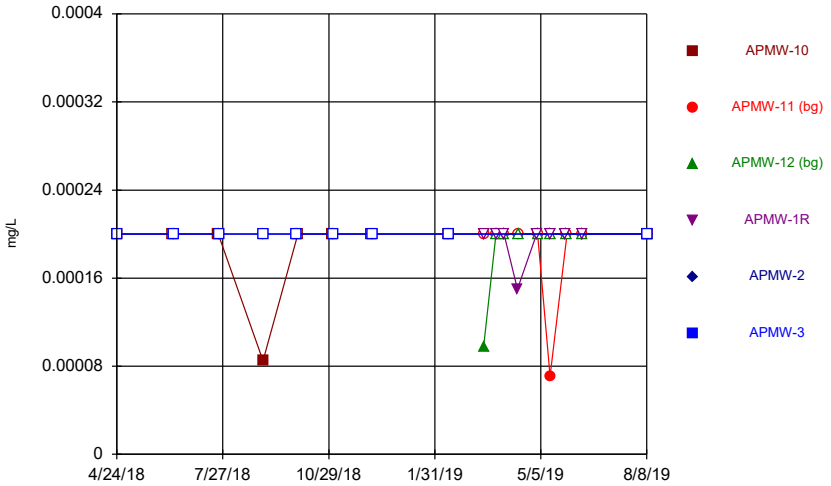
Constituent: Lithium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	0.079					
4/25/2018		0.069		0.004 (J)	0.13	0.0039 (J)
6/13/2018						0.0027 (J)
6/14/2018	0.055	0.046		0.0026 (J)	0.085	
7/23/2018					0.09	0.0041 (J)
7/24/2018	0.057	0.049		0.003 (J)		
9/1/2018	0.054	0.045				
9/6/2018				0.0029 (J)	0.099	0.0035 (J)
10/1/2018	0.063					
10/2/2018		0.052		0.0021 (J)	0.095	0.004 (J)
11/1/2018					0.16	0.018 (o)
11/2/2018	0.077	0.074		0.014 (o)		
12/6/2018	0.054	0.044		<0.005	0.082	<0.005
2/13/2019	0.053	0.045		0.0018 (J)	0.08	0.0026 (J)
4/5/2019			0.051 (D)			
4/15/2019			0.054			
5/2/2019			0.055			
5/14/2019			0.047			
5/29/2019			0.055			
6/12/2019			0.062			
6/19/2019			0.059			
6/25/2019			0.052			
8/8/2019						0.0053
8/9/2019	0.061	0.049	0.063	<0.005	0.086	
8/30/2019	0.052	0.044	0.059	<0.005	0.068	<0.005

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

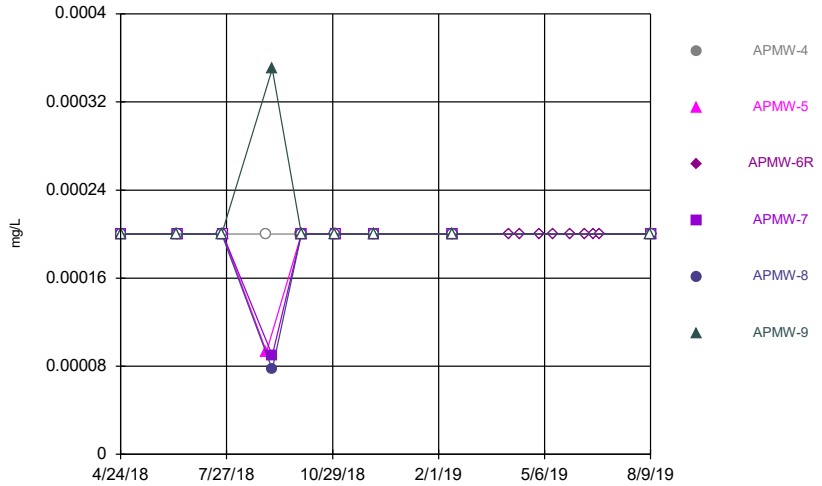
Time Series



Constituent: Mercury Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

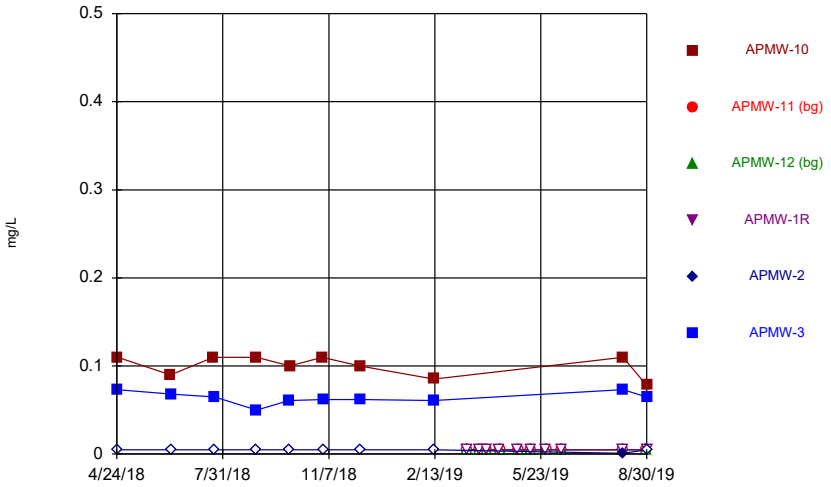
Time Series



Constituent: Mercury Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

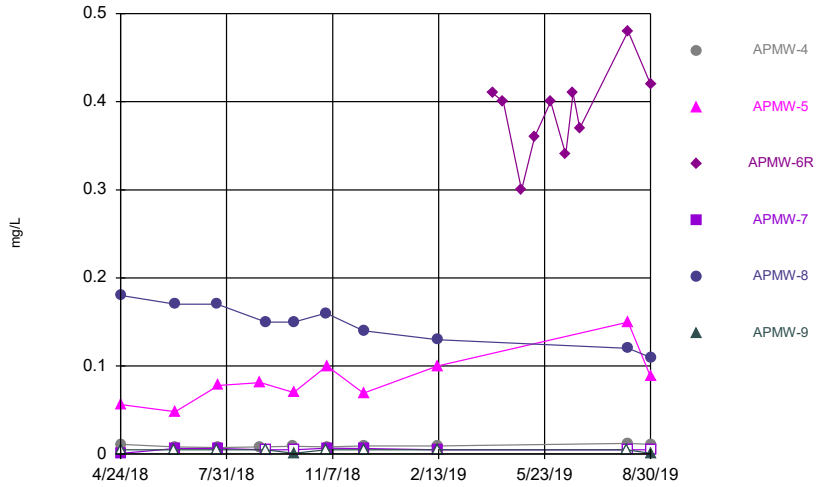
Time Series



Constituent: Molybdenum Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.0002	<0.0002
4/25/2018	<0.0002					
6/13/2018	<0.0002					
6/14/2018					<0.0002	<0.0002
7/23/2018	<0.0002					
7/24/2018					<0.0002	<0.0002
9/1/2018	8.5E-05 (J)				<0.0002	<0.0002
10/1/2018					<0.0002	<0.0002
10/2/2018	<0.0002					
11/1/2018	<0.0002					
11/2/2018					<0.0002	<0.0002
12/6/2018	<0.0002					
12/7/2018					<0.0002	<0.0002
2/13/2019	<0.0002				<0.0002	<0.0002
3/16/2019		<0.0002	9.7E-05 (J)	<0.0002		
3/27/2019		<0.0002 (D)	<0.0002 (D)	<0.0002		
4/3/2019		<0.0002 (D)	<0.0002 (D)	<0.0002		
4/15/2019				0.00015 (J)		
4/16/2019		<0.0002	<0.0002			
5/2/2019				<0.0002		
5/3/2019		<0.0002	<0.0002			
5/14/2019		7.1E-05 (J)	<0.0002	<0.0002		
5/28/2019				<0.0002		
5/29/2019		<0.0002	<0.0002			
6/12/2019		<0.0002	<0.0002	<0.0002		
8/8/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	<0.0002					
4/25/2018		<0.0002		<0.0002	<0.0002	<0.0002
6/13/2018						<0.0002
6/14/2018	<0.0002	<0.0002		<0.0002	<0.0002	
7/23/2018					<0.0002	<0.0002
7/24/2018	<0.0002	<0.0002		<0.0002		
9/1/2018	<0.0002	9.3E-05 (J)				
9/6/2018				9E-05 (J)	7.7E-05 (J)	0.00035
10/1/2018	<0.0002					
10/2/2018		<0.0002		<0.0002	<0.0002	<0.0002
11/1/2018					<0.0002	<0.0002
11/2/2018	<0.0002	<0.0002		<0.0002		
12/6/2018	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
2/13/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
4/5/2019			<0.0002 (D)			
4/15/2019			<0.0002			
5/2/2019			<0.0002			
5/14/2019			<0.0002			
5/29/2019			<0.0002			
6/12/2019			<0.0002			
6/19/2019			<0.0002			
6/25/2019			<0.0002			
8/8/2019						<0.0002
8/9/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.005	0.073
4/25/2018	0.11					
6/13/2018	0.09					
6/14/2018					<0.005	0.068
7/23/2018	0.11					
7/24/2018					<0.005	0.065
9/1/2018	0.11				<0.005	0.05
10/1/2018					<0.005	0.061
10/2/2018	0.1					
11/1/2018	0.11					
11/2/2018					<0.005	0.062
12/6/2018	0.1					
12/7/2018					<0.005	0.062
2/13/2019	0.085				<0.005	0.061
3/16/2019		<0.005	<0.005	<0.005		
3/27/2019		<0.005 (D)	<0.005 (D)	<0.005		
4/3/2019		<0.005 (D)	<0.005 (D)	<0.005		
4/15/2019				<0.005		
4/16/2019		<0.005	<0.005			
5/2/2019				<0.005		
5/3/2019		<0.005	<0.005			
5/14/2019		<0.005	<0.005	<0.005		
5/28/2019				<0.005		
5/29/2019		<0.005	<0.005			
6/12/2019		<0.005	<0.005	<0.005		
8/8/2019	0.11	<0.005	<0.005	<0.005	0.00079 (J)	0.073
8/29/2019		<0.005	<0.005			
8/30/2019	0.078			<0.005	<0.005	0.065

Time Series

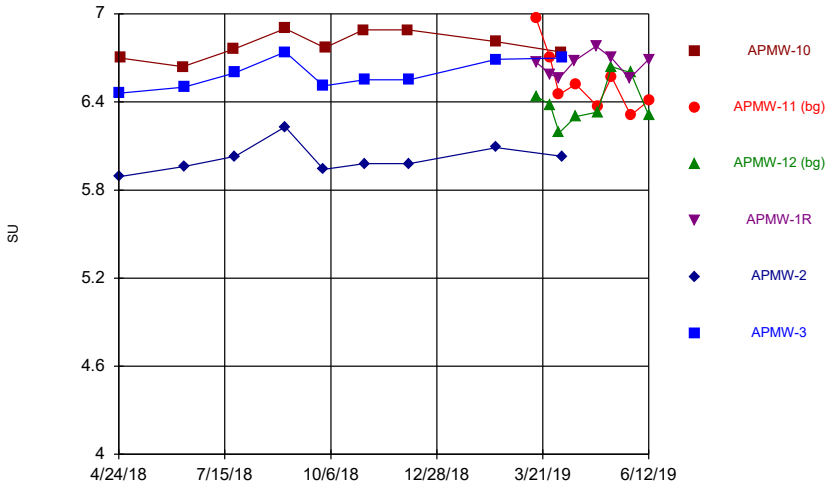
Constituent: Molybdenum (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	0.011 (J)					
4/25/2018		0.056		0.00096 (J)	0.18	<0.005
6/13/2018						<0.005
6/14/2018	0.0083 (J)	0.048		0.0062 (J)	0.17	
7/23/2018					0.17	<0.005
7/24/2018	0.0075 (J)	0.078		0.0063 (J)		
9/1/2018	0.0082 (J)	0.081				
9/6/2018				<0.005	0.15	<0.005
10/1/2018	0.0088 (J)					
10/2/2018		0.07		<0.005	0.15	0.0009 (J)
11/1/2018					0.16	<0.005
11/2/2018	0.0083 (J)	0.1		0.0066 (J)		
12/6/2018	0.0093 (J)	0.069		0.0062 (J)	0.14	<0.005
2/13/2019	0.0093 (J)	0.1		0.0047 (J)	0.13	<0.005
4/5/2019			0.41 (D)			
4/15/2019			0.4			
5/2/2019			0.3			
5/14/2019			0.36			
5/29/2019			0.4			
6/12/2019			0.34			
6/19/2019			0.41			
6/25/2019			0.37			
8/8/2019						<0.005
8/9/2019	0.012	0.15	0.48	<0.005	0.12	
8/30/2019	0.011	0.088	0.42	<0.005	0.11	0.00093 (J)

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series

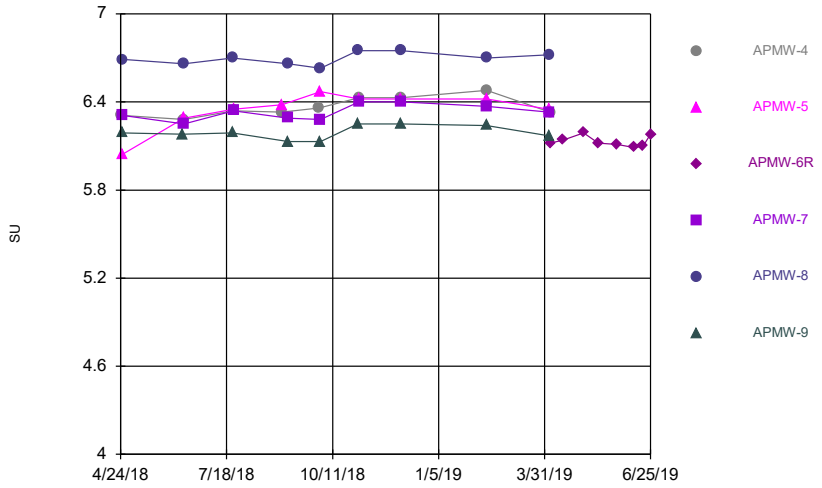


Constituent: pH Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series



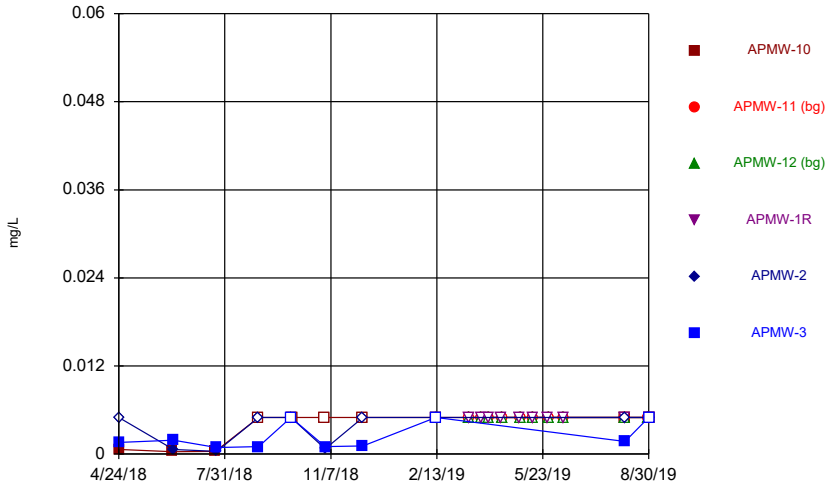
Constituent: pH Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



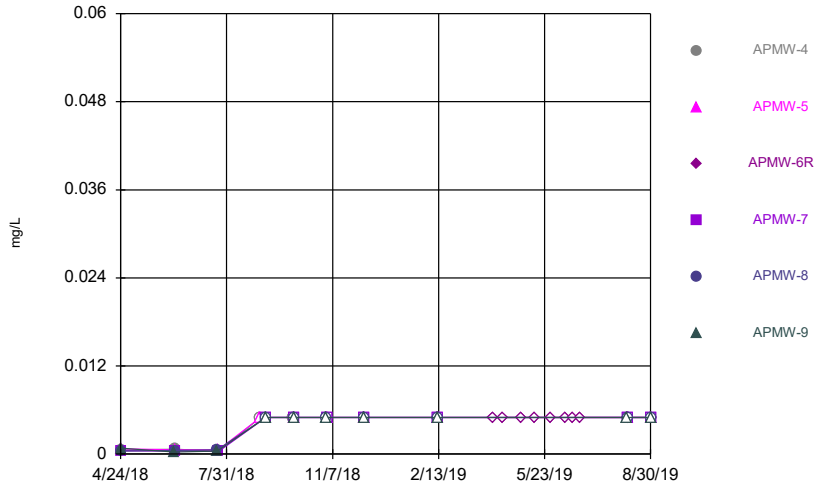
Constituent: Selenium Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: pH (SU) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					5.89	6.46
4/25/2018	6.7					
6/13/2018	6.64					
6/14/2018					5.96	6.5
7/23/2018	6.76					
7/24/2018					6.03	6.6
9/1/2018	6.9				6.23	6.74
10/1/2018					5.94	6.51
10/2/2018	6.77					
11/1/2018	6.89					
11/2/2018					5.98	6.55
12/6/2018	6.89					
12/7/2018					5.98	6.55
2/13/2019	6.81				6.09	6.69
3/16/2019		6.97	6.44	6.67		
3/27/2019		6.7	6.38	6.59		
4/3/2019		6.45	6.19	6.56		
4/4/2019	6.74					
4/5/2019					6.03	6.7
4/15/2019				6.68		
4/16/2019		6.52	6.3			
5/2/2019				6.78		
5/3/2019		6.37	6.33			
5/14/2019		6.57	6.64	6.7		
5/28/2019				6.56		
5/29/2019		6.31	6.6			
6/12/2019		6.41	6.31	6.69		

Time Series

Constituent: pH (SU) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	6.31					
4/25/2018		6.04		6.31	6.69	6.19
6/13/2018						6.18
6/14/2018	6.28	6.29		6.25	6.66	
7/23/2018					6.7	6.19
7/24/2018	6.34	6.35		6.34		
9/1/2018	6.33	6.38				
9/6/2018				6.29	6.66	6.13
10/1/2018	6.36					
10/2/2018		6.47		6.28	6.63	6.13
11/1/2018					6.75	6.25
11/2/2018	6.43	6.42		6.4		
12/6/2018	6.43	6.42		6.4	6.75	6.25
2/13/2019	6.48	6.42		6.37	6.7	6.24
4/4/2019		6.35		6.33	6.72	6.17
4/5/2019	6.33		6.12			
4/15/2019			6.14			
5/2/2019			6.19			
5/14/2019			6.12			
5/29/2019			6.11			
6/12/2019			6.09			
6/19/2019			6.1			
6/25/2019			6.18			

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.005	0.0016
4/25/2018	0.00061 (J)					
6/13/2018	0.00034 (J)					
6/14/2018					0.00061 (J)	0.0019
7/23/2018	0.00035 (J)					
7/24/2018					0.00037 (J)	0.00087 (J)
9/1/2018	<0.005				<0.005	0.001 (J)
10/1/2018					<0.005	<0.005
10/2/2018	<0.005					
11/1/2018	<0.005					
11/2/2018					0.00072 (J)	0.001 (J)
12/6/2018	<0.005					
12/7/2018					<0.005	0.0011 (J)
2/13/2019	<0.005				<0.005	<0.005
3/16/2019		<0.005	<0.005	<0.005		
3/27/2019		<0.005 (D)	<0.005 (D)	<0.005		
4/3/2019		<0.005 (D)	<0.005 (D)	<0.005		
4/15/2019				<0.005		
4/16/2019		<0.005	<0.005			
5/2/2019				<0.005		
5/3/2019		<0.005	<0.005			
5/14/2019		<0.005	<0.005	<0.005		
5/28/2019				<0.005		
5/29/2019		<0.005	<0.005			
6/12/2019		<0.005	<0.005	<0.005		
8/8/2019	<0.005	<0.005	<0.005	<0.005	<0.005	0.0017 (J)
8/29/2019		<0.005	<0.005			
8/30/2019	<0.005			<0.005	<0.005	<0.005

Time Series

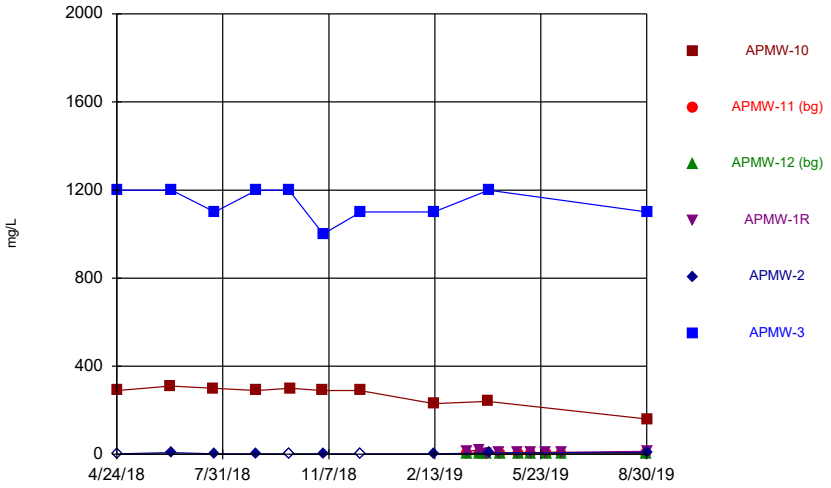
Constituent: Selenium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	0.00055 (J)					
4/25/2018		0.00071 (J)		0.00046 (J)	0.00042 (J)	0.00081 (J)
6/13/2018						0.00027 (J)
6/14/2018	0.00068 (J)	0.0006 (J)		0.00039 (J)	0.00049 (J)	
7/23/2018					0.0006 (J)	0.00041 (J)
7/24/2018	0.00036 (J)	0.0006 (J)		0.00036 (J)		
9/1/2018	<0.005	<0.005				
9/6/2018				<0.005	<0.005	<0.005
10/1/2018	<0.005					
10/2/2018		<0.005		<0.005	<0.005	<0.005
11/1/2018					<0.005	<0.005
11/2/2018	<0.005	<0.005		<0.005		
12/6/2018	<0.005	<0.005		<0.005	<0.005	<0.005
2/13/2019	<0.005	<0.005		<0.005	<0.005	<0.005
4/5/2019			<0.005 (D)			
4/15/2019			<0.005			
5/2/2019			<0.005			
5/14/2019			<0.005			
5/29/2019			<0.005			
6/12/2019			<0.005			
6/19/2019			<0.005			
6/25/2019			<0.005			
8/8/2019						<0.005
8/9/2019	<0.005	<0.005	<0.005	<0.005	<0.005	
8/30/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

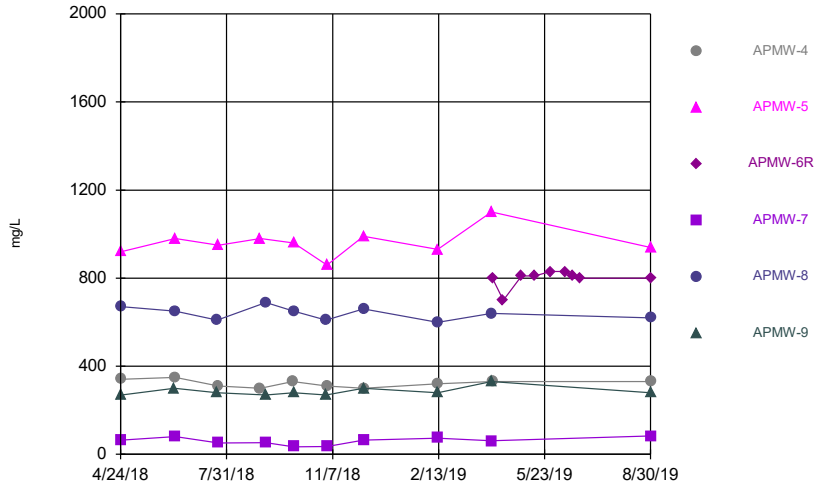
Time Series



Constituent: Sulfate Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

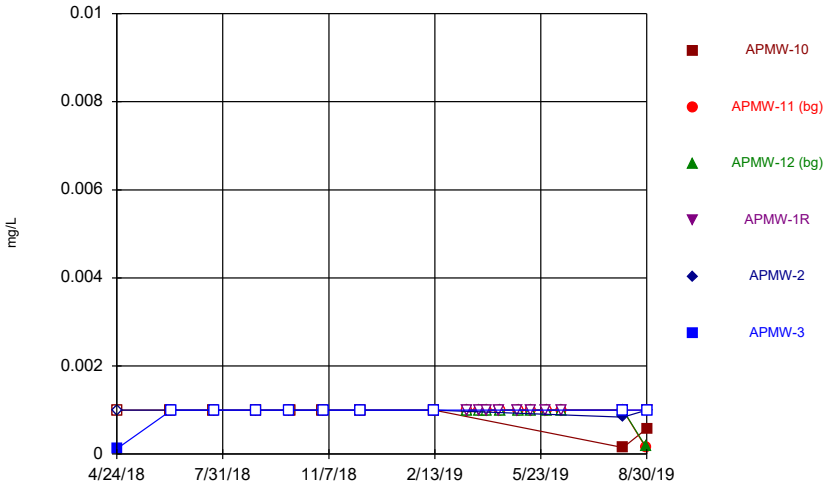
Time Series



Constituent: Sulfate Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

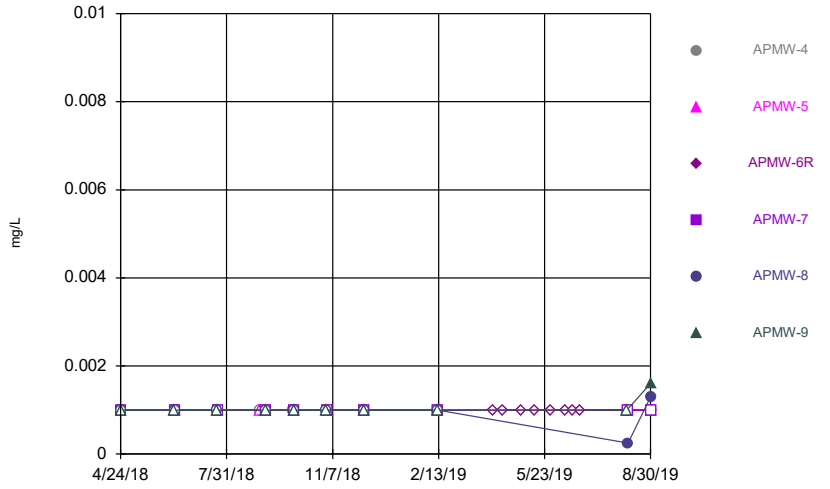
Time Series



Constituent: Thallium Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 1/13/2020 1:06 PM
Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<5	1200
4/25/2018	290					
6/13/2018	310					
6/14/2018					7.2	1200
7/23/2018	300					
7/24/2018					2.7 (J)	1100
9/1/2018	290				1.5 (J)	1200
10/1/2018					<5	1200
10/2/2018	300					
11/1/2018	290					
11/2/2018					1.9 (J)	1000
12/6/2018	290					
12/7/2018					<5	1100
2/13/2019	230				1.5 (J)	1100
3/16/2019		3.6	0.88 (J)	14		
3/27/2019		0.81 (JD)	1.3 (D)	19		
4/3/2019		1.1 (D)	1.9 (D)	4.6 (J)		
4/4/2019	240					
4/5/2019					7	1200
4/15/2019				8.6		
4/16/2019		0.68 (J)	2.5			
5/2/2019				6		
5/3/2019		1.1	1.3			
5/14/2019		1.3	2.2	5.8		
5/28/2019				9.4		
5/29/2019		2.1	1.2			
6/12/2019		1.9	1.1	8.8		
8/29/2019		2.3	1.1			
8/30/2019	160			13	8.4	1100

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	340					
4/25/2018		920		65	670	270
6/13/2018						300
6/14/2018	350	980		81	650	
7/23/2018					610	280
7/24/2018	310	950		52		
9/1/2018	300	980				
9/6/2018				53	690	270
10/1/2018	330					
10/2/2018		960		34	650	280
11/1/2018					610	270
11/2/2018	310	860		35		
12/6/2018	300	990		65	660	300
2/13/2019	320	930		74	600	280
4/4/2019		1100		61	640	330
4/5/2019	330		800 (D)			
4/15/2019			700			
5/2/2019			810			
5/14/2019			810			
5/29/2019			830			
6/12/2019			830			
6/19/2019			810			
6/25/2019			800			
8/30/2019	330	940	800	83	620	280

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					<0.001	0.00012 (J)
4/25/2018	<0.001					
6/13/2018	<0.001					
6/14/2018					<0.001	<0.001
7/23/2018	<0.001					
7/24/2018					<0.001	<0.001
9/1/2018	<0.001				<0.001	<0.001
10/1/2018					<0.001	<0.001
10/2/2018	<0.001					
11/1/2018	<0.001					
11/2/2018					<0.001	<0.001
12/6/2018	<0.001					
12/7/2018					<0.001	<0.001
2/13/2019	<0.001				<0.001	<0.001
3/16/2019		<0.001	<0.001	<0.001		
3/27/2019		<0.001 (D)	<0.001 (D)	<0.001		
4/3/2019		<0.001 (D)	<0.001 (D)	<0.001		
4/15/2019				<0.001		
4/16/2019		<0.001	<0.001			
5/2/2019				<0.001		
5/3/2019		<0.001	<0.001			
5/14/2019		<0.001	<0.001	<0.001		
5/28/2019				<0.001		
5/29/2019		<0.001	<0.001			
6/12/2019		<0.001	<0.001	<0.001		
8/8/2019	0.00015 (J)	<0.001	<0.001	<0.001	0.00084 (J)	<0.001
8/29/2019		0.00015 (J)	0.00017 (J)			
8/30/2019	0.00058 (J)			<0.001	<0.001	<0.001

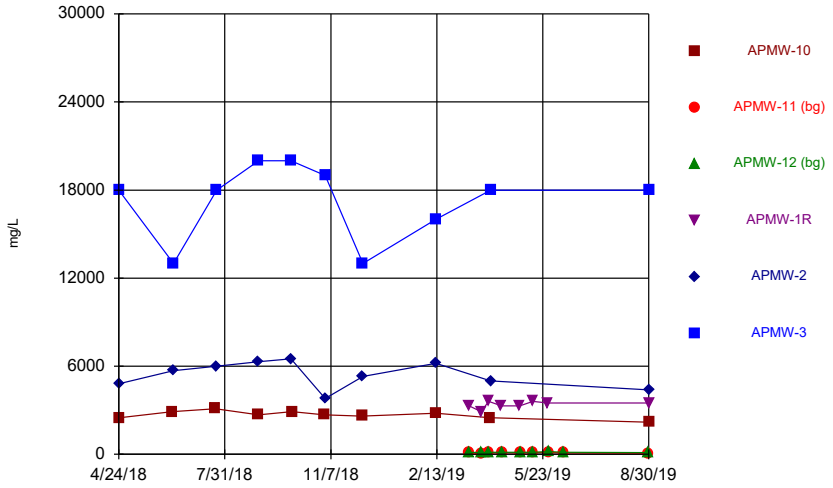
Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	<0.001					
4/25/2018		<0.001		<0.001	<0.001	<0.001
6/13/2018						<0.001
6/14/2018	<0.001	<0.001		<0.001	<0.001	
7/23/2018					<0.001	<0.001
7/24/2018	<0.001	<0.001		<0.001		
9/1/2018	<0.001	<0.001				
9/6/2018				<0.001	<0.001	<0.001
10/1/2018	<0.001					
10/2/2018		<0.001		<0.001	<0.001	<0.001
11/1/2018					<0.001	<0.001
11/2/2018	<0.001	<0.001		<0.001		
12/6/2018	<0.001	<0.001		<0.001	<0.001	<0.001
2/13/2019	<0.001	<0.001		<0.001	<0.001	<0.001
4/5/2019			<0.001 (D)			
4/15/2019			<0.001			
5/2/2019			<0.001			
5/14/2019			<0.001			
5/29/2019			<0.001			
6/12/2019			<0.001			
6/19/2019			<0.001			
6/25/2019			<0.001			
8/8/2019						<0.001
8/9/2019	<0.001	<0.001	<0.001	<0.001	0.00025 (J)	
8/30/2019	<0.001	<0.001	<0.001	<0.001	0.0013	0.0016

Time Series

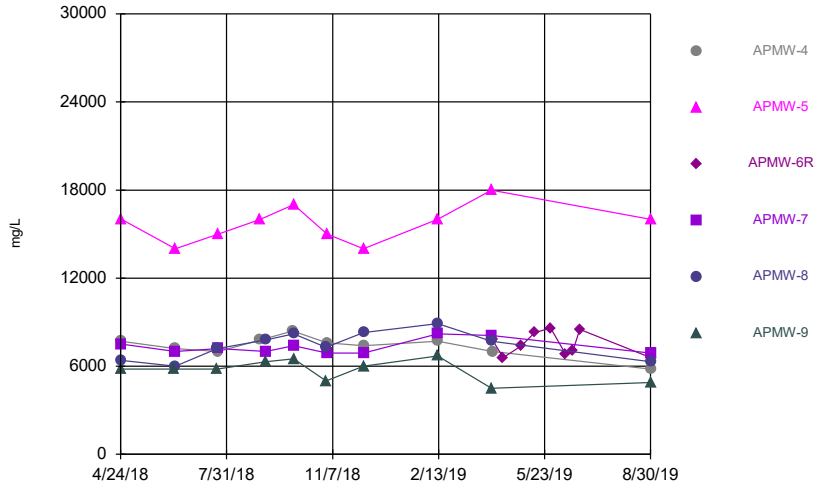


Constituent: Total Dissolved Solids Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 1/13/2020 1:06 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3
4/24/2018					4800	18000
4/25/2018	2500					
6/13/2018	2900					
6/14/2018					5700	13000
7/23/2018	3100					
7/24/2018					6000	18000
9/1/2018	2700				6300	20000
10/1/2018					6500	20000
10/2/2018	2900					
11/1/2018	2700					
11/2/2018					3800	19000
12/6/2018	2600					
12/7/2018					5300	13000
2/13/2019	2800				6200	16000
3/16/2019		120	150	3300		
3/27/2019		63 (D)	110 (D)	2900		
4/3/2019		100 (D)	150 (D)	3600		
4/4/2019	2500					
4/5/2019					5000	18000
4/15/2019				3300		
4/16/2019		110	150			
5/2/2019				3300		
5/3/2019		91	130			
5/14/2019		120	150	3600		
5/28/2019				3500		
5/29/2019		140	180			
6/12/2019		100	130			
8/29/2019		73	110			
8/30/2019	2200			3500	4400	18000

Time Series

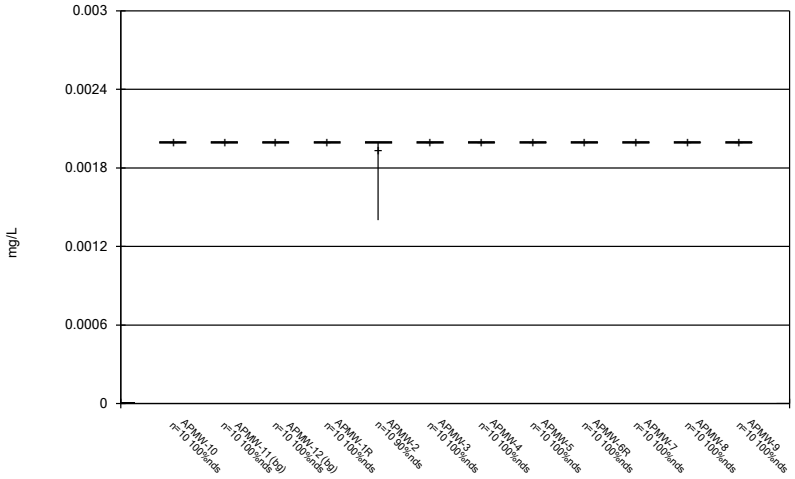
Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2020 1:07 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

	APMW-4	APMW-5	APMW-6R	APMW-7	APMW-8	APMW-9
4/24/2018	7700					
4/25/2018		16000		7500	6400	5800
6/13/2018						5800
6/14/2018	7200	14000		7000	6000	
7/23/2018					7200	5800
7/24/2018	7000	15000		7200		
9/1/2018	7800	16000				
9/6/2018				7000	7800	6300
10/1/2018	8400					
10/2/2018		17000		7400	8200	6500
11/1/2018					7300	5000
11/2/2018	7600	15000		6900		
12/6/2018	7400	14000		6900	8300	6000
2/13/2019	7700	16000		8200	8900	6700
4/4/2019		18000		8100	7700	4500
4/5/2019	7000		7800 (D)			
4/15/2019			6600			
5/2/2019			7400			
5/14/2019			8300			
5/29/2019			8600			
6/12/2019			6800			
6/19/2019			7100			
6/25/2019			8500			
8/30/2019	5800	16000	6600	6900	6300	4900

Box Plots

Box & Whiskers Plot

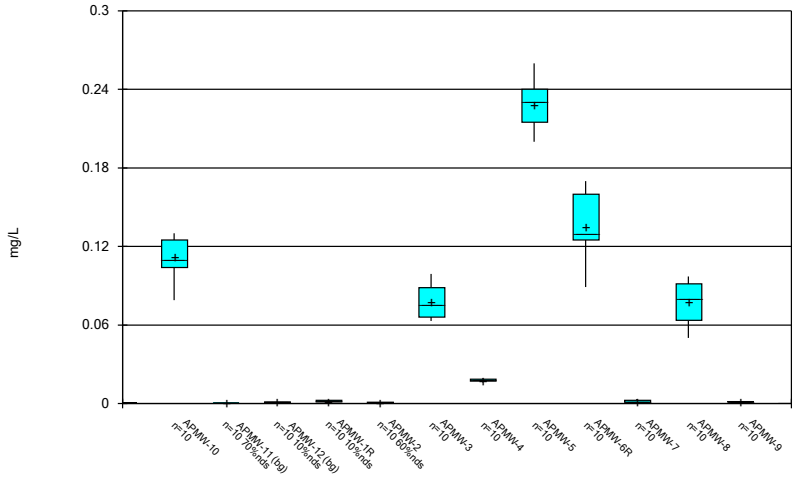


Constituent: Antimony Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Box & Whiskers Plot

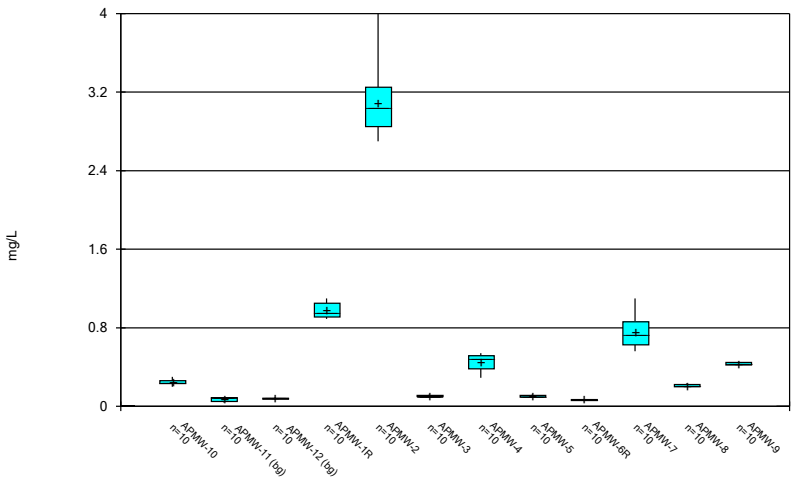


Constituent: Arsenic Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Box & Whiskers Plot

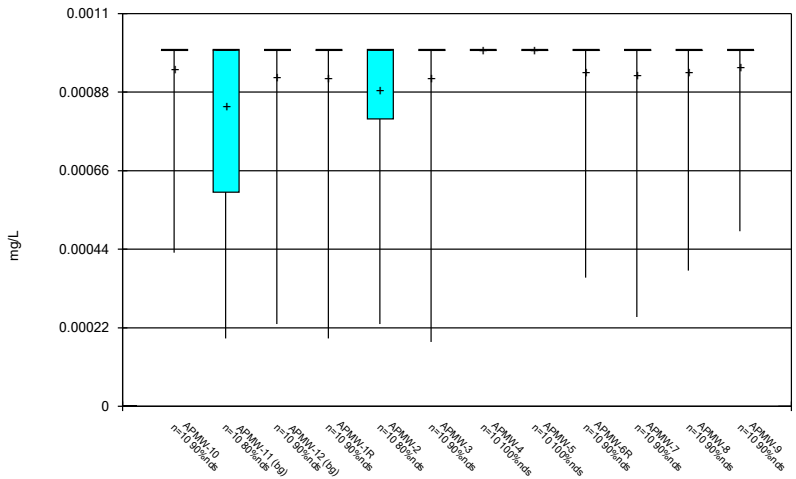


Constituent: Barium Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

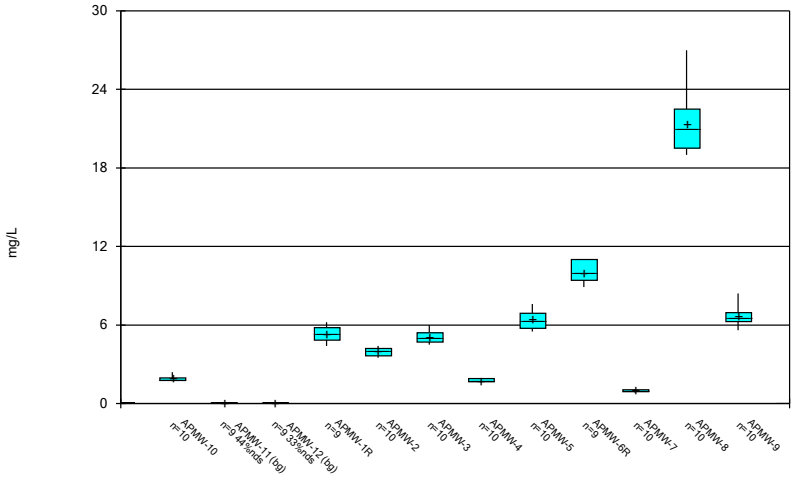
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

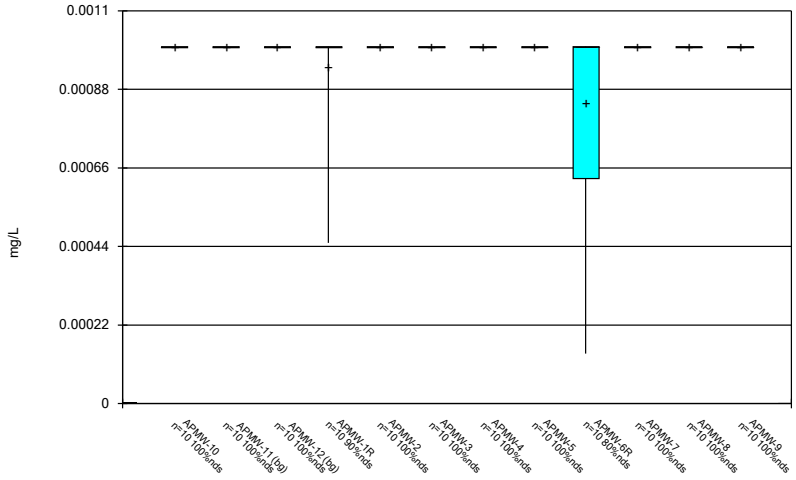
Box & Whiskers Plot



Constituent: Boron Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

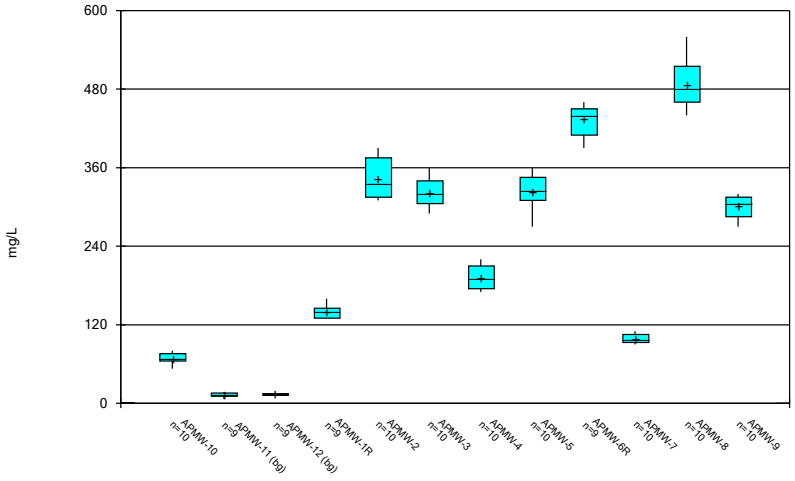
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

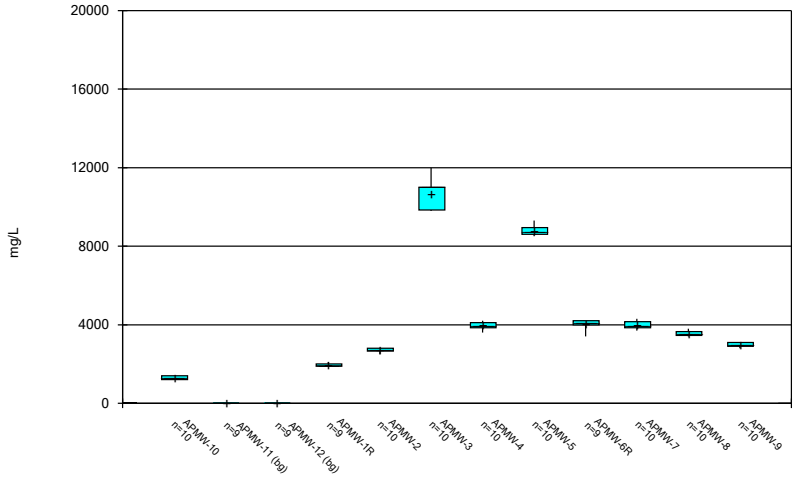
Box & Whiskers Plot



Constituent: Calcium Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

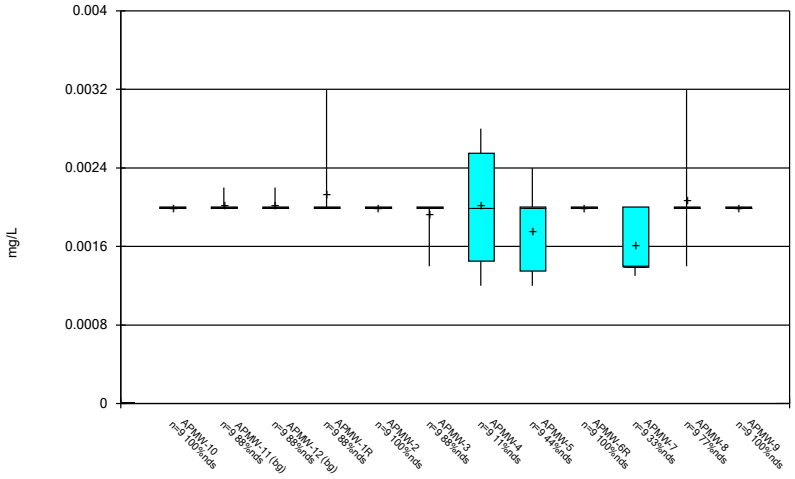
Box & Whiskers Plot



Constituent: Chloride Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Box & Whiskers Plot

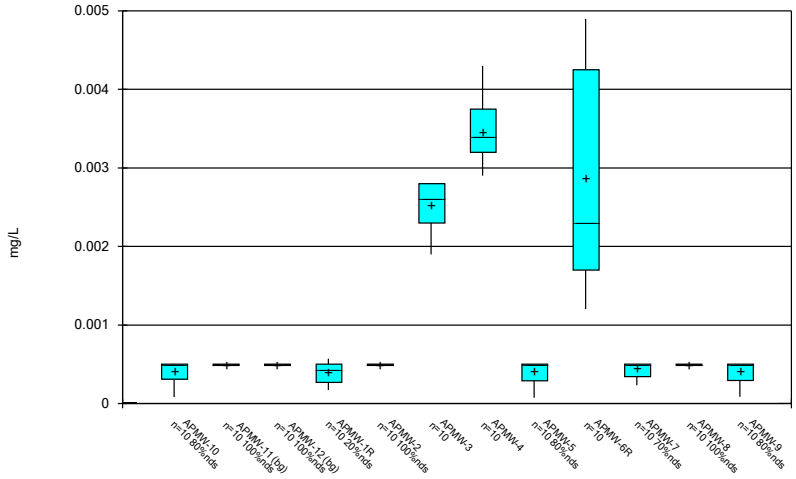


Constituent: Chromium Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Box & Whiskers Plot

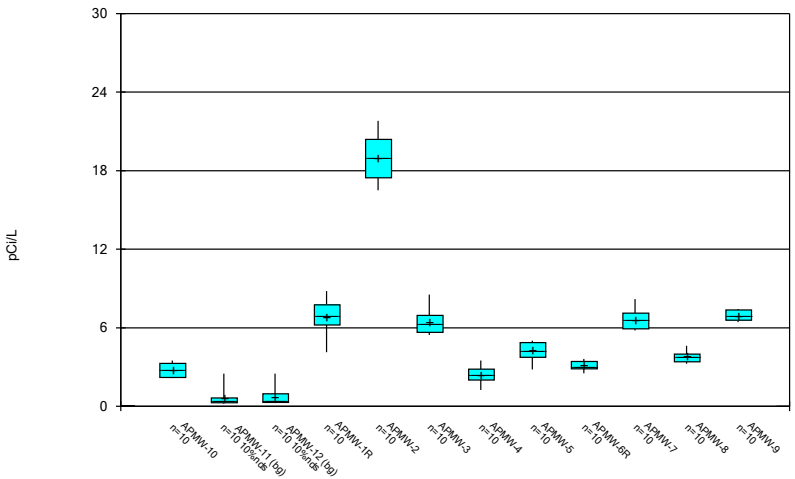


Constituent: Cobalt Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Box & Whiskers Plot

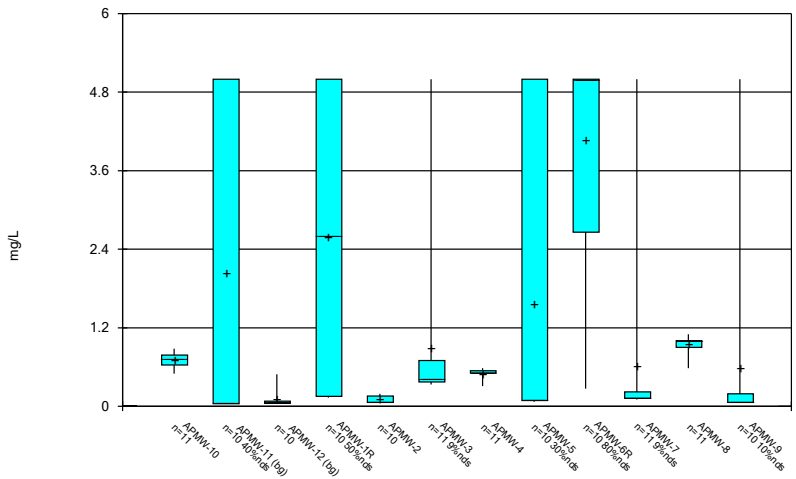


Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

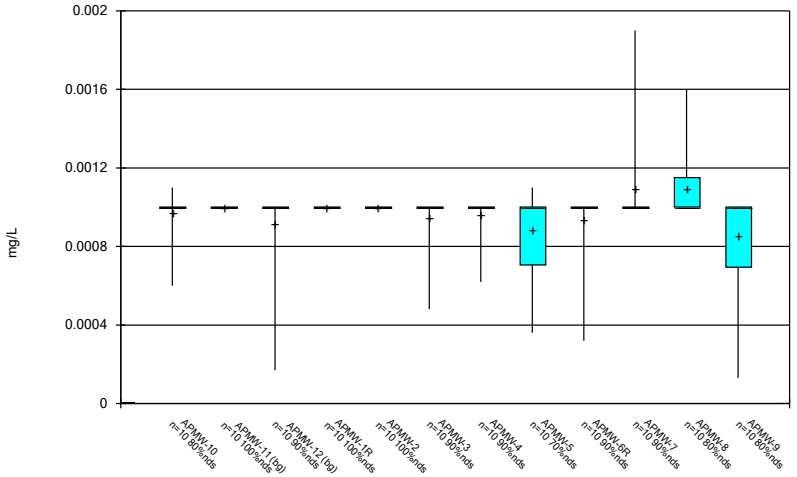
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Box & Whiskers Plot

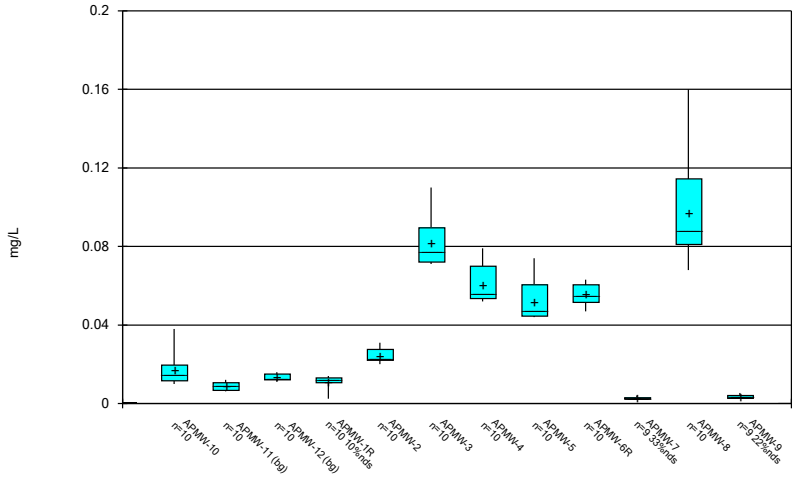


Constituent: Lead Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Box & Whiskers Plot

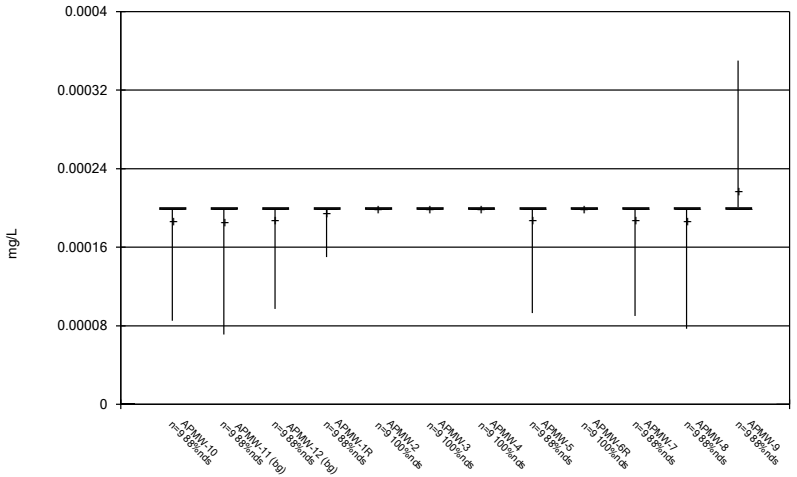


Constituent: Lithium Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Box & Whiskers Plot

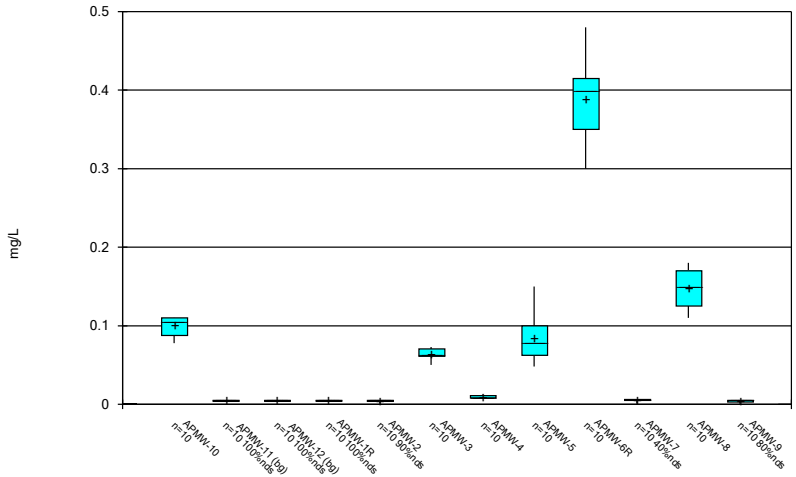


Constituent: Mercury Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

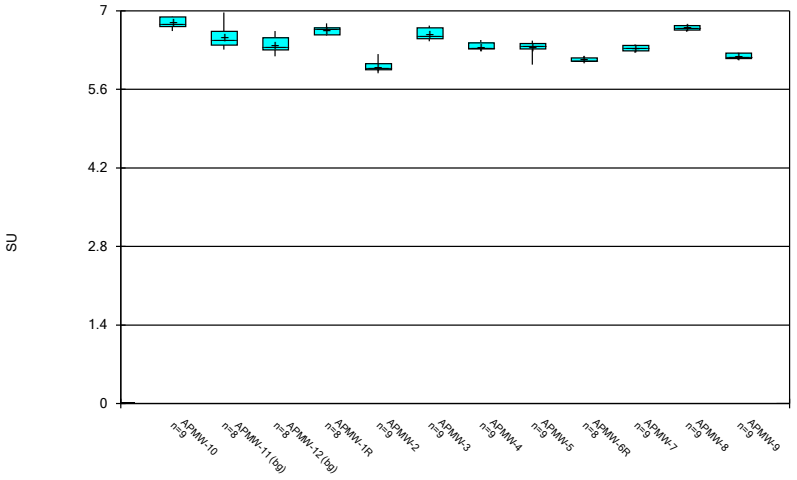
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Box & Whiskers Plot

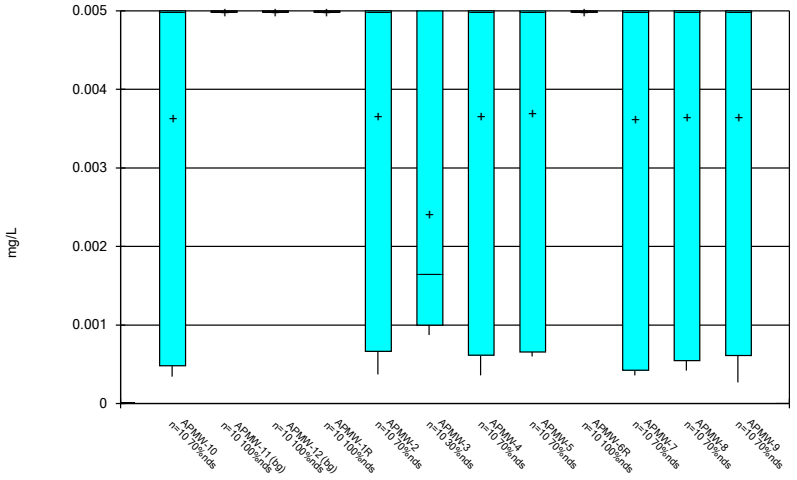


Constituent: pH Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Box & Whiskers Plot

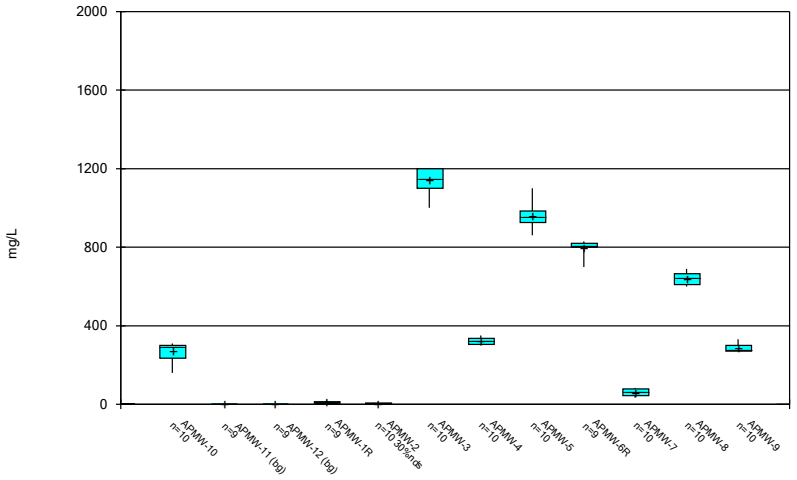


Constituent: Selenium Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

Box & Whiskers Plot

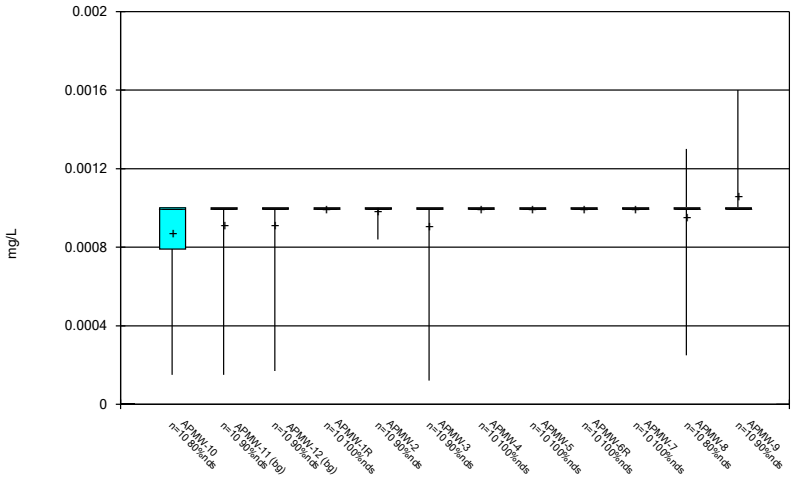


Constituent: Sulfate Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Sanitas™ v.9.6.24 Groundwater Stats Consulting. UG

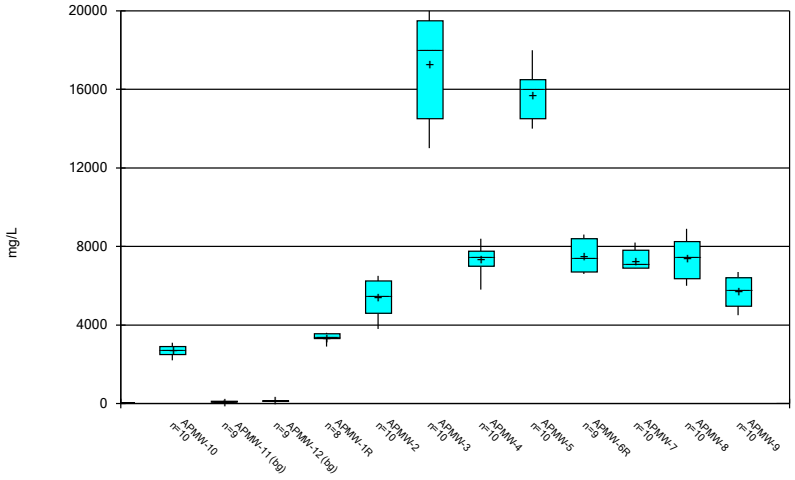
Box & Whiskers Plot



Constituent: Thallium Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2020 1:08 PM

Plant Watson Client: Southern Company Data: Plant Watson CCR

Semiannual Assessment Monitoring Event 2 -

Statistical Analysis

GROUNDWATER STATS CONSULTING

June 18, 2020

Southern Company Services
Attn: Ms. Lauren Parker
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Watson Ash Pond
Statistical Analysis – March 2020

Dear Ms. Parker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of data for the March 2020 sample event for Mississippi Power Company's Plant Watson Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) and follows the USEPA Unified Guidance (2009).

Sampling began for the CCR program in April 2018 for wells listed below except newer background wells APMW-11 and APMW-12, and downgradient well APMW-1R which is a replacement well for well APMW-1. Sampling began at these wells in March 2019. Additionally, sampling began in April 2019 for downgradient well APMW-6R which is a replacement well for APMW-6. At least 8 background samples have been collected at each of the groundwater monitoring wells.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** APMW-11 and APMW-12
- **Downgradient wells:** APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-7, APMW-8, APMW-9, APMW-10

The CCR program consists of the following constituents:

- **Appendix III** (Detection Monitoring) **-** boron, calcium, chloride, fluoride, pH, sulfate, and TDS;
- **Appendix IV** (Assessment Monitoring) **–** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium.

Time series plots and box plots are included for all constituents at upgradient and downgradient wells. The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

Data at all wells were evaluated in April 2019 for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Interwell prediction limits were selected as the most appropriate statistical method to evaluate the Appendix III parameters at this site. Power curves were submitted at that time and demonstrated 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.

Appendix III Parameters – Statistical Evaluation

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for all Appendix III constituents--boron, calcium, chloride, fluoride, pH, sulfate and TDS--using all available upgradient well data to develop background limits. The most recent observation at each downgradient well is compared to its respective background limit during each subsequent semi-annual sampling event.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) 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 a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary.

During the background screening conducted in April 2019, Tukey's box plot method was used to screen for outliers and the findings were submitted at that time. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph and the accompanying data pages display the flagged value in a lighter font. A summary of flagged values also follows this letter. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. Note that for fluoride, the most recent detection limit in some of the downgradient wells of 5.0 mg/L, when substituted for nondetects in all wells, would result in a prediction limit that is higher than most of the detected values in both upgradient and downgradient wells. Therefore, the historical detection limit of 2 mg/L was substituted at all wells. This will be re-evaluated during the next background update.

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. The confidence levels associated with parametric prediction limits are based on an overall false positive rate of 5%. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized where the highest background value is used to establish the upper prediction limit (and lowest value in the case of pH). The associated confidence level is dependent on the number of available background, future comparisons and resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (USEPA Unified Guidance, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects.
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

When interwell prediction limits were constructed based on the interwell methods discussed above, several statistically significant increases were identified. Summary tables of the prediction limit findings follow this letter.

The Sen's Slope/Mann Kendall trend test was performed on wells/constituents with prediction limit exceedances. Upgradient wells were included in this analysis for a general comparison of how the groundwater behaves upgradient of the facility relative to downgradient. When the entire record of data was evaluated for each well discussed above, no statistically significant increasing trends were noted at any of the downgradient wells. Statistically significant decreasing trends were noted for boron in downgradient well APMW-4; pH in upgradient well APMW-11; and sulfate in downgradient well APMW-10.

Evaluation of Appendix IV Parameters

Parametric tolerance limits were used to calculate background limits, when data followed a normal distribution, from pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage to determine the background limits. When data did not follow a normal or transformed-normal distribution, nonparametric tolerance limits were constructed and the confidence and coverage levels are dependent upon the number of background samples. These limits were compared to the Maximum Contaminant Levels (MCs) and CCR-Rule Specified Levels (RSL) in the GWPS table following this letter to determine the highest limit for use as the Groundwater Protection Standard (GWPS) in the Confidence Interval comparisons.

Confidence intervals were then constructed on downgradient wells for each of the Appendix IV parameters using the highest limit of either the MCL, RSL, or background as discussed above. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. Several exceedances were noted. A summary of the significant results follows this letter.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Watson Ash Pond. If you have any questions or comments, please feel free to contact me.

For Groundwater Stats Consulting,

Kristina L. Rayner
Groundwater Statistician

Interwell Prediction Limits - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	APMW-10	0.0755	n/a	3/17/2020	1.9	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-1R	0.0755	n/a	3/16/2020	7.2	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-2	0.0755	n/a	3/16/2020	3.7	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-3	0.0755	n/a	3/16/2020	5.3	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-4	0.0755	n/a	3/16/2020	1.6	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-5	0.0755	n/a	3/17/2020	6.6	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-6R	0.0755	n/a	3/17/2020	11	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-7	0.0755	n/a	3/17/2020	0.98	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-8	0.0755	n/a	3/17/2020	20	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-9	0.0755	n/a	3/17/2020	7.1	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-10	18.14	n/a	3/17/2020	59	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-1R	18.14	n/a	3/16/2020	200	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-2	18.14	n/a	3/16/2020	350	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-3	18.14	n/a	3/16/2020	310	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-4	18.14	n/a	3/16/2020	170	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-5	18.14	n/a	3/17/2020	330	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-6R	18.14	n/a	3/17/2020	420	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-7	18.14	n/a	3/17/2020	110	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-8	18.14	n/a	3/17/2020	470	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-9	18.14	n/a	3/17/2020	310	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	APMW-10	15	n/a	3/17/2020	1100	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-1R	15	n/a	3/16/2020	2600	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-2	15	n/a	3/16/2020	2500	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-3	15	n/a	3/16/2020	10000	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-4	15	n/a	3/16/2020	3400	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-5	15	n/a	3/17/2020	8900	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-6R	15	n/a	3/17/2020	6000	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-7	15	n/a	3/17/2020	4600	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-8	15	n/a	3/17/2020	3700	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-9	15	n/a	3/17/2020	3100	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
pH (SU)	APMW-10	6.851	5.943	3/17/2020	6.93	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-2	6.851	5.943	3/16/2020	5.91	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
Sulfate (mg/L)	APMW-10	3.832	n/a	3/17/2020	110	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-1R	3.832	n/a	3/16/2020	23	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-2	3.832	n/a	3/16/2020	16	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-3	3.832	n/a	3/16/2020	1100	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-4	3.832	n/a	3/16/2020	330	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-5	3.832	n/a	3/17/2020	910	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-6R	3.832	n/a	3/17/2020	590	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-7	3.832	n/a	3/17/2020	430	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-8	3.832	n/a	3/17/2020	680	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-9	3.832	n/a	3/17/2020	290	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-10	184.8	n/a	3/17/2020	2700	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-1R	184.8	n/a	3/16/2020	4500	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-2	184.8	n/a	3/16/2020	4400	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-3	184.8	n/a	3/16/2020	16000	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-4	184.8	n/a	3/16/2020	6100	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-5	184.8	n/a	3/17/2020	15000	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-6R	184.8	n/a	3/17/2020	7200	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-7	184.8	n/a	3/17/2020	6900	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2

Interwell Prediction Limits - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	**APMW-8**	**184.8**	**n/a**	**3/17/2020**	**6400**	**20**	**119.6**	**28.86**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**APMW-9**	**184.8**	**n/a**	**3/17/2020**	**5400**	**20**	**119.6**	**28.86**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**

Interwell Prediction Limits - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**APMW-10**	**0.0755**	**n/a**	**3/17/2020**	**1.9**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-1R**	**0.0755**	**n/a**	**3/16/2020**	**7.2**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-2**	**0.0755**	**n/a**	**3/16/2020**	**3.7**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-3**	**0.0755**	**n/a**	**3/16/2020**	**5.3**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-4**	**0.0755**	**n/a**	**3/16/2020**	**1.6**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-5**	**0.0755**	**n/a**	**3/17/2020**	**6.6**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-6R**	**0.0755**	**n/a**	**3/17/2020**	**11**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-7**	**0.0755**	**n/a**	**3/17/2020**	**0.98**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-8**	**0.0755**	**n/a**	**3/17/2020**	**20**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-9**	**0.0755**	**n/a**	**3/17/2020**	**7.1**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-10**	**18.14**	**n/a**	**3/17/2020**	**59**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-1R**	**18.14**	**n/a**	**3/16/2020**	**200**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-2**	**18.14**	**n/a**	**3/16/2020**	**350**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-3**	**18.14**	**n/a**	**3/16/2020**	**310**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-4**	**18.14**	**n/a**	**3/16/2020**	**170**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-5**	**18.14**	**n/a**	**3/17/2020**	**330**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-6R**	**18.14**	**n/a**	**3/17/2020**	**420**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-7**	**18.14**	**n/a**	**3/17/2020**	**110**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-8**	**18.14**	**n/a**	**3/17/2020**	**470**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-9**	**18.14**	**n/a**	**3/17/2020**	**310**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Chloride (mg/L)	**APMW-10**	**15**	**n/a**	**3/17/2020**	**1100**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-1R**	**15**	**n/a**	**3/16/2020**	**2600**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-2**	**15**	**n/a**	**3/16/2020**	**2500**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-3**	**15**	**n/a**	**3/16/2020**	**10000**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-4**	**15**	**n/a**	**3/16/2020**	**3400**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-5**	**15**	**n/a**	**3/17/2020**	**8900**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-6R**	**15**	**n/a**	**3/17/2020**	**6000**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-7**	**15**	**n/a**	**3/17/2020**	**4600**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-8**	**15**	**n/a**	**3/17/2020**	**3700**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-9**	**15**	**n/a**	**3/17/2020**	**3100**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	APMW-10	2	n/a	3/17/2020	0.38	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-1R	2	n/a	3/16/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-2	2	n/a	3/16/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-3	2	n/a	3/16/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-4	2	n/a	3/16/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-5	2	n/a	3/17/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-6R	2	n/a	3/17/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-7	2	n/a	3/17/2020	1.6	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-8	2	n/a	3/17/2020	0.52	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-9	2	n/a	3/17/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
pH (SU)	**APMW-10**	**6.851**	**5.943**	**3/17/2020**	**6.93**	**22**	**6.397**	**0.2038**	**0**	**None**	**No**	**0.0003761**	**Param Inter 1 of 2**
pH (SU)	APMW-1R	6.851	5.943	3/16/2020	6.51	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	**APMW-2**	**6.851**	**5.943**	**3/16/2020**	**5.91**	**22**	**6.397**	**0.2038**	**0**	**None**	**No**	**0.0003761**	**Param Inter 1 of 2**
pH (SU)	APMW-3	6.851	5.943	3/16/2020	6.61	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-4	6.851	5.943	3/16/2020	6.71	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-5	6.851	5.943	3/17/2020	6.32	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-6R	6.851	5.943	3/17/2020	5.97	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-7	6.851	5.943	3/17/2020	6.57	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-8	6.851	5.943	3/17/2020	6.69	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-9	6.851	5.943	8/30/2019	6.1	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	APMW-10	3.832	n/a	3/17/2020	110	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-1R	3.832	n/a	3/16/2020	23	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-2	3.832	n/a	3/16/2020	16	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-3	3.832	n/a	3/16/2020	1100	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-4	3.832	n/a	3/16/2020	330	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-5	3.832	n/a	3/17/2020	910	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-6R	3.832	n/a	3/17/2020	590	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-7	3.832	n/a	3/17/2020	430	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-8	3.832	n/a	3/17/2020	680	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-9	3.832	n/a	3/17/2020	290	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-10	184.8	n/a	3/17/2020	2700	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-1R	184.8	n/a	3/16/2020	4500	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-2	184.8	n/a	3/16/2020	4400	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-3	184.8	n/a	3/16/2020	16000	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-4	184.8	n/a	3/16/2020	6100	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-5	184.8	n/a	3/17/2020	15000	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-6R	184.8	n/a	3/17/2020	7200	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-7	184.8	n/a	3/17/2020	6900	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-8	184.8	n/a	3/17/2020	6400	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-9	184.8	n/a	3/17/2020	5400	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2

Trend Test Summary - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:12 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**APMW-4**	**-0.1708**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**APMW-11 (bg)**	**-0.8652**	**-42**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**APMW-10**	**-94.94**	**-38**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:12 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	APMW-10	0.1055	17	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-11 (bg)	0.0238	15	30	No	10	40	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-12 (bg)	0.03395	24	30	No	10	30	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-1R	2.205	24	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-2	-0.2744	-21	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-3	-0.237	-9	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	**APMW-4**	**-0.1708**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	APMW-5	-0.5781	-12	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-6R	2.664	23	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-7	-0.01213	-7	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-8	-1.738	-24	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-9	0	0	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-10	-10.28	-28	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-11 (bg)	-15.21	-30	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-12 (bg)	0	-9	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-1R	61.86	20	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-2	-12.15	-5	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-3	-14.96	-17	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-4	-24.77	-32	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-5	-22.26	-22	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-6R	55.3	20	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-7	0	-2	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-8	-59.51	-32	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-9	-7.419	-13	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-10	-136.7	-29	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-11 (bg)	-0.5229	-9	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-12 (bg)	0	-7	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-1R	474	27	30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-2	-165.2	-29	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-3	-442.4	-19	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-4	-316.5	-29	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-5	106.1	8	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-6R	890.2	14	30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-7	228.1	11	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-8	0	3	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-9	0	8	34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	APMW-10	0.1225	31	38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	**APMW-11 (bg)**	**-0.8652**	**-42**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	APMW-12 (bg)	-0.2387	-17	-34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	APMW-2	0.06448	16	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**APMW-10**	**-94.94**	**-38**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	APMW-11 (bg)	2.959	22	30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-12 (bg)	0.4837	3	30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-1R	10.68	9	30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-2	3.763	13	34	No	11	27.27	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-3	0	-15	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-4	0	-1	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-5	-5.275	-2	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-6R	0	-6	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-7	24.61	18	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-8	-16.22	-7	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-9	7.419	15	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-10	-272.4	-18	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-11 (bg)	-5.229	-3	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-12 (bg)	-11.44	-9	-30	No	10	0	n/a	n/a	0.01	NP

Trend Test Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:12 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	APMW-1R	1133	17	25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-2	-740.2	-12	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-3	0	-6	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-4	-1018	-21	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-5	0	7	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-6R	-228.1	-2	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-7	-82.58	-12	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-8	561.5	10	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-9	-227.1	-8	-34	No	11	0	n/a	n/a	0.01	NP

Tolerance Limit Summary Table - Appendix IV

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:06 PM

Constituent	Well	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.002	22	n/a	n/a	100	n/a	n/a	0.3235	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.001262	22	5.5e-7	4.5e-7	40.91	Kaplan-Meier	x^2	0.05	Inter
Barium (mg/L)	n/a	0.109	22	0.07155	0.01595	0	None	No	0.05	Inter
Beryllium (mg/L)	n/a	0.001	22	n/a	n/a	86.36	n/a	n/a	0.3235	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.001	22	n/a	n/a	100	n/a	n/a	0.3235	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0022	18	n/a	n/a	88.89	n/a	n/a	0.3972	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0005	22	n/a	n/a	100	n/a	n/a	0.3235	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	2.492	22	-0.6829	0.6791	9.091	None	ln(x)	0.05	Inter
Fluoride (mg/L)	n/a	0.49	22	n/a	n/a	22.73	n/a	n/a	0.3235	NP Inter(normality)
Lead (mg/L)	n/a	0.001	22	n/a	n/a	95.45	n/a	n/a	0.3235	NP Inter(NDs)
Lithium (mg/L)	n/a	0.01879	22	0.01157	0.003075	0	None	No	0.05	Inter
Mercury (mg/L)	n/a	0.0002	18	n/a	n/a	88.89	n/a	n/a	0.3972	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.005	22	n/a	n/a	100	n/a	n/a	0.3235	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	22	n/a	n/a	100	n/a	n/a	0.3235	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	22	n/a	n/a	90.91	n/a	n/a	0.3235	NP Inter(NDs)

WATSON ASH POND GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.002	0.006
Arsenic, Total (mg/L)	0.01		0.0013	0.01
Barium, Total (mg/L)	2		0.11	2
Beryllium, Total (mg/L)	0.004		0.001	0.004
Cadmium, Total (mg/L)	0.005		0.001	0.005
Chromium, Total (mg/L)	0.1		0.0022	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0005	0.006
Combined Radium, Total (pCi/L)	5		2.49	5
Fluoride, Total (mg/L)	4		0.49	4
Lead, Total (mg/L)	0.015		0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.019	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.005	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

GWPS = Groundwater Protection Standard

MCL = Maximum Contaminant Level

Confidence Interval Summary - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	APMW-10	0.1229	0.09711	0.01	Yes	11	0.11	0.01547	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-3	0.08637	0.06709	0.01	Yes	11	0.07673	0.01157	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-4	0.01848	0.01697	0.01	Yes	11	0.01773	0.0009045	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-5	0.2404	0.2123	0.01	Yes	11	0.2264	0.0169	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-6R	0.1607	0.1173	0.01	Yes	11	0.139	0.02606	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-8	0.08964	0.05927	0.01	Yes	11	0.07445	0.01822	0	None	No	0.01	Param.
Barium (mg/L)	APMW-2	3.387	2.827	2	Yes	11	3.109	0.3477	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-1R	8.55	5.815	5	Yes	11	7.183	1.641	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-2	20.23	17.66	5	Yes	11	18.95	1.541	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-3	7.157	5.705	5	Yes	11	6.431	0.8712	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-7	7.161	5.828	5	Yes	11	6.495	0.7994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-9	7.26	6.642	5	Yes	11	6.951	0.3708	0	None	No	0.01	Param.
Lithium (mg/L)	APMW-3	0.091	0.071	0.04	Yes	11	0.08027	0.01208	0	None	No	0.006	NP (normality)
Lithium (mg/L)	APMW-4	0.077	0.053	0.04	Yes	11	0.05982	0.009631	0	None	No	0.006	NP (normality)
Lithium (mg/L)	APMW-5	0.069	0.044	0.04	Yes	11	0.051	0.01052	0	None	No	0.006	NP (normality)
Lithium (mg/L)	APMW-6R	0.05973	0.05173	0.04	Yes	11	0.05573	0.004798	0	None	No	0.01	Param.
Lithium (mg/L)	APMW-8	0.114	0.07616	0.04	Yes	11	0.09591	0.02648	0	None	ln(x)	0.01	Param.
Molybdenum (mg/L)	APMW-6R	0.4403	0.3524	0.1	Yes	11	0.3964	0.05278	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-8	0.1658	0.1204	0.1	Yes	11	0.1431	0.02722	0	None	No	0.01	Param.

Confidence Interval Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	APMW-10	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-1R	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-2	0.002	0.002	0.006	No	11	0.001945	0.0001809	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-3	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-4	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-5	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-6R	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-7	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-8	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-9	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Arsenic (mg/L)	**APMW-10**	**0.1229**	**0.09711**	**0.01**	**Yes**	**11**	**0.11**	**0.01547**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-1R	0.002315	0.001131	0.01	No	11	0.001723	0.0007104	9.091	None	No	0.01	Param.
Arsenic (mg/L)	APMW-2	0.00094	0.0005	0.01	No	11	0.0006145	0.0002519	63.64	None	No	0.006	NP (normality)
Arsenic (mg/L)	**APMW-3**	**0.08637**	**0.06709**	**0.01**	**Yes**	**11**	**0.07673**	**0.01157**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-4**	**0.01848**	**0.01697**	**0.01**	**Yes**	**11**	**0.01773**	**0.0009045**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-5**	**0.2404**	**0.2123**	**0.01**	**Yes**	**11**	**0.2264**	**0.0169**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-6R**	**0.1607**	**0.1173**	**0.01**	**Yes**	**11**	**0.139**	**0.02606**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-7	0.002274	0.0007438	0.01	No	11	0.001509	0.0009184	0	None	No	0.01	Param.
Arsenic (mg/L)	**APMW-8**	**0.08964**	**0.05927**	**0.01**	**Yes**	**11**	**0.07445**	**0.01822**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-9	0.001455	0.001073	0.01	No	11	0.001264	0.0002292	0	None	No	0.01	Param.
Barium (mg/L)	APMW-10	0.266	0.2249	2	No	11	0.2455	0.02464	0	None	No	0.01	Param.
Barium (mg/L)	APMW-1R	1.078	0.9143	2	No	11	0.9964	0.09852	0	None	No	0.01	Param.
Barium (mg/L)	**APMW-2**	**3.387**	**2.827**	**2**	**Yes**	**11**	**3.109**	**0.3477**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Barium (mg/L)	APMW-3	0.11	0.1	2	No	11	0.1034	0.006961	0	None	No	0.006	NP (normality)
Barium (mg/L)	APMW-4	0.5167	0.3561	2	No	11	0.4364	0.09636	0	None	No	0.01	Param.
Barium (mg/L)	APMW-5	0.1089	0.09327	2	No	11	0.1011	0.009386	0	None	No	0.01	Param.
Barium (mg/L)	APMW-6R	0.06834	0.05603	2	No	11	0.06218	0.007387	0	None	No	0.01	Param.
Barium (mg/L)	APMW-7	0.8729	0.5962	2	No	11	0.7345	0.166	0	None	No	0.01	Param.
Barium (mg/L)	APMW-8	0.2196	0.2022	2	No	11	0.2109	0.01044	0	None	No	0.01	Param.
Barium (mg/L)	APMW-9	0.45	0.42	2	No	11	0.4373	0.02102	0	None	No	0.006	NP (normality)
Beryllium (mg/L)	APMW-10	0.001	0.001	0.004	No	11	0.0009482	0.0001719	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-1R	0.001	0.001	0.004	No	11	0.0009264	0.0002442	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-2	0.001	0.00061	0.004	No	11	0.0008945	0.0002495	81.82	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-3	0.001	0.001	0.004	No	11	0.0009255	0.0002472	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-4	0.001	0.001	0.004	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-5	0.001	0.001	0.004	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-6R	0.001	0.001	0.004	No	11	0.0009418	0.000193	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-7	0.001	0.001	0.004	No	11	0.0009318	0.0002261	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-8	0.001	0.001	0.004	No	11	0.0009436	0.0001869	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-9	0.001	0.001	0.004	No	11	0.0009536	0.0001538	90.91	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-10	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-1R	0.001	0.001	0.005	No	11	0.00095	0.0001658	90.91	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-2	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-3	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-4	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-5	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-6R	0.001	0.00026	0.005	No	11	0.0008545	0.0003247	81.82	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-7	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-8	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-9	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Chromium (mg/L)	APMW-10	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-1R	0.0032	0.002	0.1	No	9	0.002133	0.0004	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-2	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-3	0.002	0.0014	0.1	No	9	0.001933	0.0002	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-4	0.00257	0.001474	0.1	No	9	0.002022	0.0005674	11.11	None	No	0.01	Param.

Confidence Interval Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	APMW-5	0.002607	0.001358	0.1	No	9	0.001756	0.0004126	44.44	Cohen`s	No	0.01	Param.
Chromium (mg/L)	APMW-6R	0.002	0.002	0.1	No	9	0.002	0	100	Cohen`s	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-7	0.002	0.0013	0.1	No	9	0.001622	0.0003032	33.33	None	No	0.002	NP (normality)
Chromium (mg/L)	APMW-8	0.0032	0.0014	0.1	No	9	0.002067	0.000469	77.78	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-9	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Cobalt (mg/L)	APMW-10	0.0005	0.00012	0.006	No	11	0.0004275	0.0001616	81.82	None	No	0.006	NP (NDs)
Cobalt (mg/L)	APMW-1R	0.0005	0.00017	0.006	No	11	0.0004073	0.0001299	27.27	None	No	0.006	NP (Cohens/xfrm)
Cobalt (mg/L)	APMW-2	0.0005	0.0005	0.006	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	APMW-3	0.002744	0.002256	0.006	No	11	0.0025	0.0002933	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-4	0.003831	0.003169	0.006	No	11	0.0035	0.0003975	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-5	0.0005	0.000079	0.006	No	11	0.0004231	0.0001711	81.82	None	No	0.006	NP (NDs)
Cobalt (mg/L)	APMW-6R	0.003925	0.001821	0.006	No	11	0.002873	0.001263	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-7	0.0005	0.00024	0.006	No	11	0.0004227	0.0001193	63.64	None	No	0.006	NP (normality)
Cobalt (mg/L)	APMW-8	0.0005	0.0005	0.006	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	APMW-9	0.0005	0.000089	0.006	No	11	0.0004248	0.0001673	81.82	None	No	0.006	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	APMW-10	3.183	2.405	5	No	11	2.794	0.467	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-1R**	**8.55**	**5.815**	**5**	**Yes**	**11**	**7.183**	**1.641**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**APMW-2**	**20.23**	**17.66**	**5**	**Yes**	**11**	**18.95**	**1.541**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**APMW-3**	**7.157**	**5.705**	**5**	**Yes**	**11**	**6.431**	**0.8712**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	APMW-4	2.825	1.795	5	No	11	2.31	0.6182	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-5	4.755	3.687	5	No	11	4.221	0.6409	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-6R	3.375	2.849	5	No	11	3.112	0.3153	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-7**	**7.161**	**5.828**	**5**	**Yes**	**11**	**6.495**	**0.7994**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	APMW-8	4.063	3.398	5	No	11	3.731	0.399	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-9**	**7.26**	**6.642**	**5**	**Yes**	**11**	**6.951**	**0.3708**	**0**	**None**	**No**	**0.01**	**Param.**
Fluoride (mg/L)	APMW-10	0.7867	0.5666	4	No	12	0.6767	0.1402	0	None	No	0.01	Param.
Fluoride (mg/L)	APMW-1R	0.5	0.14	4	No	11	0.35	0.174	54.55	None	No	0.006	NP (normality)
Fluoride (mg/L)	APMW-2	0.1816	0.05758	4	No	11	0.1336	0.1306	9.091	None	ln(x)	0.01	Param.
Fluoride (mg/L)	APMW-3	0.606	0.3723	4	No	12	0.4892	0.1489	16.67	None	No	0.01	Param.
Fluoride (mg/L)	APMW-4	0.5468	0.4751	4	No	12	0.505	0.0664	8.333	None	x^4	0.01	Param.
Fluoride (mg/L)	APMW-5	0.5	0.09	4	No	11	0.24	0.2063	36.36	None	No	0.006	NP (normality)
Fluoride (mg/L)	APMW-6R	0.5	0.32	4	No	11	0.4627	0.08368	81.82	None	No	0.006	NP (NDs)
Fluoride (mg/L)	APMW-7	0.5	0.11	4	No	12	0.3092	0.4265	8.333	None	No	0.01	NP (normality)
Fluoride (mg/L)	APMW-8	1.047	0.822	4	No	12	0.9175	0.1855	0	None	x^3	0.01	Param.
Fluoride (mg/L)	APMW-9	0.5	0.06	4	No	11	0.1664	0.1724	18.18	None	No	0.006	NP (normality)
Lead (mg/L)	APMW-10	0.001	0.001	0.015	No	11	0.0009727	0.0001272	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-1R	0.001	0.001	0.015	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-2	0.001	0.001	0.015	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-3	0.001	0.001	0.015	No	11	0.0009527	0.0001568	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-4	0.001	0.001	0.015	No	11	0.0009655	0.0001146	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-5	0.001	0.00041	0.015	No	11	0.0008973	0.0002553	72.73	None	No	0.006	NP (normality)
Lead (mg/L)	APMW-6R	0.001	0.001	0.015	No	11	0.0009382	0.000205	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-7	0.001	0.001	0.015	No	11	0.001082	0.0002714	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-8	0.0013	0.001	0.015	No	11	0.001082	0.000194	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-9	0.001	0.00039	0.015	No	11	0.0008655	0.0003049	81.82	None	No	0.006	NP (NDs)
Lithium (mg/L)	APMW-10	0.02208	0.01148	0.04	No	11	0.017	0.007694	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	APMW-1R	0.01314	0.01014	0.04	No	11	0.01123	0.003109	9.091	None	x^3	0.01	Param.
Lithium (mg/L)	APMW-2	0.02782	0.02163	0.04	No	11	0.02473	0.003717	0	None	No	0.01	Param.
Lithium (mg/L)	**APMW-3**	**0.091**	**0.071**	**0.04**	**Yes**	**11**	**0.08027**	**0.01208**	**0**	**None**	**No**	**0.006**	**NP (normality)**
Lithium (mg/L)	**APMW-4**	**0.077**	**0.053**	**0.04**	**Yes**	**11**	**0.05982**	**0.009631**	**0**	**None**	**No**	**0.006**	**NP (normality)**
Lithium (mg/L)	**APMW-5**	**0.069**	**0.044**	**0.04**	**Yes**	**11**	**0.051**	**0.01052**	**0**	**None**	**No**	**0.006**	**NP (normality)**
Lithium (mg/L)	**APMW-6R**	**0.05973**	**0.05173**	**0.04**	**Yes**	**11**	**0.05573**	**0.004798**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	APMW-7	0.004	0.0021	0.04	No	10	0.0031	0.001523	30	None	No	0.011	NP (Cohens/xfrm)
Lithium (mg/L)	**APMW-8**	**0.114**	**0.07616**	**0.04**	**Yes**	**11**	**0.09591**	**0.02648**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Lithium (mg/L)	APMW-9	0.0053	0.0025	0.04	No	10	0.00388	0.001621	20	None	No	0.011	NP (Cohens/xfrm)

Confidence Interval Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	APMW-10	0.0002	0.000085	0.002	No	9	0.0001872	0.00003833	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-1R	0.0002	0.00015	0.002	No	9	0.0001944	0.00001667	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-2	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-3	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-4	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-5	0.0002	0.000093	0.002	No	9	0.0001881	0.00003567	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-6R	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-7	0.0002	0.00009	0.002	No	9	0.0001878	0.00003667	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-8	0.0002	0.000077	0.002	No	9	0.0001863	0.000041	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-9	0.00035	0.0002	0.002	No	9	0.0002167	0.00005	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	APMW-10	0.11	0.081	0.1	No	11	0.09855	0.01283	0	None	No	0.006	NP (normality)
Molybdenum (mg/L)	APMW-1R	0.005	0.005	0.1	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	APMW-2	0.005	0.005	0.1	No	11	0.004617	0.001269	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	APMW-3	0.07038	0.05907	0.1	No	11	0.06473	0.006784	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-4	0.01061	0.008246	0.1	No	11	0.009427	0.001417	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-5	0.1063	0.0608	0.1	No	11	0.08355	0.0273	0	None	No	0.01	Param.
Molybdenum (mg/L)	**APMW-6R**	**0.4403**	**0.3524**	**0.1**	**Yes**	**11**	**0.3964**	**0.05278**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	APMW-7	0.0063	0.0047	0.1	No	11	0.005087	0.001532	45.45	None	No	0.006	NP (Cohens/xfrm)
Molybdenum (mg/L)	**APMW-8**	**0.1658**	**0.1204**	**0.1**	**Yes**	**11**	**0.1431**	**0.02722**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	APMW-9	0.005	0.00093	0.1	No	11	0.004257	0.001652	81.82	None	No	0.006	NP (NDs)
Selenium (mg/L)	APMW-10	0.005	0.00035	0.05	No	11	0.003755	0.002134	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-1R	0.005	0.005	0.05	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Selenium (mg/L)	APMW-2	0.005	0.00061	0.05	No	11	0.003791	0.002072	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-3	0.005	0.001	0.05	No	11	0.002652	0.001889	36.36	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-4	0.005	0.00055	0.05	No	11	0.003781	0.002089	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-5	0.005	0.0006	0.05	No	11	0.00381	0.002038	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-6R	0.005	0.005	0.05	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Selenium (mg/L)	APMW-7	0.005	0.00039	0.05	No	11	0.003746	0.002147	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-8	0.005	0.00049	0.05	No	11	0.003774	0.002101	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-9	0.005	0.00041	0.05	No	11	0.003772	0.002107	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	APMW-10	0.001	0.00058	0.002	No	11	0.0008845	0.0002743	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-1R	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-2	0.001	0.001	0.002	No	11	0.0009855	0.00004824	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-3	0.001	0.001	0.002	No	11	0.00092	0.0002653	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-4	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-5	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-6R	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-7	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-8	0.001	0.001	0.002	No	11	0.0009591	0.0002518	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-9	0.001	0.001	0.002	No	11	0.001055	0.0001809	90.91	None	No	0.006	NP (NDs)

Outlier Summary

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:32 PM

	APMW-2 Fluoride (mg/L)	APMW-5 Fluoride (mg/L)	APMW-9 Fluoride (mg/L)	APMW-7 Lithium (mg/L)	APMW-9 Lithium (mg/L)
11/1/2018					0.018 (o)
11/2/2018				0.014 (o)	
12/6/2018		1.4 (o)	0.21 (o)		
12/7/2018	4.3 (o)				

Prediction Limits - Appendix III

Interwell Prediction Limits - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	APMW-10	0.0755	n/a	3/17/2020	1.9	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-1R	0.0755	n/a	3/16/2020	7.2	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-2	0.0755	n/a	3/16/2020	3.7	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-3	0.0755	n/a	3/16/2020	5.3	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-4	0.0755	n/a	3/16/2020	1.6	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-5	0.0755	n/a	3/17/2020	6.6	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-6R	0.0755	n/a	3/17/2020	11	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-7	0.0755	n/a	3/17/2020	0.98	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-8	0.0755	n/a	3/17/2020	20	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Boron (mg/L)	APMW-9	0.0755	n/a	3/17/2020	7.1	20	0.192	0.03665	35	Kaplan-Meier	sqrt(x)	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-10	18.14	n/a	3/17/2020	59	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-1R	18.14	n/a	3/16/2020	200	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-2	18.14	n/a	3/16/2020	350	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-3	18.14	n/a	3/16/2020	310	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-4	18.14	n/a	3/16/2020	170	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-5	18.14	n/a	3/17/2020	330	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-6R	18.14	n/a	3/17/2020	420	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-7	18.14	n/a	3/17/2020	110	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-8	18.14	n/a	3/17/2020	470	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	APMW-9	18.14	n/a	3/17/2020	310	20	12.91	2.317	0	None	No	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	APMW-10	15	n/a	3/17/2020	1100	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-1R	15	n/a	3/16/2020	2600	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-2	15	n/a	3/16/2020	2500	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-3	15	n/a	3/16/2020	10000	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-4	15	n/a	3/16/2020	3400	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-5	15	n/a	3/17/2020	8900	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-6R	15	n/a	3/17/2020	6000	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-7	15	n/a	3/17/2020	4600	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-8	15	n/a	3/17/2020	3700	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
Chloride (mg/L)	APMW-9	15	n/a	3/17/2020	3100	20	n/a	n/a	0	n/a	n/a	0.003755	NP Inter (normality) 1 of 2
pH (SU)	APMW-10	6.851	5.943	3/17/2020	6.93	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-2	6.851	5.943	3/16/2020	5.91	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
Sulfate (mg/L)	APMW-10	3.832	n/a	3/17/2020	110	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-1R	3.832	n/a	3/16/2020	23	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-2	3.832	n/a	3/16/2020	16	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-3	3.832	n/a	3/16/2020	1100	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-4	3.832	n/a	3/16/2020	330	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-5	3.832	n/a	3/17/2020	910	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-6R	3.832	n/a	3/17/2020	590	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-7	3.832	n/a	3/17/2020	430	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-8	3.832	n/a	3/17/2020	680	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-9	3.832	n/a	3/17/2020	290	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-10	184.8	n/a	3/17/2020	2700	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-1R	184.8	n/a	3/16/2020	4500	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-2	184.8	n/a	3/16/2020	4400	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-3	184.8	n/a	3/16/2020	16000	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-4	184.8	n/a	3/16/2020	6100	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-5	184.8	n/a	3/17/2020	15000	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-6R	184.8	n/a	3/17/2020	7200	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-7	184.8	n/a	3/17/2020	6900	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2

Interwell Prediction Limits - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	**APMW-8**	**184.8**	**n/a**	**3/17/2020**	**6400**	**20**	**119.6**	**28.86**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**APMW-9**	**184.8**	**n/a**	**3/17/2020**	**5400**	**20**	**119.6**	**28.86**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**

Interwell Prediction Limits - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**APMW-10**	**0.0755**	**n/a**	**3/17/2020**	**1.9**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-1R**	**0.0755**	**n/a**	**3/16/2020**	**7.2**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-2**	**0.0755**	**n/a**	**3/16/2020**	**3.7**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-3**	**0.0755**	**n/a**	**3/16/2020**	**5.3**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-4**	**0.0755**	**n/a**	**3/16/2020**	**1.6**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-5**	**0.0755**	**n/a**	**3/17/2020**	**6.6**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-6R**	**0.0755**	**n/a**	**3/17/2020**	**11**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-7**	**0.0755**	**n/a**	**3/17/2020**	**0.98**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-8**	**0.0755**	**n/a**	**3/17/2020**	**20**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Boron (mg/L)	**APMW-9**	**0.0755**	**n/a**	**3/17/2020**	**7.1**	**20**	**0.192**	**0.03665**	**35**	**Kaplan-Meier**	**sqrt(x)**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-10**	**18.14**	**n/a**	**3/17/2020**	**59**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-1R**	**18.14**	**n/a**	**3/16/2020**	**200**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-2**	**18.14**	**n/a**	**3/16/2020**	**350**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-3**	**18.14**	**n/a**	**3/16/2020**	**310**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-4**	**18.14**	**n/a**	**3/16/2020**	**170**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-5**	**18.14**	**n/a**	**3/17/2020**	**330**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-6R**	**18.14**	**n/a**	**3/17/2020**	**420**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-7**	**18.14**	**n/a**	**3/17/2020**	**110**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-8**	**18.14**	**n/a**	**3/17/2020**	**470**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Calcium (mg/L)	**APMW-9**	**18.14**	**n/a**	**3/17/2020**	**310**	**20**	**12.91**	**2.317**	**0**	**None**	**No**	**0.0007523**	**Param Inter 1 of 2**
Chloride (mg/L)	**APMW-10**	**15**	**n/a**	**3/17/2020**	**1100**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-1R**	**15**	**n/a**	**3/16/2020**	**2600**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-2**	**15**	**n/a**	**3/16/2020**	**2500**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-3**	**15**	**n/a**	**3/16/2020**	**10000**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-4**	**15**	**n/a**	**3/16/2020**	**3400**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-5**	**15**	**n/a**	**3/17/2020**	**8900**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-6R**	**15**	**n/a**	**3/17/2020**	**6000**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-7**	**15**	**n/a**	**3/17/2020**	**4600**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-8**	**15**	**n/a**	**3/17/2020**	**3700**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**APMW-9**	**15**	**n/a**	**3/17/2020**	**3100**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003755**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	APMW-10	2	n/a	3/17/2020	0.38	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-1R	2	n/a	3/16/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-2	2	n/a	3/16/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-3	2	n/a	3/16/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-4	2	n/a	3/16/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-5	2	n/a	3/17/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-6R	2	n/a	3/17/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-7	2	n/a	3/17/2020	1.6	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-8	2	n/a	3/17/2020	0.52	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
Fluoride (mg/L)	APMW-9	2	n/a	3/17/2020	2ND	22	n/a	n/a	22.73	n/a	n/a	0.00328	NP Inter (normality) 1 of 2
pH (SU)	**APMW-10**	**6.851**	**5.943**	**3/17/2020**	**6.93**	**22**	**6.397**	**0.2038**	**0**	**None**	**No**	**0.0003761**	**Param Inter 1 of 2**
pH (SU)	APMW-1R	6.851	5.943	3/16/2020	6.51	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	**APMW-2**	**6.851**	**5.943**	**3/16/2020**	**5.91**	**22**	**6.397**	**0.2038**	**0**	**None**	**No**	**0.0003761**	**Param Inter 1 of 2**
pH (SU)	APMW-3	6.851	5.943	3/16/2020	6.61	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-4	6.851	5.943	3/16/2020	6.71	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-5	6.851	5.943	3/17/2020	6.32	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-6R	6.851	5.943	3/17/2020	5.97	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-7	6.851	5.943	3/17/2020	6.57	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-8	6.851	5.943	3/17/2020	6.69	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2
pH (SU)	APMW-9	6.851	5.943	8/30/2019	6.1	22	6.397	0.2038	0	None	No	0.0003761	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:04 PM

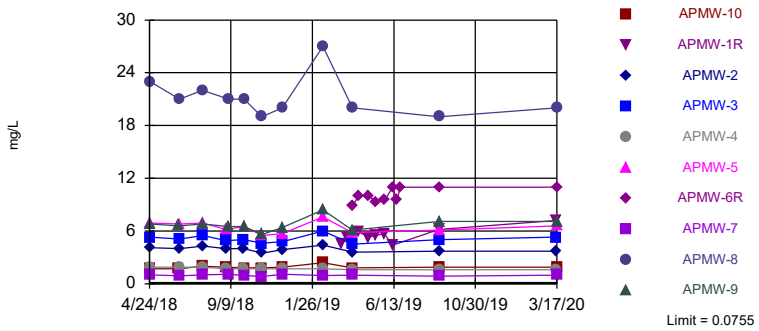
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	APMW-10	3.832	n/a	3/17/2020	110	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-1R	3.832	n/a	3/16/2020	23	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-2	3.832	n/a	3/16/2020	16	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-3	3.832	n/a	3/16/2020	1100	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-4	3.832	n/a	3/16/2020	330	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-5	3.832	n/a	3/17/2020	910	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-6R	3.832	n/a	3/17/2020	590	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-7	3.832	n/a	3/17/2020	430	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-8	3.832	n/a	3/17/2020	680	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Sulfate (mg/L)	APMW-9	3.832	n/a	3/17/2020	290	20	1.764	0.9161	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-10	184.8	n/a	3/17/2020	2700	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-1R	184.8	n/a	3/16/2020	4500	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-2	184.8	n/a	3/16/2020	4400	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-3	184.8	n/a	3/16/2020	16000	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-4	184.8	n/a	3/16/2020	6100	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-5	184.8	n/a	3/17/2020	15000	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-6R	184.8	n/a	3/17/2020	7200	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-7	184.8	n/a	3/17/2020	6900	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-8	184.8	n/a	3/17/2020	6400	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	APMW-9	184.8	n/a	3/17/2020	5400	20	119.6	28.86	0	None	No	0.0007523	Param Inter 1 of 2

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-7, APMW-8, APMW-9

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.192, Std. Dev.=0.03665, n=20, 35% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9144, critical = 0.868. Kappa = 2.258 (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 5/11/2020 4:55 PM View: PLs Interwell

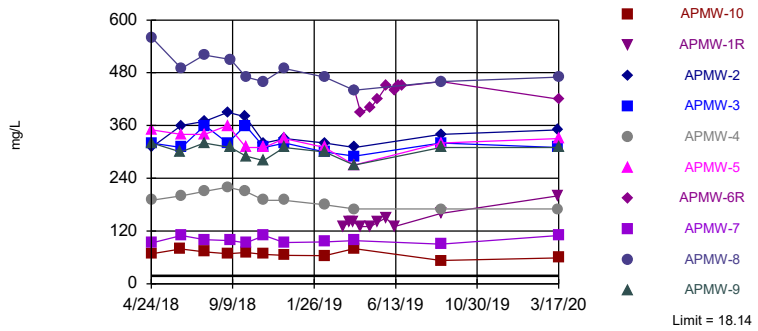
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-7, APMW-8, APMW-9

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=12.91, Std. Dev.=2.317, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9389, critical = 0.868. Kappa = 2.258 (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 5/11/2020 4:55 PM View: PLs Interwell

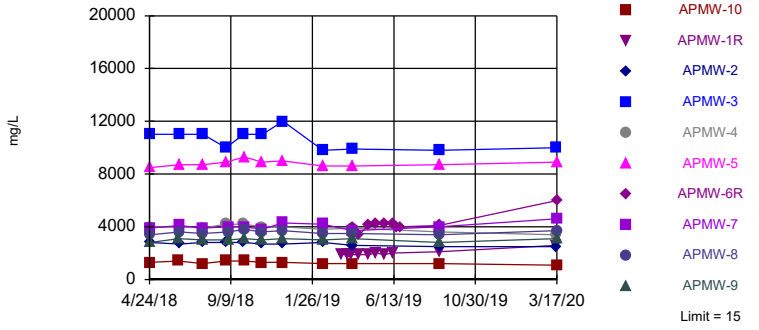
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-7, APMW-8, APMW-9

Prediction Limit

Interwell Non-parametric



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 20 background values. Annual per-constituent alpha = 0.07248. Individual comparison alpha = 0.003755 (1 of 2). Comparing 10 points to limit.

Constituent: Chloride Analysis Run 5/11/2020 4:55 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

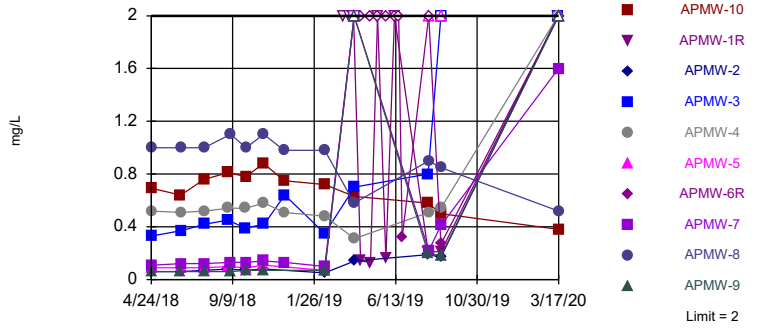
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. 22.73% NDs. Annual per-constituent alpha = 0.06359. Individual comparison alpha = 0.00328 (1 of 2). Comparing 10 points to limit.

Constituent: Fluoride Analysis Run 5/11/2020 4:55 PM View: PLs Interwell

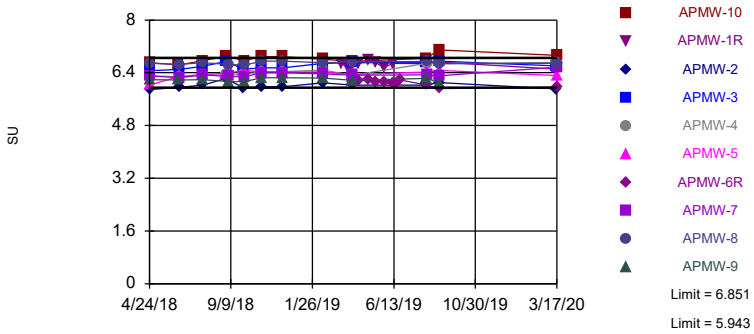
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limits: APMW-10, APMW-2

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=6.397, Std. Dev.=0.2038, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9183, critical = 0.878. Kappa = 2.226 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0003761. Comparing 10 points to limit.

Constituent: pH Analysis Run 5/11/2020 4:55 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

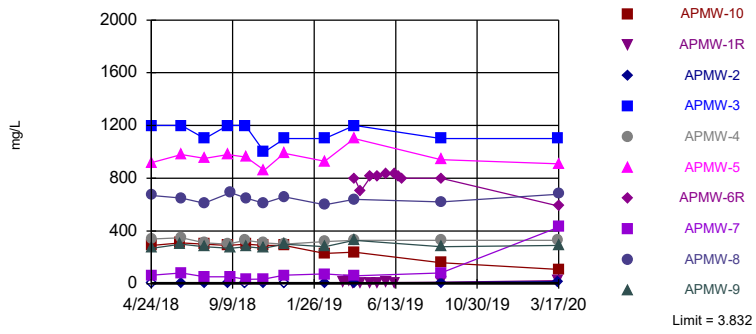
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-7, APMW-8, APMW-9

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=1.764, Std. Dev.=0.9161, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8763, critical = 0.868. Kappa = 2.258 (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: Sulfate Analysis Run 5/11/2020 4:55 PM View: PLs Interwell

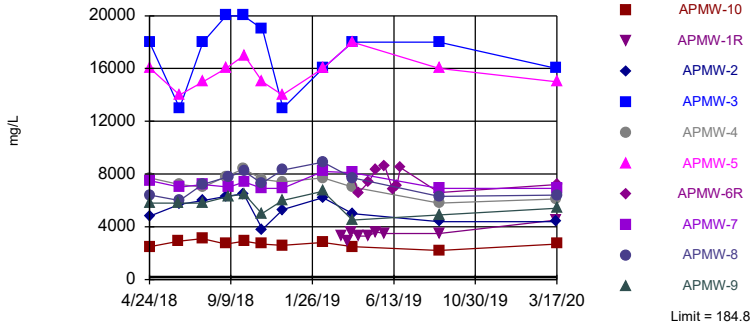
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: APMW-10, APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-7, APMW-8, APMW-9

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=119.6, Std. Dev.=28.86, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9774, critical = 0.868. Kappa = 2.258 (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 5/11/2020 4:55 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/11/2020 5:02 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-4	APMW-3	APMW-2	APMW-9	APMW-8	APMW-7	APMW-5	APMW-10	APMW-1R
4/24/2018	1.9	5.3	4.1						
4/25/2018				6.8	23	1	6.9	1.7	
6/13/2018				6.6				1.7	
6/14/2018	1.9	5.1	4		21	0.91	6.8		
7/23/2018				6.8	22			2	
7/24/2018	1.9	5.5	4.3			1	6.9		
9/1/2018	1.7	4.9	4				6.2	1.9	
9/6/2018				6.5	21	1.1			
10/1/2018	1.7	5	4						
10/2/2018				6.5	21	0.95	6.5	1.8	
11/1/2018				5.6	19			1.8	
11/2/2018	1.7	4.6	3.5			0.82	5.5		
12/6/2018	1.7			6.4	20	1.1	5.7	1.9	
12/7/2018		4.8	3.9						
2/13/2019	1.7	6	4.4	8.4	27	0.95	7.6	2.4	
3/16/2019									4.5
3/27/2019									5.2
4/3/2019									5.3
4/4/2019				6.1	20	0.98	5.8	1.8	
4/5/2019	1.6	4.5	3.6						
4/15/2019									5.9
4/16/2019									
5/2/2019									5.3
5/3/2019									
5/14/2019									5.5
5/28/2019									5.7
5/29/2019									
6/12/2019									4.4
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	1.6	5	3.7	7.1	19	0.88	6.1	1.9	6.2
3/16/2020	1.6	5.3	3.7						7.2
3/17/2020				7.1	20	0.98	6.6	1.9	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-11 (bg)	APMW-12 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	0.028 (J)	0.035 (J)	
3/27/2019	0.027 (JD)	0.033 (JD)	
4/3/2019	0.089 (D)	0.023 (JD)	
4/4/2019			
4/5/2019			8.9 (D)
4/15/2019			10
4/16/2019	<0.08	<0.08	
5/2/2019			10
5/3/2019	<0.08	0.021 (J)	
5/14/2019	<0.08	<0.08	9.3
5/28/2019			
5/29/2019	0.034 (J)	0.044 (J)	9.5
6/12/2019	0.05 (J)	0.047 (J)	11
6/19/2019			9.5
6/25/2019			11
8/29/2019	<0.08	<0.08	
8/30/2019			11
3/16/2020			
3/17/2020	0.057 (J)	0.057 (J)	11

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-4	APMW-3	APMW-2	APMW-9	APMW-8	APMW-7	APMW-5	APMW-10	APMW-1R
4/24/2018	190	320	310						
4/25/2018				320	560	93	350	68	
6/13/2018				300				79	
6/14/2018	200	310	360		490	110	340		
7/23/2018				320	520			73	
7/24/2018	210	360	370			100	340		
9/1/2018	220	320	390				360	68	
9/6/2018				310	510	98			
10/1/2018	210	360	380						
10/2/2018				290	470	93	310	71	
11/1/2018				280	460			67	
11/2/2018	190	310	320			110	310		
12/6/2018	190			310	490	94	330	65	
12/7/2018		320	330						
2/13/2019	180	300	320	300	470	95	310	64	
3/16/2019									130
3/27/2019									140
4/3/2019									140
4/4/2019				270	440	98	270	80	
4/5/2019	170	290	310						
4/15/2019									130
4/16/2019									
5/2/2019									130
5/3/2019									
5/14/2019									140
5/28/2019									150
5/29/2019									
6/12/2019									130
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	170	320	340	310	460	90	320	53	160
3/16/2020	170	310	350						200
3/17/2020				310	470	110	330	59	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-11 (bg)	APMW-12 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	17	13	
3/27/2019	16 (D)	15 (D)	
4/3/2019	15 (D)	13 (D)	
4/4/2019			
4/5/2019			440 (D)
4/15/2019			390
4/16/2019	13	12	
5/2/2019			400
5/3/2019	12	13	
5/14/2019	14	13	420
5/28/2019			
5/29/2019	7	15	450
6/12/2019	13	14	440
6/19/2019			450
6/25/2019			450
8/29/2019	9.4	12	
8/30/2019			460
3/16/2020			
3/17/2020	9.8	12	420

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-4	APMW-3	APMW-2	APMW-9	APMW-8	APMW-7	APMW-5	APMW-10	APMW-1R
4/24/2018	4000	11000	2800						
4/25/2018				2800	3400	3900	8500	1300	
6/13/2018				3100				1400	
6/14/2018	4000	11000	2700		3600	4100	8700		
7/23/2018				3000	3500			1200	
7/24/2018	3900	11000	2800			3900	8700		
9/1/2018	4200	10000	2800				8900	1400	
9/6/2018				3000	3600	4000			
10/1/2018	4200	11000	2800						
10/2/2018				3100	3800	4000	9300	1400	
11/1/2018				3000	3600			1300	
11/2/2018	4000	11000	2700			3800	8900		
12/6/2018	4000			3100	3700	4300	9000	1300	
12/7/2018		12000	2700						
2/13/2019	3800	9800	2800	3000	3500	4200	8600	1200	
3/16/2019									1900
3/27/2019									1900
4/3/2019									1900
4/4/2019				3100	3500	3700	8600	1200	
4/5/2019	3900	9900	2600						
4/15/2019									1900
4/16/2019									
5/2/2019									1900
5/3/2019									
5/14/2019									2000
5/28/2019									1900
5/29/2019									
6/12/2019									2000
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	3600	9800	2500	2800	3400	4000	8700	1200	2100
3/16/2020	3400	10000	2500						2600
3/17/2020				3100	3700	4600	8900	1100	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-11 (bg)	APMW-12 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	9.3	14	
3/27/2019	8.2 (D)	15 (D)	
4/3/2019	8.7 (D)	15 (D)	
4/4/2019			
4/5/2019			4000 (D)
4/15/2019			3400
4/16/2019	8.7	14	
5/2/2019			4100
5/3/2019	9.3	15	
5/14/2019	8.8	15	4200
5/28/2019			
5/29/2019	8.8	14	4200
6/12/2019	8.8	15	4200
6/19/2019			4000
6/25/2019			4000
8/29/2019	8.1	14	
8/30/2019			4100
3/16/2020			
3/17/2020	8.2	14	6000

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-4	APMW-3	APMW-2	APMW-9	APMW-8	APMW-7	APMW-5	APMW-10	APMW-1R
4/24/2018	0.52	0.33	0.06 (J)						
4/25/2018				0.06 (J)	1	0.11	0.09 (J)	0.69	
6/13/2018				0.06 (J)				0.64	
6/14/2018	0.51	0.37	0.06 (J)		1	0.12	0.09 (J)		
7/23/2018				0.06 (J)	1			0.76	
7/24/2018	0.52	0.42	0.07 (J)			0.12	0.09 (J)		
9/1/2018	0.54	0.45	0.08 (J)				0.1	0.81	
9/6/2018				0.06 (J)	1.1	0.13			
10/1/2018	0.54	0.39	0.07 (J)						
10/2/2018				0.07 (J)	1	0.13	0.09 (J)	0.78	
11/1/2018				0.07 (J)	1.1			0.88	
11/2/2018	0.58	0.42	0.08 (J)			0.14	0.11		
12/6/2018	0.51			0.21 (o)	0.98	0.13	1.4 (o)	0.75	
12/7/2018		0.64	4.3 (o)						
2/13/2019	0.48	0.35	0.05 (J)	0.07 (J)	0.98	0.1	0.07 (J)	0.72	
3/16/2019									<2
3/27/2019									<2
4/3/2019									<2
4/4/2019				<2	0.58 (J)	<2	<2	0.63	
4/5/2019	0.31 (J)	0.7 (J)	0.14 (J)						
4/15/2019									0.14 (J)
4/16/2019									
5/2/2019									0.13 (J)
5/3/2019									
5/14/2019									<2
5/28/2019									0.16 (J)
5/29/2019									
6/12/2019									<2
6/19/2019									
6/25/2019									
8/8/2019		0.8 (J)	0.19 (J)	0.2 (J)				0.58	0.21 (J)
8/9/2019	0.51				0.9 (J)	0.22 (J)	<2		
8/29/2019									
8/30/2019	0.54 (J)	<2	0.17 (J)	0.18 (J)	0.85 (J)	0.41 (J)	<2	0.5	0.21 (J)
3/16/2020	<2	<2	<2						<2
3/17/2020				<2	0.52 (J)	1.6	<2	0.38	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-12 (bg)	APMW-11 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	0.041 (J)	0.047 (J)	
3/27/2019	0.49 (D)	<2 (D)	
4/3/2019	0.086 (JD)	<2 (D)	
4/4/2019			
4/5/2019			<2 (D)
4/15/2019			<2
4/16/2019	0.055 (J)	0.034 (J)	
5/2/2019			<2
5/3/2019	0.058 (J)	0.042 (J)	
5/14/2019	0.071 (J)	0.039 (J)	<2
5/28/2019			
5/29/2019	0.042 (J)	<2	<2
6/12/2019	0.037 (J)	<2	<2
6/19/2019			<2
6/25/2019			0.32 (J)
8/8/2019	0.072 (J)	0.051 (J)	
8/9/2019			<2
8/29/2019	0.065 (J)	0.061 (J)	
8/30/2019			0.27 (J)
3/16/2020			
3/17/2020	0.036 (J)	<2	<2

Prediction Limit

Constituent: pH (SU) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-4	APMW-3	APMW-2	APMW-9	APMW-8	APMW-7	APMW-5	APMW-10	APMW-12 (bg)
4/24/2018	6.31	6.46	5.89						
4/25/2018				6.19	6.69	6.31	6.04	6.7	
6/13/2018				6.18				6.64	
6/14/2018	6.28	6.5	5.96		6.66	6.25	6.29		
7/23/2018				6.19	6.7			6.76	
7/24/2018	6.34	6.6	6.03			6.34	6.35		
9/1/2018	6.33	6.74	6.23				6.38	6.9	
9/6/2018				6.13	6.66	6.29			
10/1/2018	6.36	6.51	5.94						
10/2/2018				6.13	6.63	6.28	6.47	6.77	
11/1/2018				6.25	6.75			6.89	
11/2/2018	6.43	6.55	5.98			6.4	6.42		
12/6/2018	6.43			6.25	6.75	6.4	6.42	6.89	
12/7/2018		6.55	5.98						
2/13/2019	6.48	6.69	6.09	6.24	6.7	6.37	6.42	6.81	
3/16/2019									6.44
3/27/2019									6.38
4/3/2019									6.19
4/4/2019				6.17	6.72	6.33	6.35	6.74	
4/5/2019	6.33	6.7	6.03						
4/15/2019									
4/16/2019									6.3
5/2/2019									
5/3/2019									6.33
5/14/2019									6.64
5/28/2019									
5/29/2019									6.6
6/12/2019									6.31
6/19/2019									
6/25/2019									
8/8/2019		6.7	6.03	6.23				6.84	6.12
8/9/2019	6.69				6.74	6.34	6.42		
8/29/2019									6.24
8/30/2019	6.68	6.75	6.1	6.1	6.68	6.31	6.47	7.09	
3/16/2020	6.71	6.61	5.91						
3/17/2020					6.69	6.57	6.32	6.93	6.2

Prediction Limit

Constituent: pH (SU) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-11 (bg)	APMW-1R	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	6.97	6.67	
3/27/2019	6.7	6.59	
4/3/2019	6.45	6.56	
4/4/2019			
4/5/2019			6.12
4/15/2019		6.68	6.14
4/16/2019	6.52		
5/2/2019		6.78	6.19
5/3/2019	6.37		
5/14/2019	6.57	6.7	6.12
5/28/2019		6.56	
5/29/2019	6.31		6.11
6/12/2019	6.41	6.69	6.09
6/19/2019			6.1
6/25/2019			6.18
8/8/2019	6.29	6.68	
8/9/2019			6.03
8/29/2019	6.2		
8/30/2019		6.72	5.92
3/16/2020		6.51	
3/17/2020	6.2		5.97

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-4	APMW-3	APMW-2	APMW-9	APMW-8	APMW-7	APMW-5	APMW-10	APMW-1R
4/24/2018	340	1200	<5						
4/25/2018				270	670	65	920	290	
6/13/2018				300				310	
6/14/2018	350	1200	7.2		650	81	980		
7/23/2018				280	610			300	
7/24/2018	310	1100	2.7 (J)			52	950		
9/1/2018	300	1200	1.5 (J)				980	290	
9/6/2018				270	690	53			
10/1/2018	330	1200	<5						
10/2/2018				280	650	34	960	300	
11/1/2018				270	610			290	
11/2/2018	310	1000	1.9 (J)			35	860		
12/6/2018	300			300	660	65	990	290	
12/7/2018		1100	<5						
2/13/2019	320	1100	1.5 (J)	280	600	74	930	230	
3/16/2019									14
3/27/2019									19
4/3/2019									4.6 (J)
4/4/2019				330	640	61	1100	240	
4/5/2019	330	1200	7						
4/15/2019									8.6
4/16/2019									
5/2/2019									6
5/3/2019									
5/14/2019									5.8
5/28/2019									9.4
5/29/2019									
6/12/2019									8.8
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	330	1100	8.4	280	620	83	940	160	13
3/16/2020	330	1100	16						23
3/17/2020				290	680	430	910	110	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-11 (bg)	APMW-12 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	3.6	0.88 (J)	
3/27/2019	0.81 (JD)	1.3 (D)	
4/3/2019	1.1 (D)	1.9 (D)	
4/4/2019			
4/5/2019			800 (D)
4/15/2019			700
4/16/2019	0.68 (J)	2.5	
5/2/2019			810
5/3/2019	1.1	1.3	
5/14/2019	1.3	2.2	810
5/28/2019			
5/29/2019	2.1	1.2	830
6/12/2019	1.9	1.1	830
6/19/2019			810
6/25/2019			800
8/29/2019	2.3	1.1	
8/30/2019			800
3/16/2020			
3/17/2020	3.7	3.2	590

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-4	APMW-3	APMW-2	APMW-10	APMW-9	APMW-8	APMW-7	APMW-5	APMW-1R
4/24/2018	7700	18000	4800						
4/25/2018				2500	5800	6400	7500	16000	
6/13/2018				2900	5800				
6/14/2018	7200	13000	5700			6000	7000	14000	
7/23/2018				3100	5800	7200			
7/24/2018	7000	18000	6000				7200	15000	
9/1/2018	7800	20000	6300	2700				16000	
9/6/2018					6300	7800	7000		
10/1/2018	8400	20000	6500						
10/2/2018				2900	6500	8200	7400	17000	
11/1/2018				2700	5000	7300			
11/2/2018	7600	19000	3800				6900	15000	
12/6/2018	7400			2600	6000	8300	6900	14000	
12/7/2018		13000	5300						
2/13/2019	7700	16000	6200	2800	6700	8900	8200	16000	
3/16/2019									3300
3/27/2019									2900
4/3/2019									3600
4/4/2019				2500	4500	7700	8100	18000	
4/5/2019	7000	18000	5000						
4/15/2019									3300
4/16/2019									
5/2/2019									3300
5/3/2019									
5/14/2019									3600
5/28/2019									3500
5/29/2019									
6/12/2019									
6/19/2019									
6/25/2019									
8/29/2019									
8/30/2019	5800	18000	4400	2200	4900	6300	6900	16000	3500
3/16/2020	6100	16000	4400						4500
3/17/2020				2700	5400	6400	6900	15000	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/11/2020 5:03 PM View: PLs Interwell

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-11 (bg)	APMW-12 (bg)	APMW-6R
4/24/2018			
4/25/2018			
6/13/2018			
6/14/2018			
7/23/2018			
7/24/2018			
9/1/2018			
9/6/2018			
10/1/2018			
10/2/2018			
11/1/2018			
11/2/2018			
12/6/2018			
12/7/2018			
2/13/2019			
3/16/2019	120	150	
3/27/2019	63 (D)	110 (D)	
4/3/2019	100 (D)	150 (D)	
4/4/2019			
4/5/2019			7800 (D)
4/15/2019			6600
4/16/2019	110	150	
5/2/2019			7400
5/3/2019	91	130	
5/14/2019	120	150	8300
5/28/2019			
5/29/2019	140	180	8600
6/12/2019	100	130	6800
6/19/2019			7100
6/25/2019			8500
8/29/2019	73	110	
8/30/2019			6600
3/16/2020			
3/17/2020	95	120	7200

Trend Tests

Trend Test Summary - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:12 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**APMW-4**	**-0.1708**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**APMW-11 (bg)**	**-0.8652**	**-42**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**APMW-10**	**-94.94**	**-38**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:12 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	APMW-10	0.1055	17	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-11 (bg)	0.0238	15	30	No	10	40	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-12 (bg)	0.03395	24	30	No	10	30	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-1R	2.205	24	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-2	-0.2744	-21	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-3	-0.237	-9	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	**APMW-4**	**-0.1708**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	APMW-5	-0.5781	-12	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-6R	2.664	23	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-7	-0.01213	-7	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-8	-1.738	-24	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	APMW-9	0	0	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-10	-10.28	-28	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-11 (bg)	-15.21	-30	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-12 (bg)	0	-9	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-1R	61.86	20	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-2	-12.15	-5	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-3	-14.96	-17	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-4	-24.77	-32	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-5	-22.26	-22	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-6R	55.3	20	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-7	0	-2	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-8	-59.51	-32	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	APMW-9	-7.419	-13	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-10	-136.7	-29	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-11 (bg)	-0.5229	-9	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-12 (bg)	0	-7	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-1R	474	27	30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-2	-165.2	-29	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-3	-442.4	-19	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-4	-316.5	-29	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-5	106.1	8	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-6R	890.2	14	30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-7	228.1	11	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-8	0	3	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	APMW-9	0	8	34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	APMW-10	0.1225	31	38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	**APMW-11 (bg)**	**-0.8652**	**-42**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	APMW-12 (bg)	-0.2387	-17	-34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	APMW-2	0.06448	16	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**APMW-10**	**-94.94**	**-38**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	APMW-11 (bg)	2.959	22	30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-12 (bg)	0.4837	3	30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-1R	10.68	9	30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-2	3.763	13	34	No	11	27.27	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-3	0	-15	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-4	0	-1	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-5	-5.275	-2	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-6R	0	-6	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-7	24.61	18	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-8	-16.22	-7	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	APMW-9	7.419	15	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-10	-272.4	-18	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-11 (bg)	-5.229	-3	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-12 (bg)	-11.44	-9	-30	No	10	0	n/a	n/a	0.01	NP

Trend Test Summary - All Results

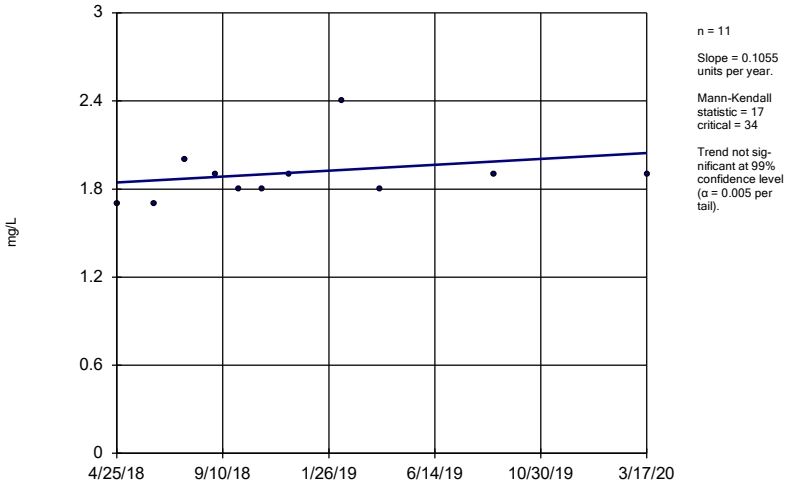
Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 5/11/2020, 5:12 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	APMW-1R	1133	17	25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-2	-740.2	-12	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-3	0	-6	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-4	-1018	-21	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-5	0	7	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-6R	-228.1	-2	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-7	-82.58	-12	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-8	561.5	10	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	APMW-9	-227.1	-8	-34	No	11	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-10



n = 11

Slope = 0.1055 units per year.

Mann-Kendall statistic = 17 critical = 34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests

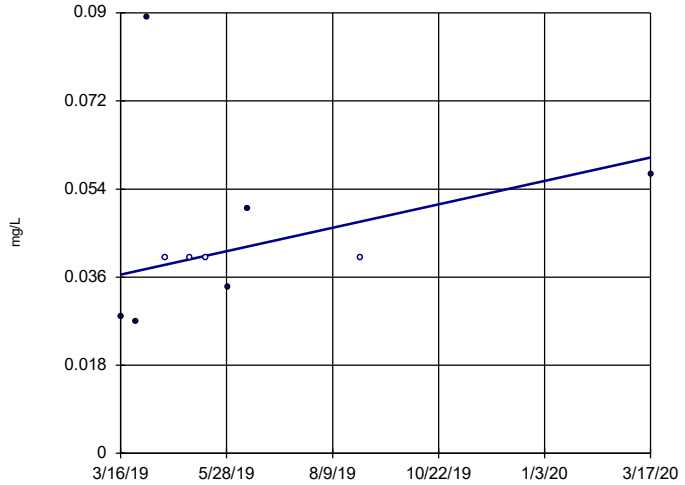
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

APMW-11 (bg)



n = 10

Slope = 0.0238 units per year.

Mann-Kendall statistic = 15 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests

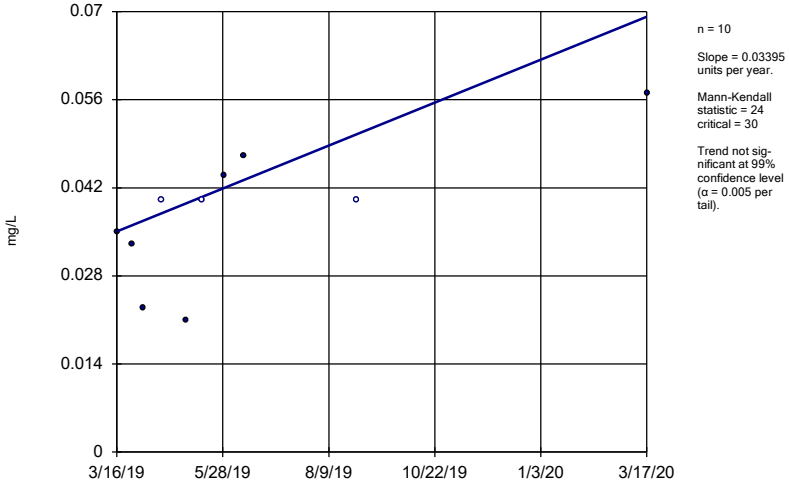
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

APMW-12 (bg)



n = 10

Slope = 0.03395 units per year.

Mann-Kendall statistic = 24 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

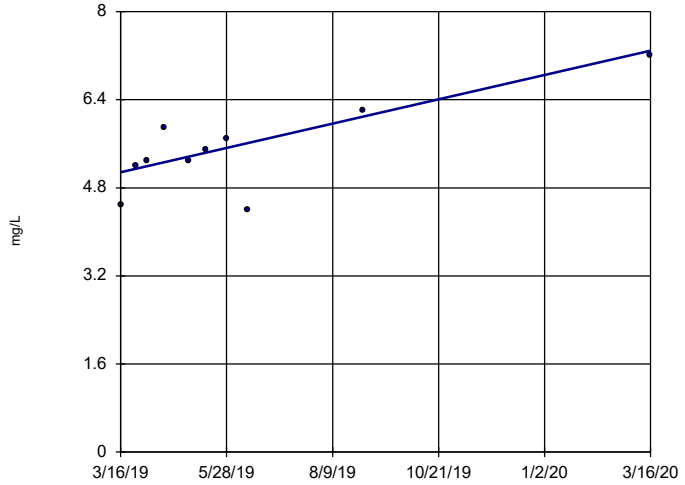
Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-1R



n = 10

Slope = 2.205 units per year.

Mann-Kendall statistic = 24 critical = 30

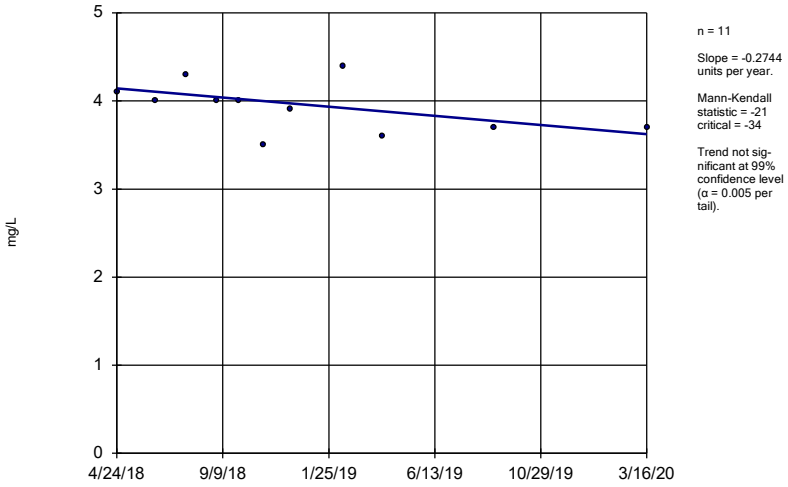
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-2



n = 11

Slope = -0.2744 units per year.

Mann-Kendall statistic = -21
critical = -34

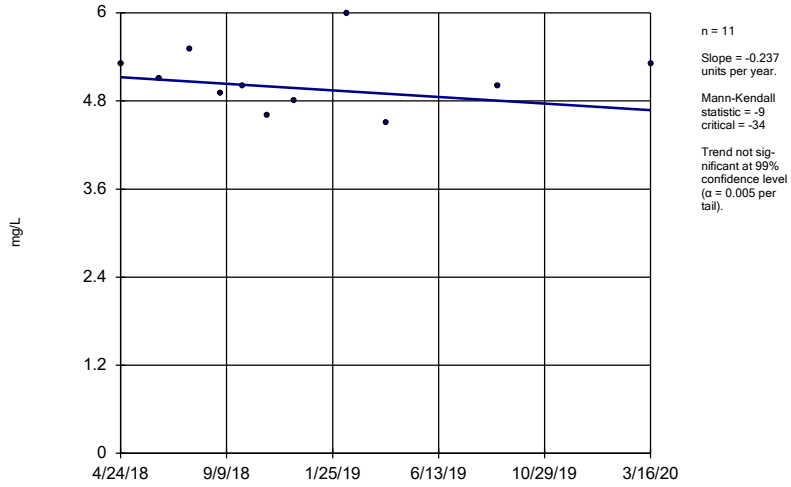
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-3



n = 11

Slope = -0.237 units per year.

Mann-Kendall statistic = -9
critical = -34

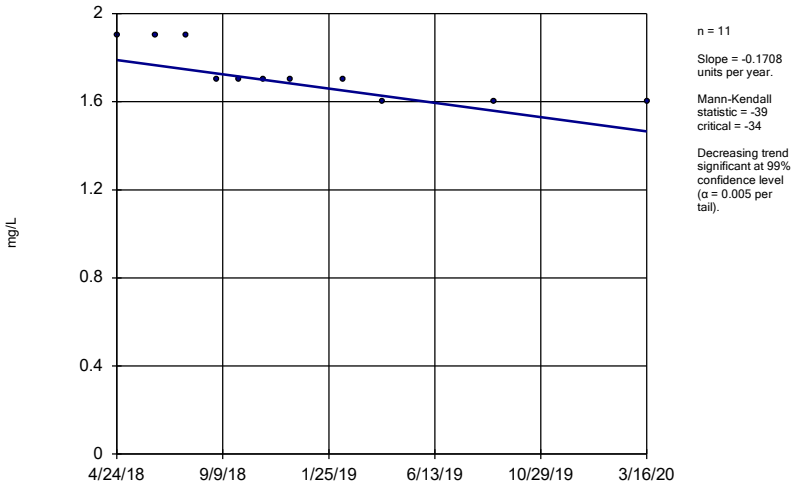
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-4



n = 11

Slope = -0.1708 units per year.

Mann-Kendall statistic = -39
critical = -34

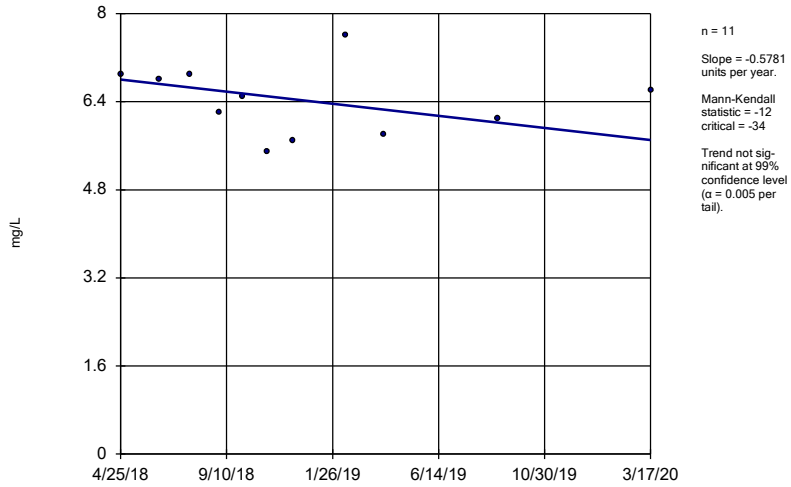
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-5



n = 11

Slope = -0.5781 units per year.

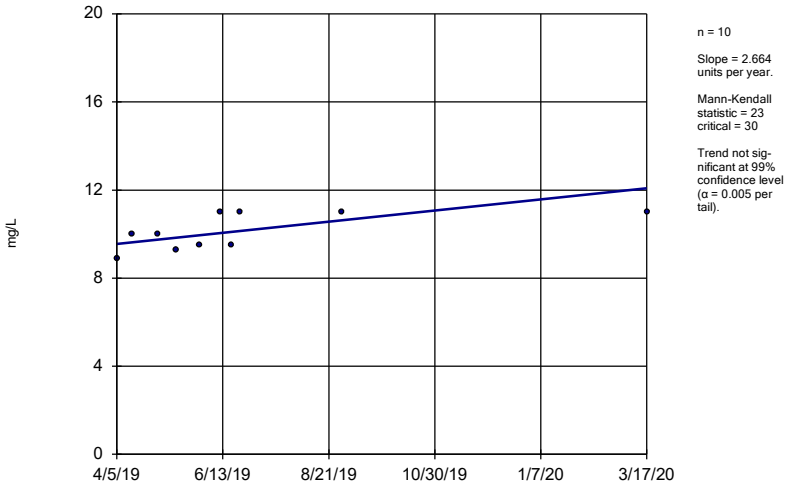
Mann-Kendall statistic = -12
critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-6R



n = 10

Slope = 2.664 units per year.

Mann-Kendall statistic = 23 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

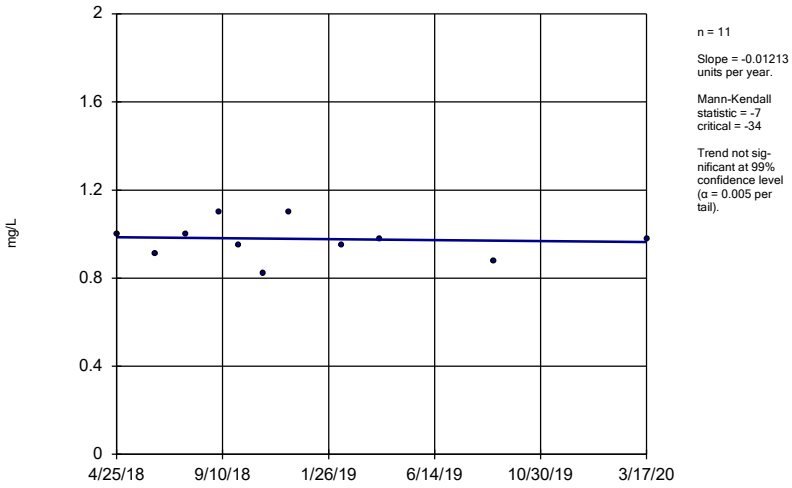
Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-7



n = 11

Slope = -0.01213 units per year.

Mann-Kendall statistic = -7 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

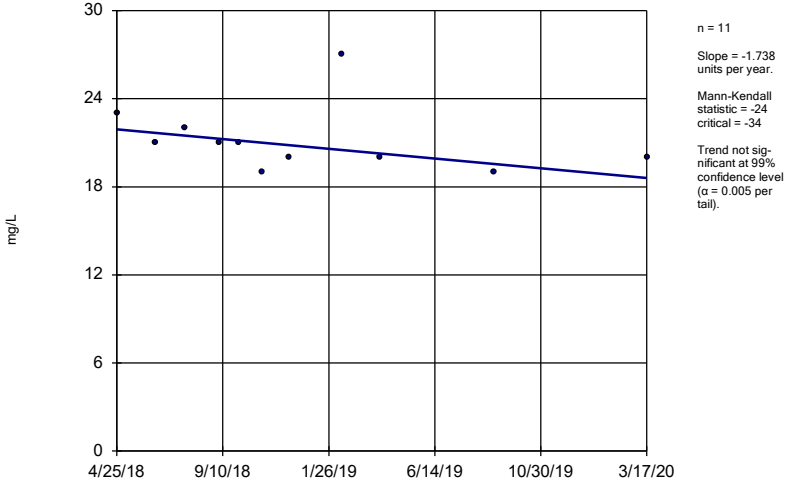
Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-8



n = 11

Slope = -1.738 units per year.

Mann-Kendall statistic = -24 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

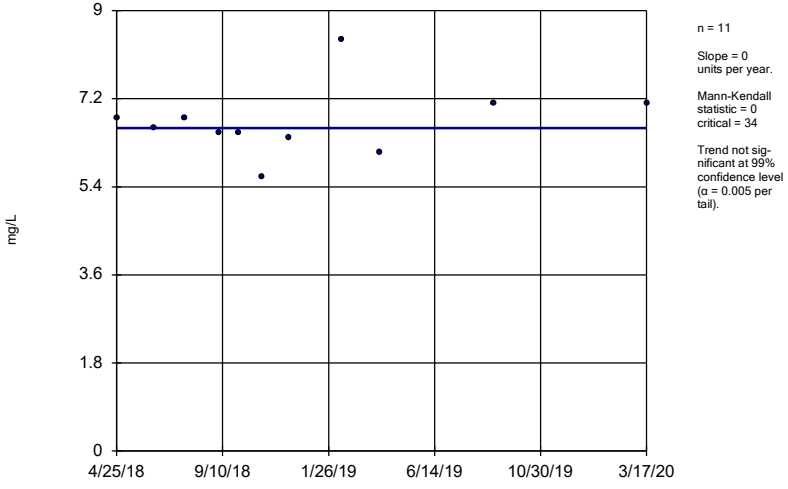
Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-9



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 34

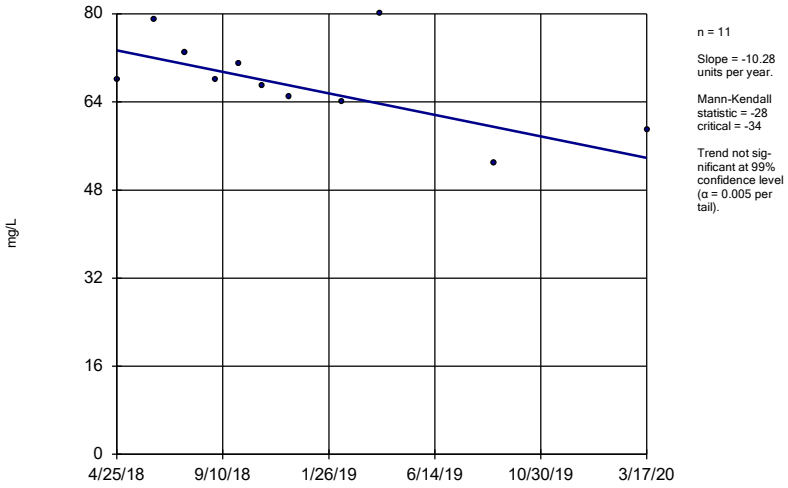
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-10



n = 11

Slope = -10.28 units per year.

Mann-Kendall statistic = -28 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

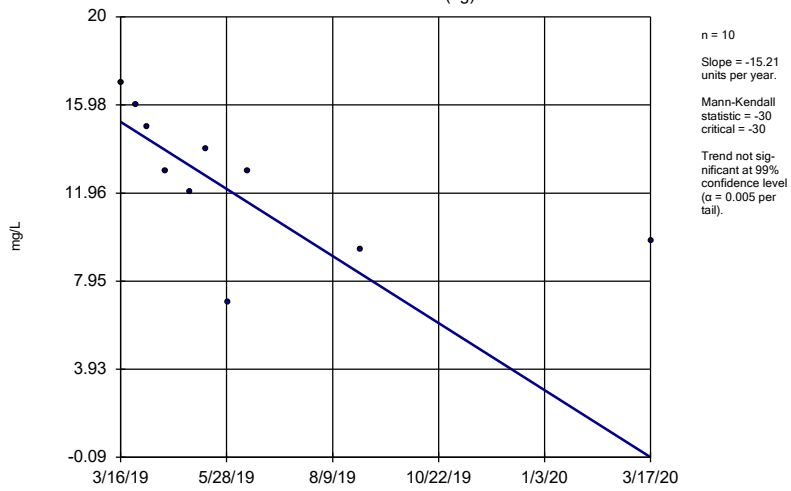
Constituent: Calcium Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-11 (bg)



n = 10

Slope = -15.21 units per year.

Mann-Kendall statistic = -30 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

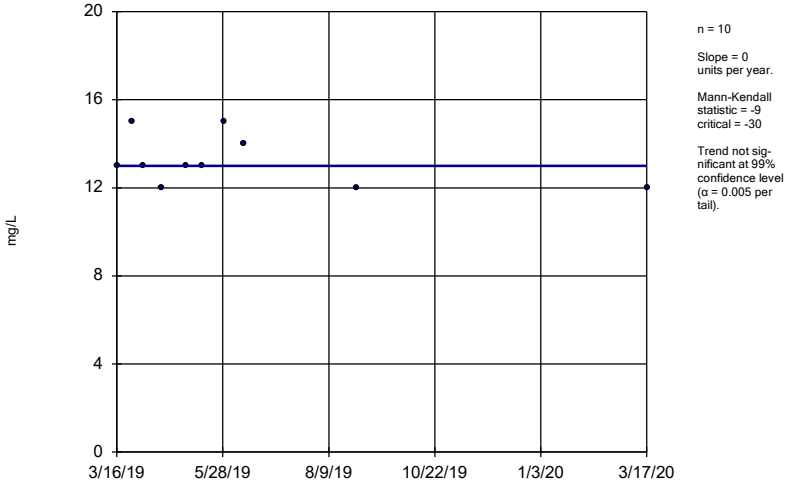
Constituent: Calcium Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-12 (bg)



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = -9 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

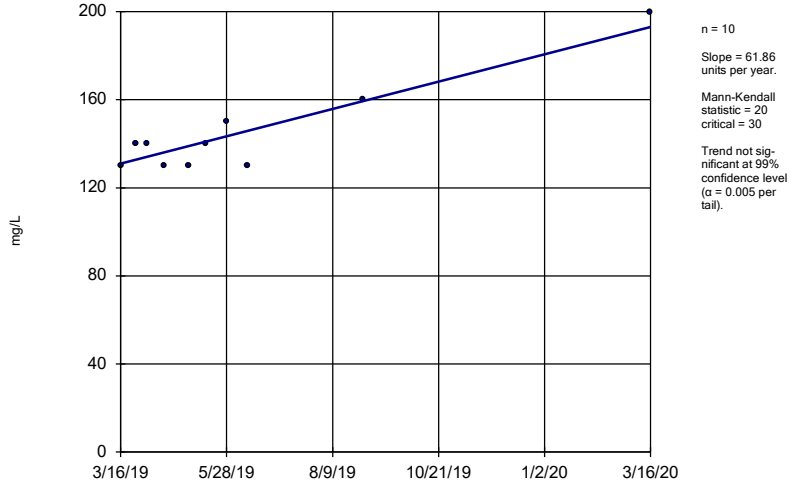
Constituent: Calcium Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-1R



n = 10

Slope = 61.86 units per year.

Mann-Kendall statistic = 20 critical = 30

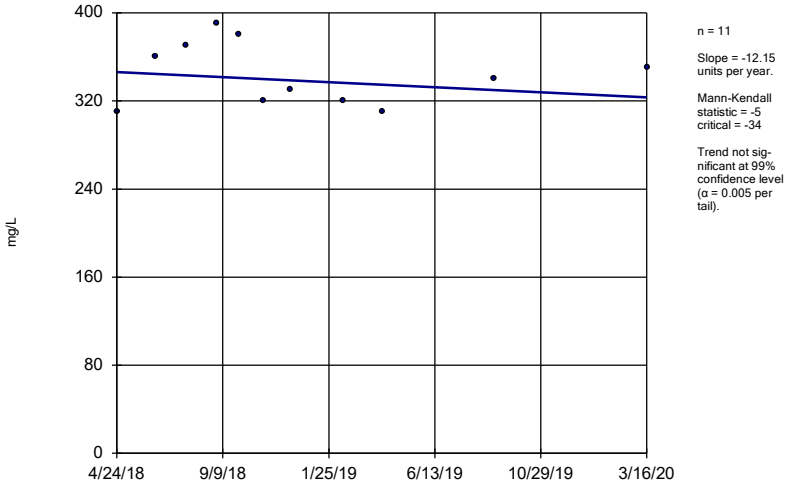
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-2



n = 11

Slope = -12.15 units per year.

Mann-Kendall statistic = -5 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

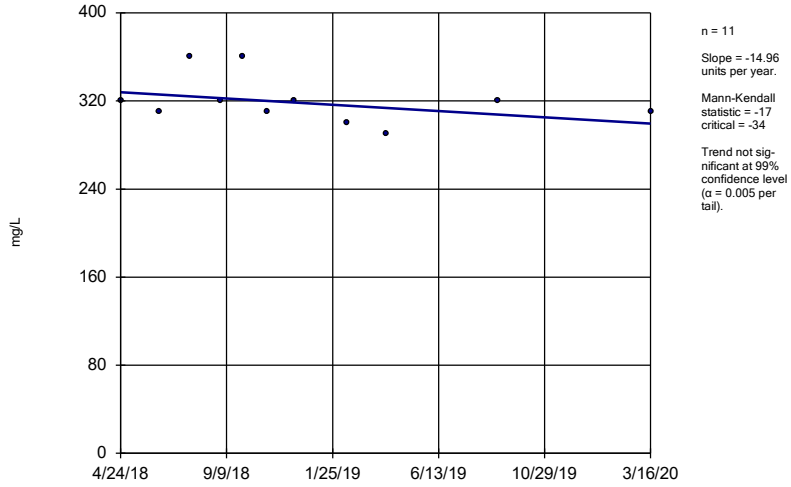
Constituent: Calcium Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-3



n = 11

Slope = -14.96 units per year.

Mann-Kendall statistic = -17 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

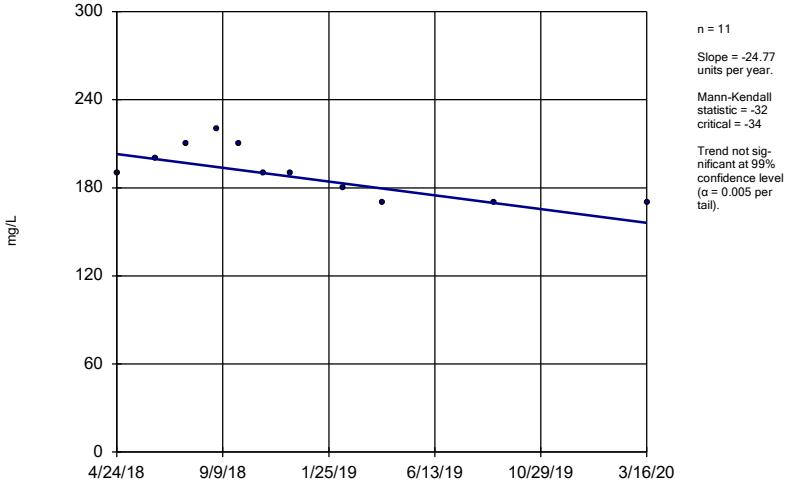
Constituent: Calcium Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-4



n = 11

Slope = -24.77 units per year.

Mann-Kendall statistic = -32 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

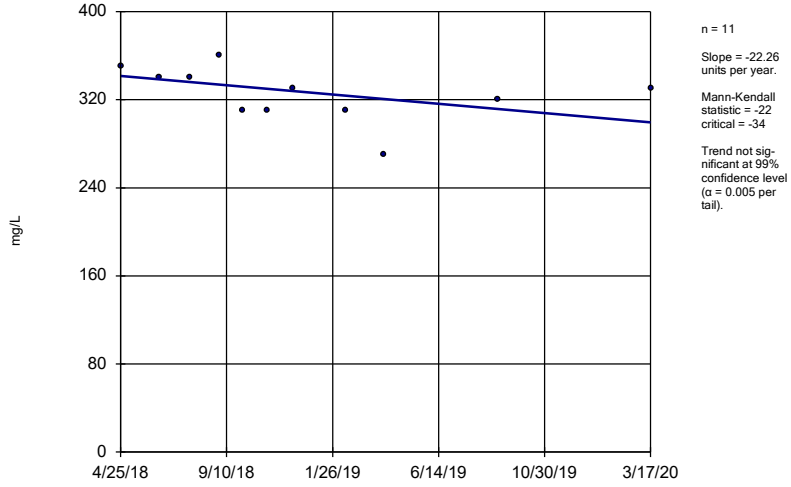
Constituent: Calcium Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-5



n = 11

Slope = -22.26 units per year.

Mann-Kendall statistic = -22 critical = -34

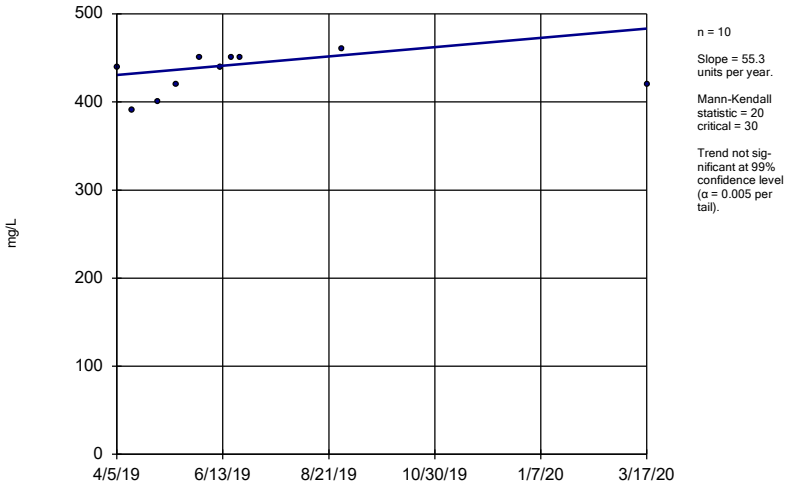
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/11/2020 5:07 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-6R



n = 10

Slope = 55.3 units per year.

Mann-Kendall statistic = 20 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

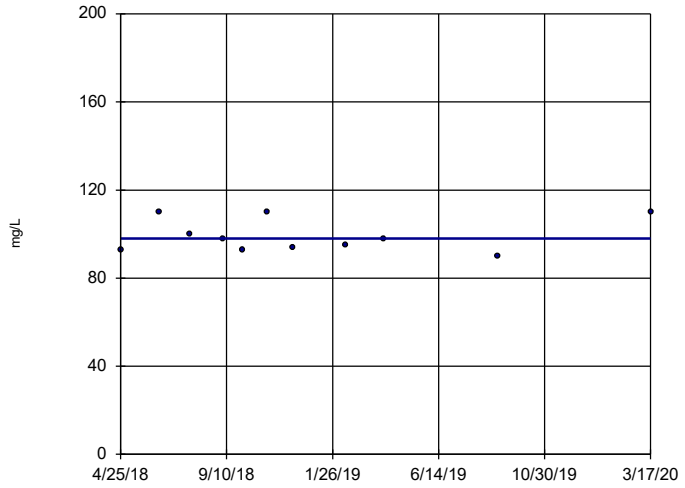
Constituent: Calcium Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-7



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = -2 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

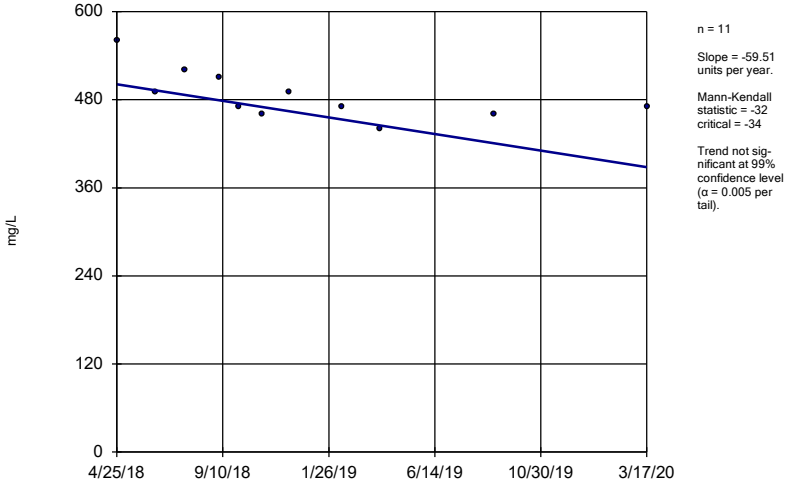
Constituent: Calcium Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-8



n = 11

Slope = -59.51 units per year.

Mann-Kendall statistic = -32 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

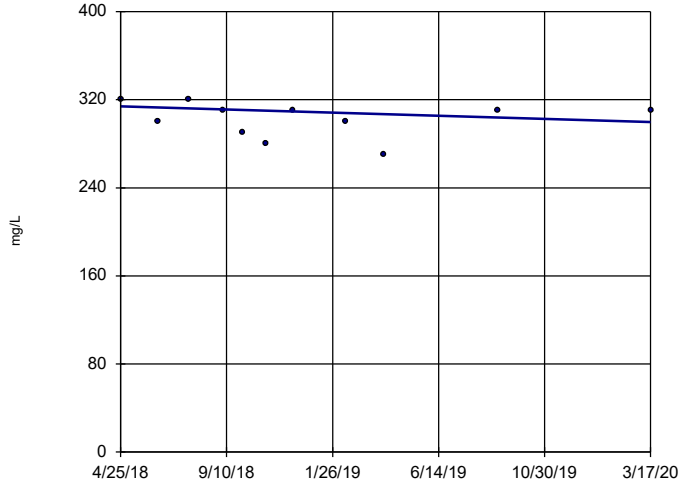
Constituent: Calcium Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-9



n = 11

Slope = -7.419 units per year.

Mann-Kendall statistic = -13 critical = -34

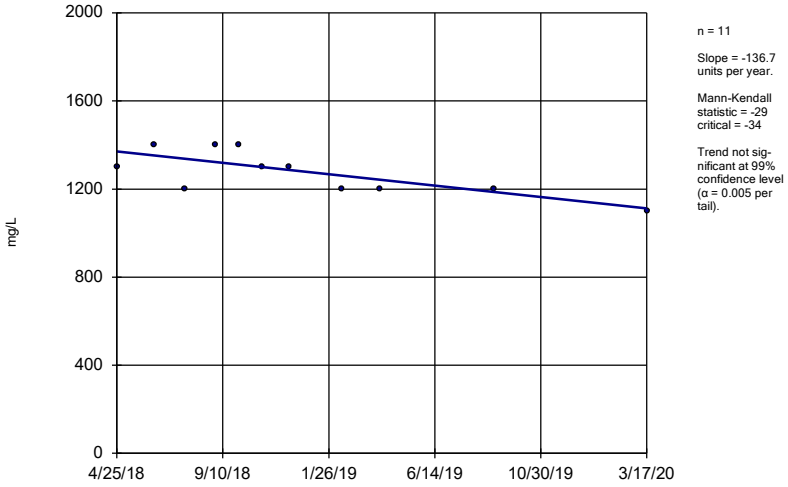
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-10



n = 11

Slope = -136.7 units per year.

Mann-Kendall statistic = -29 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

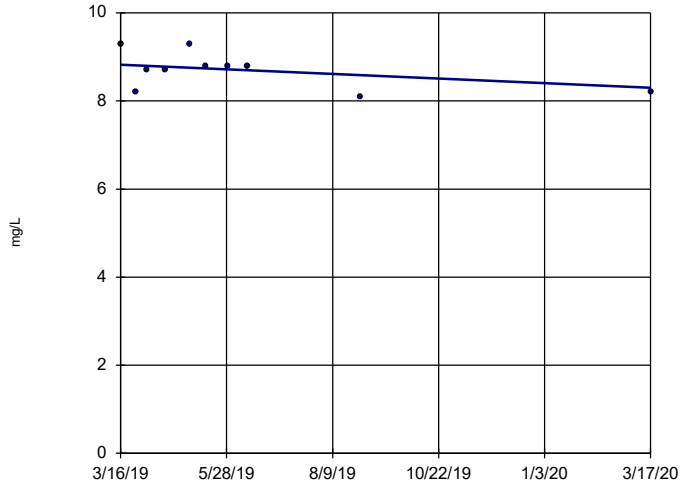
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-11 (bg)



n = 10

Slope = -0.5229 units per year.

Mann-Kendall statistic = -9 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

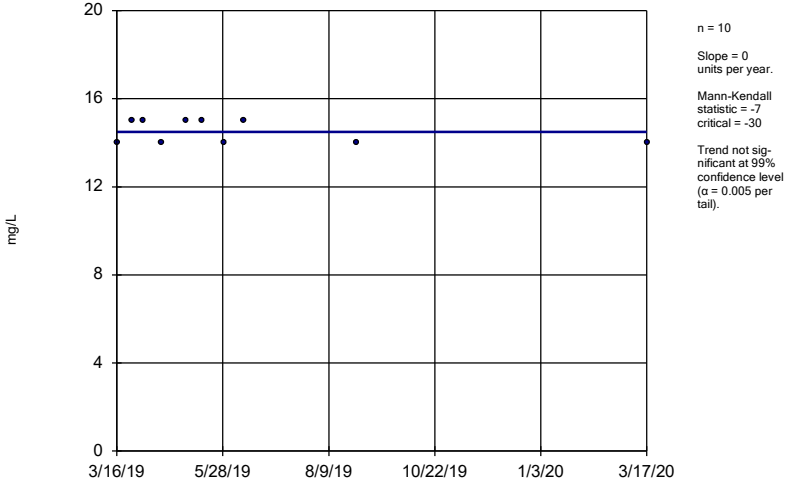
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-12 (bg)



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = -7 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

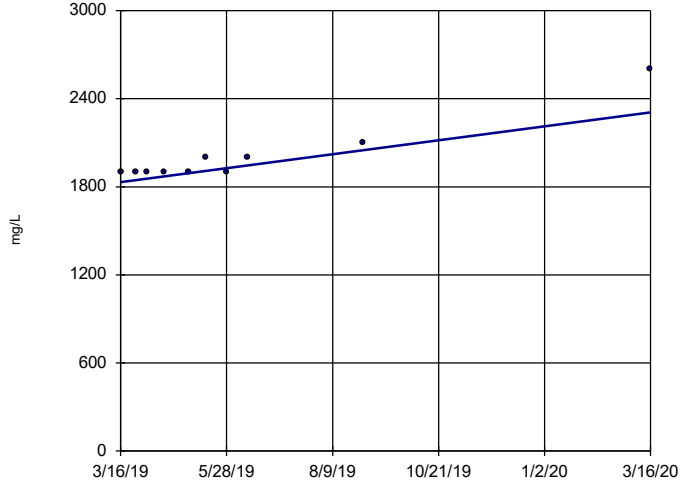
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-1R



n = 10

Slope = 474 units per year.

Mann-Kendall statistic = 27 critical = 30

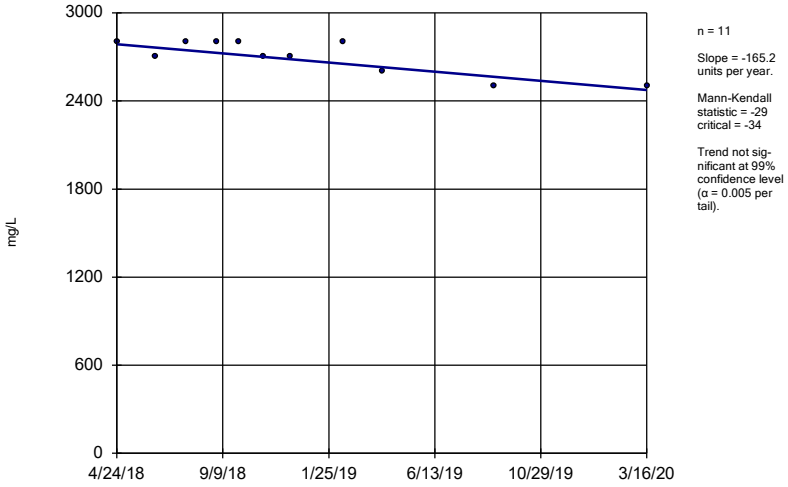
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-2



n = 11

Slope = -165.2 units per year.

Mann-Kendall statistic = -29 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

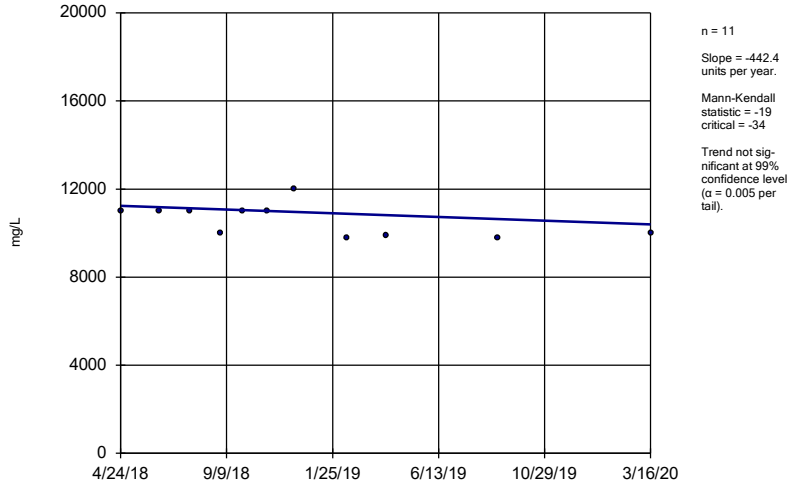
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-3



n = 11

Slope = -442.4 units per year.

Mann-Kendall statistic = -19 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

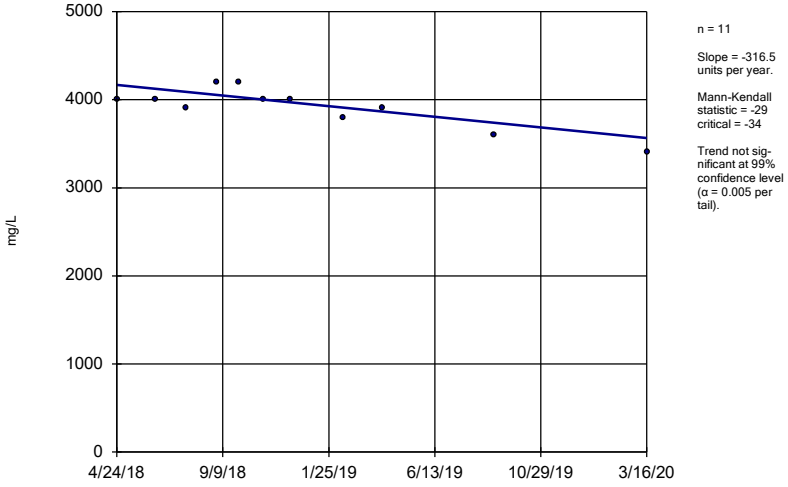
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-4



n = 11

Slope = -316.5 units per year.

Mann-Kendall statistic = -29 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

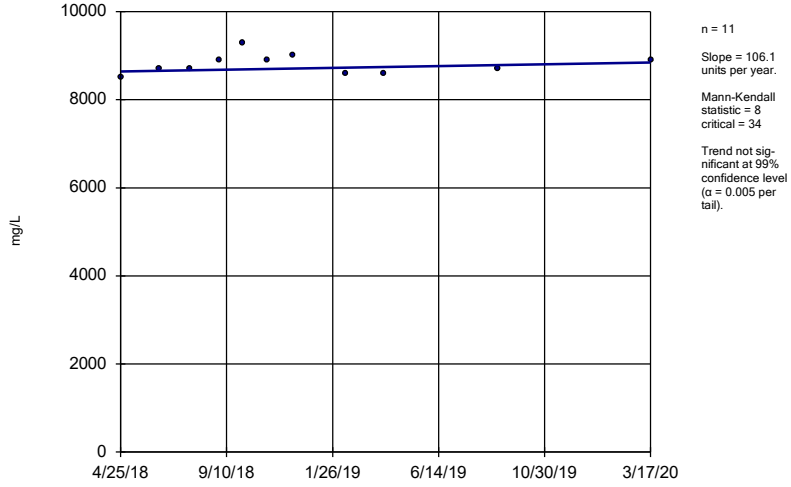
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-5



n = 11

Slope = 106.1 units per year.

Mann-Kendall statistic = 8 critical = 34

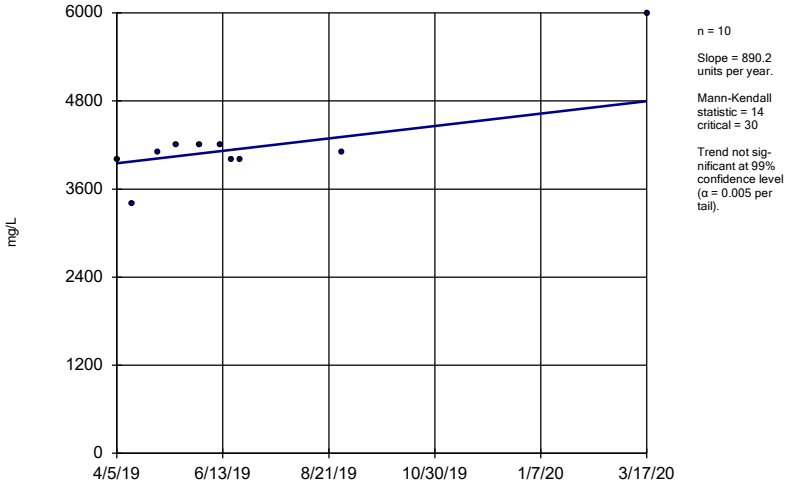
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-6R



n = 10

Slope = 890.2 units per year.

Mann-Kendall statistic = 14 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

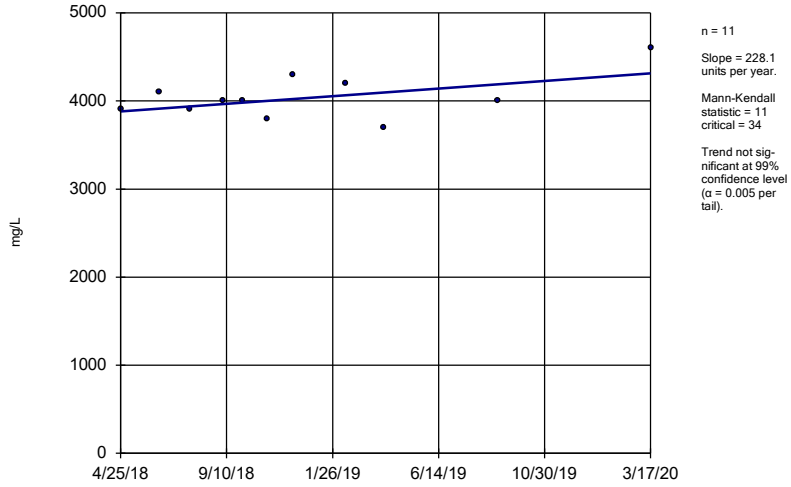
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-7



n = 11

Slope = 228.1 units per year.

Mann-Kendall statistic = 11 critical = 34

Trend not significant at 99% confidence level (α = 0.005 per tail).

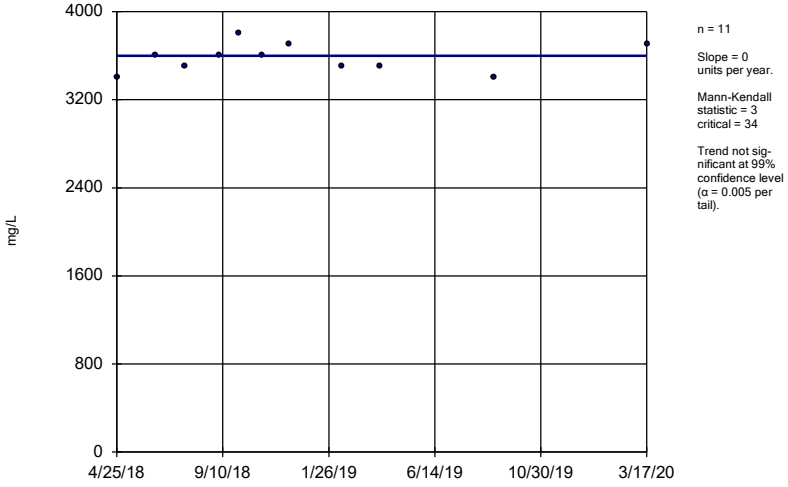
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-8



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = 3 critical = 34

Trend not significant at 99% confidence level (α = 0.005 per tail).

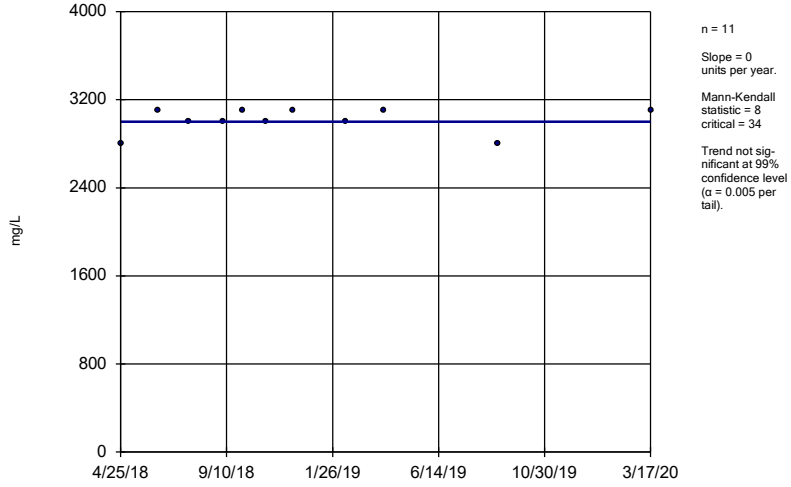
Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-9



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = 8 critical = 34

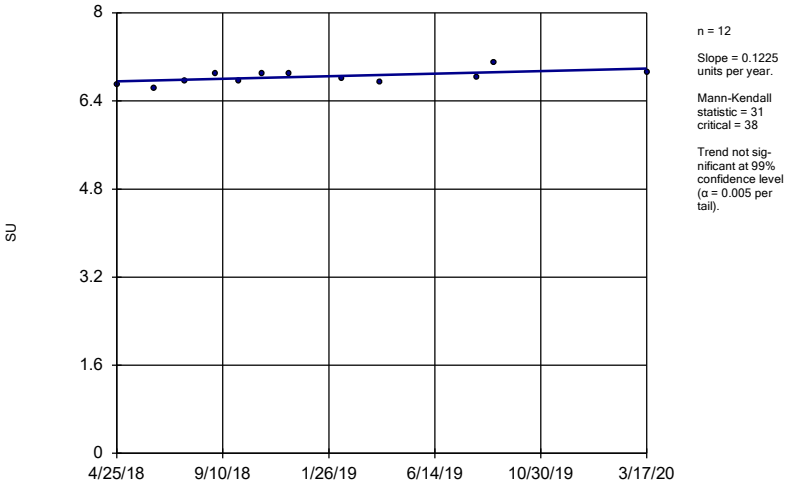
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-10



n = 12

Slope = 0.1225 units per year.

Mann-Kendall statistic = 31
critical = 38

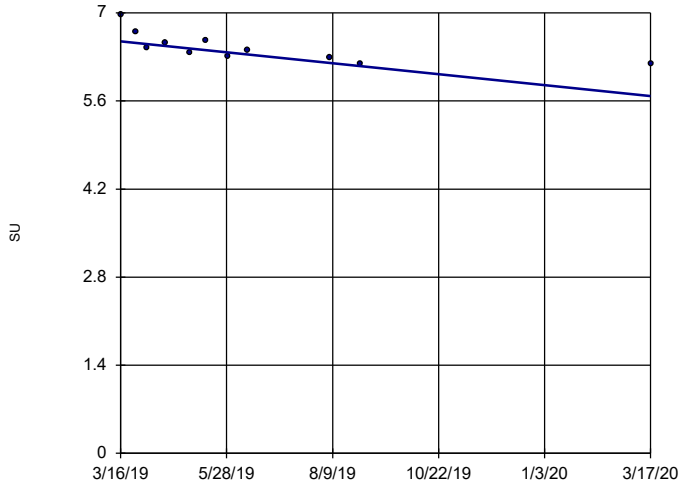
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-11 (bg)



n = 11

Slope = -0.8652 units per year.

Mann-Kendall statistic = -42
critical = -34

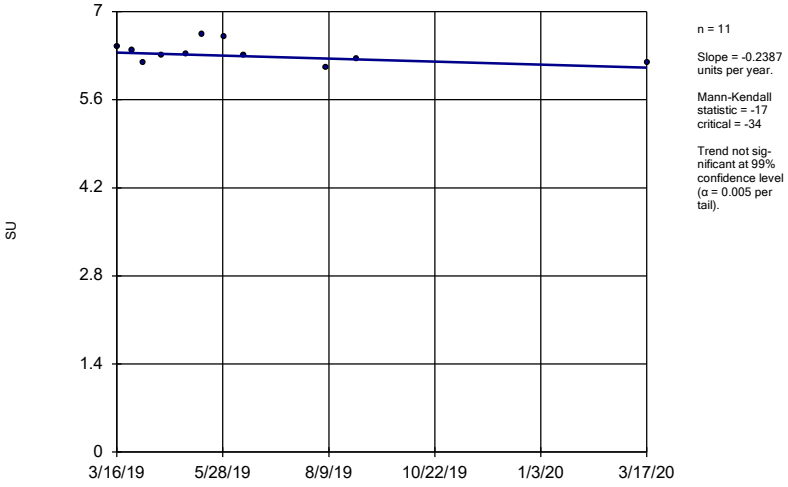
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-12 (bg)



n = 11

Slope = -0.2387 units per year.

Mann-Kendall statistic = -17
critical = -34

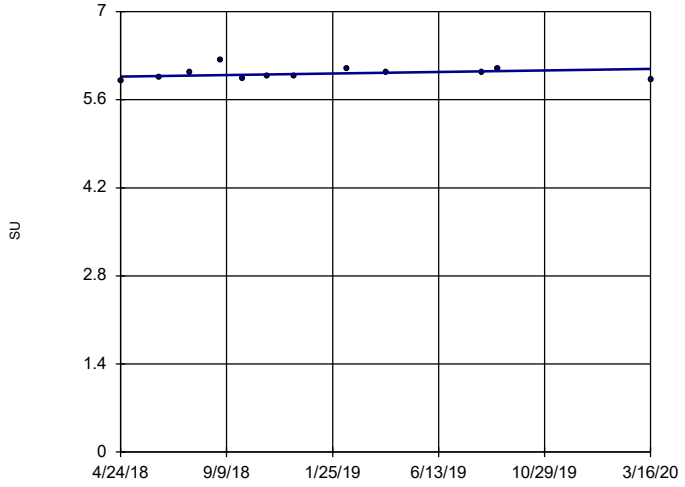
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-2



n = 12

Slope = 0.06448 units per year.

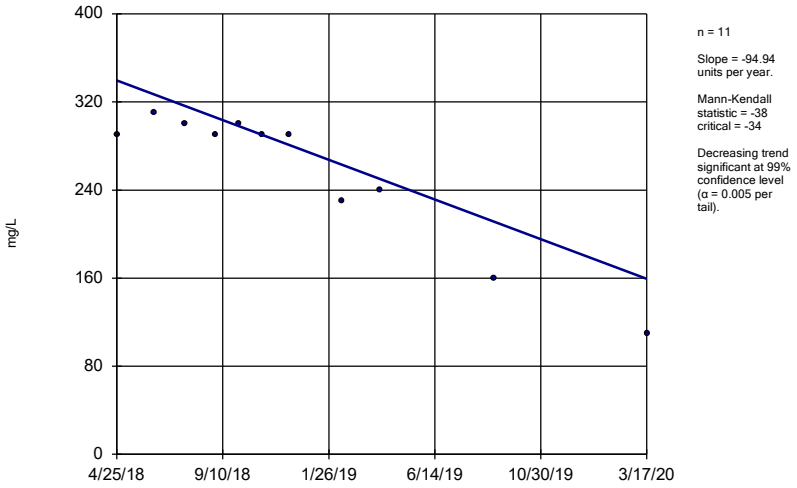
Mann-Kendall statistic = 16
critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-10



n = 11

Slope = -94.94 units per year.

Mann-Kendall statistic = -38 critical = -34

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

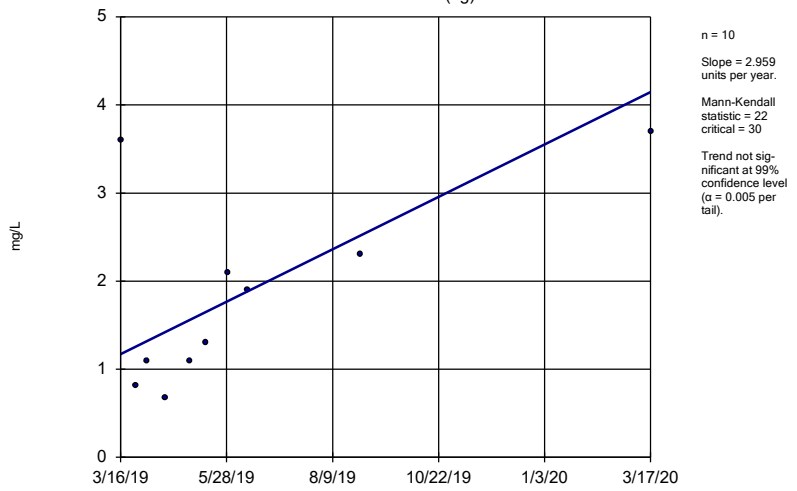
Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-11 (bg)



n = 10

Slope = 2.959 units per year.

Mann-Kendall statistic = 22 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

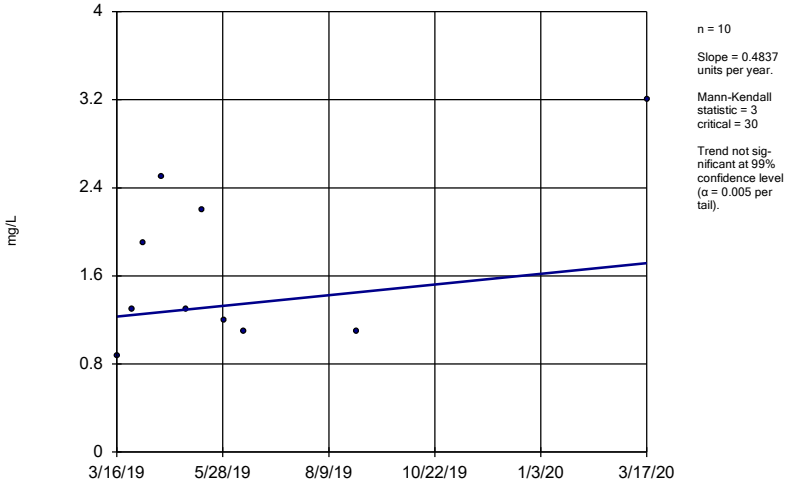
Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-12 (bg)



n = 10

Slope = 0.4837 units per year.

Mann-Kendall statistic = 3 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

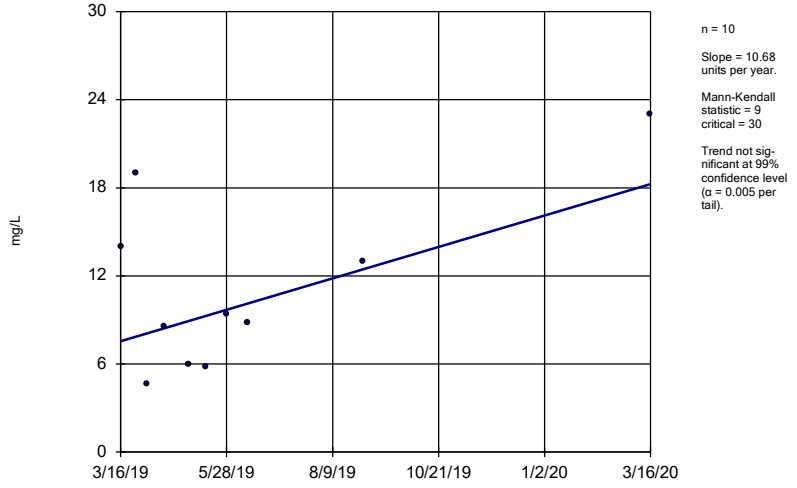
Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-1R



n = 10

Slope = 10.68 units per year.

Mann-Kendall statistic = 9 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests

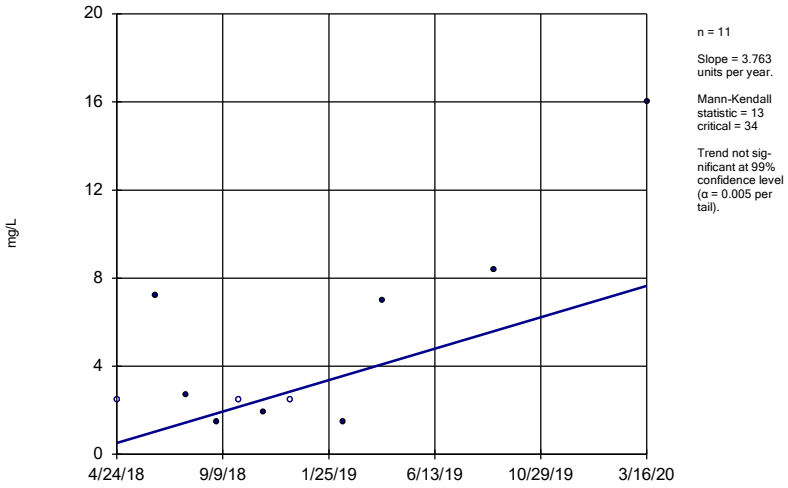
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

APMW-2



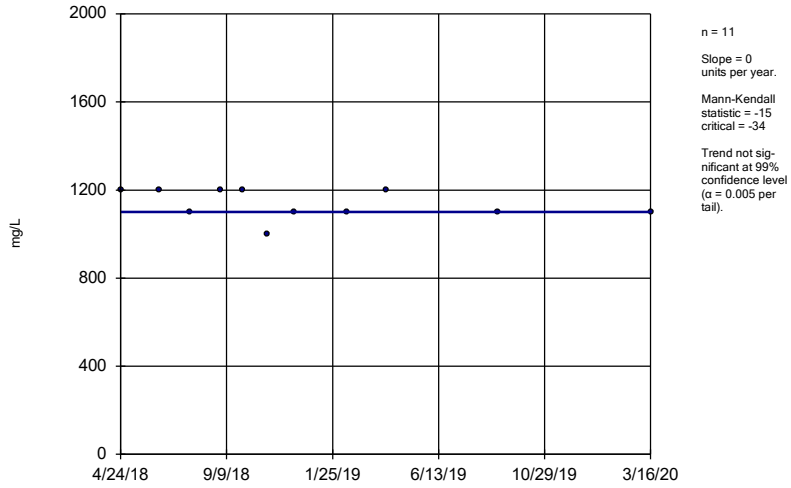
Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-3



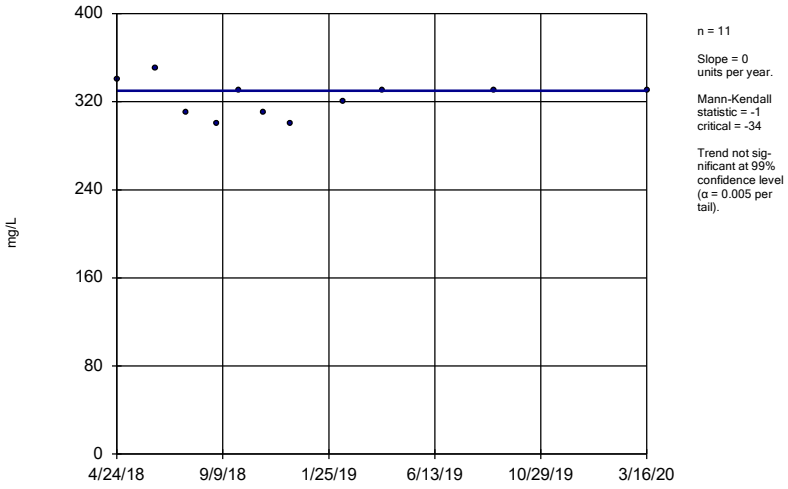
Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-4



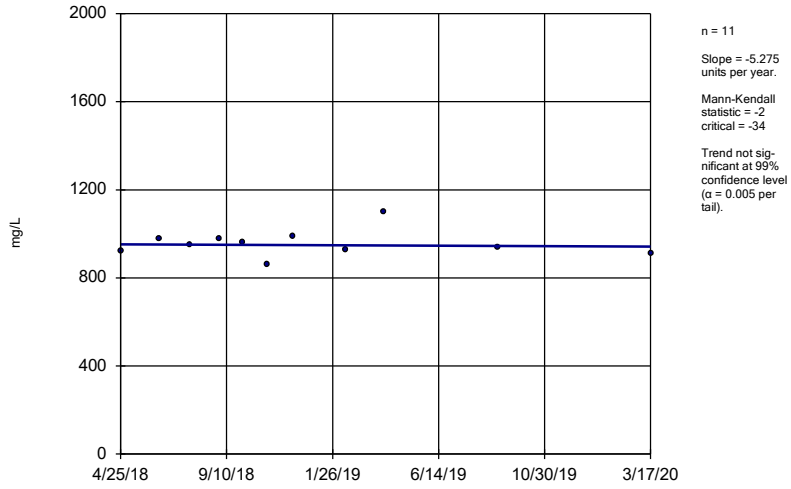
Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-5

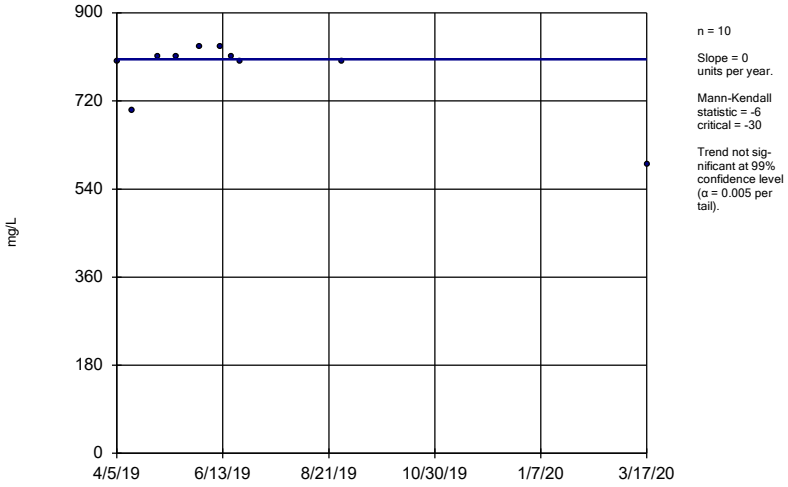


Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-6R



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = -6
critical = -30

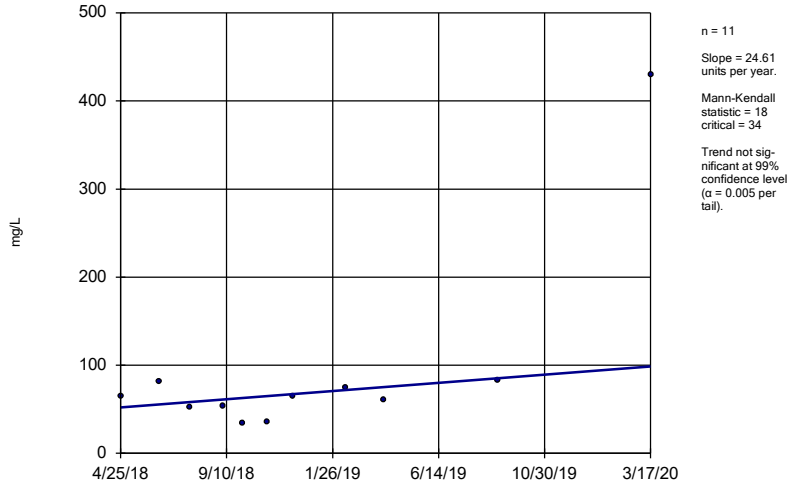
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-7



n = 11

Slope = 24.61 units per year.

Mann-Kendall statistic = 18
critical = 34

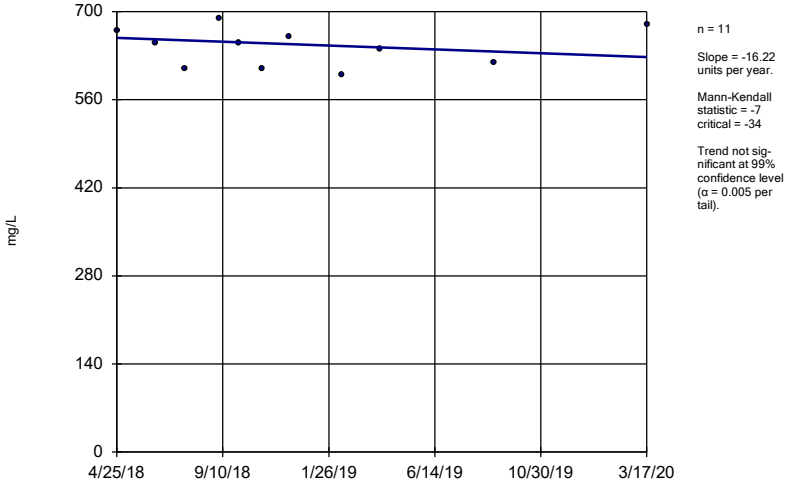
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-8



n = 11

Slope = -16.22 units per year.

Mann-Kendall statistic = -7
critical = -34

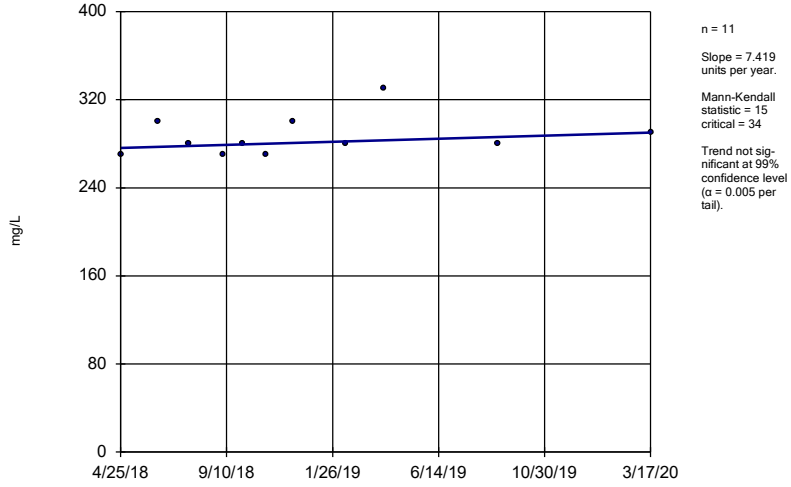
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-9



n = 11

Slope = 7.419 units per year.

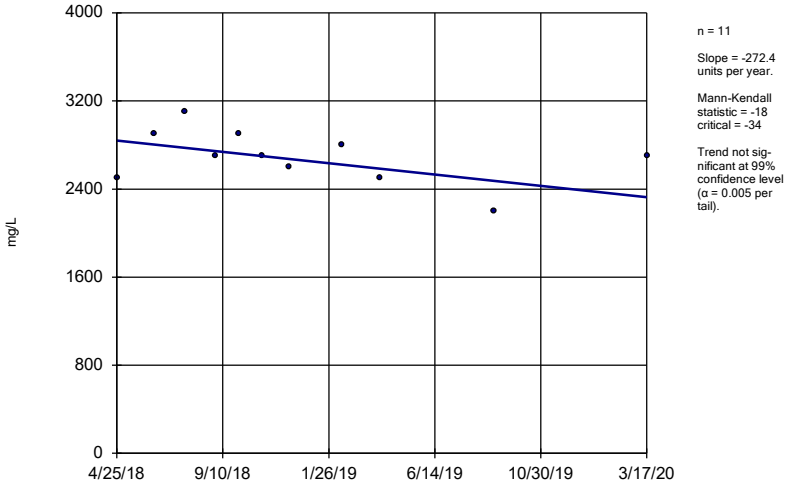
Mann-Kendall statistic = 15
critical = 34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-10



n = 11

Slope = -272.4 units per year.

Mann-Kendall statistic = -18 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

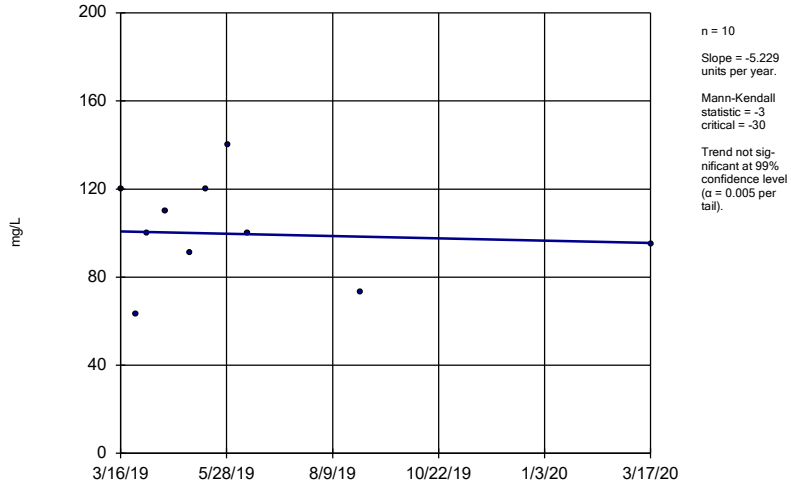
Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-11 (bg)



n = 10

Slope = -5.229 units per year.

Mann-Kendall statistic = -3 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

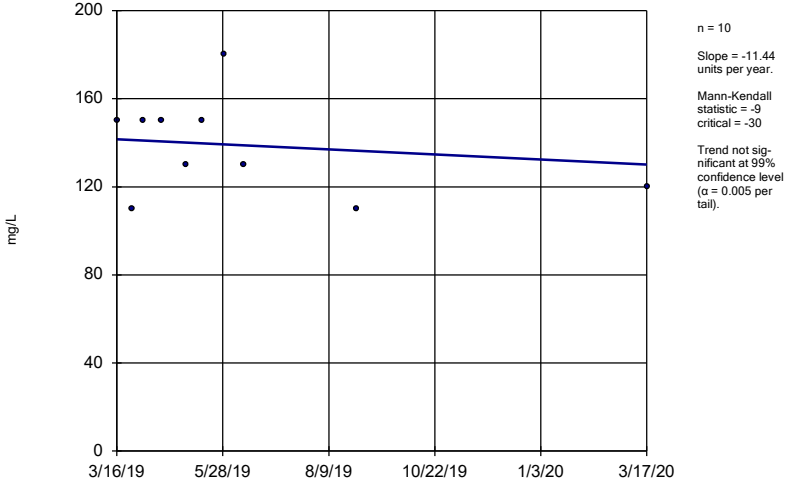
Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-12 (bg)



n = 10

Slope = -11.44 units per year.

Mann-Kendall statistic = -9 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

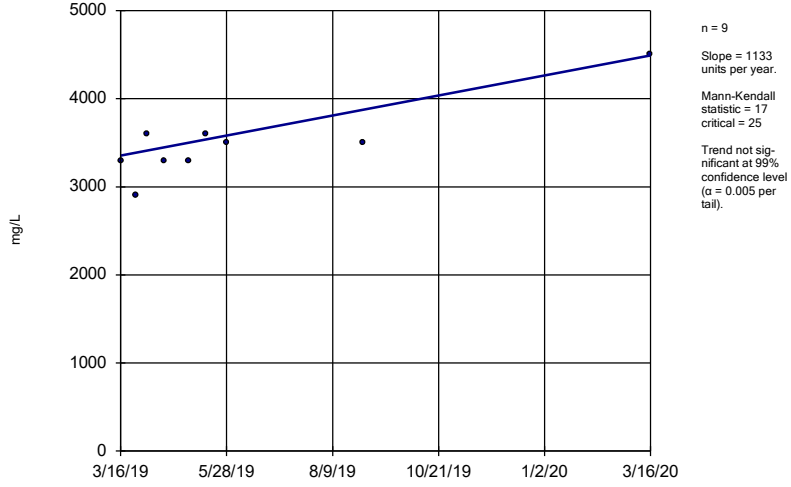
Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-1R



n = 9

Slope = 1133 units per year.

Mann-Kendall statistic = 17 critical = 25

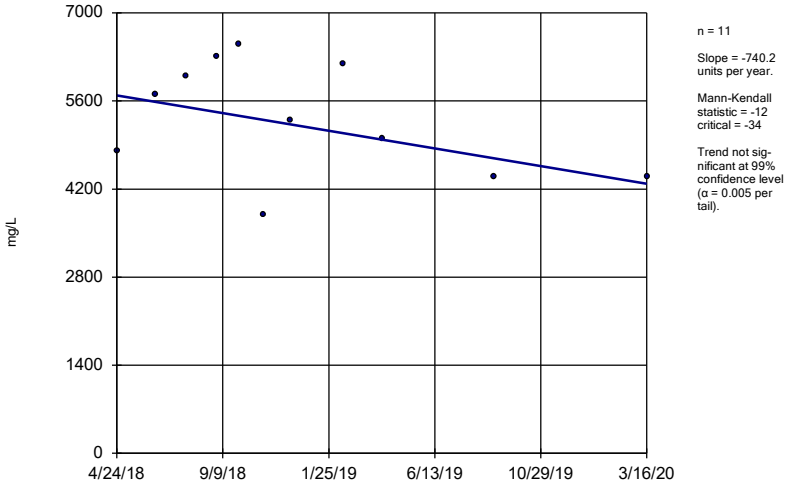
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-2



n = 11

Slope = -740.2 units per year.

Mann-Kendall statistic = -12
critical = -34

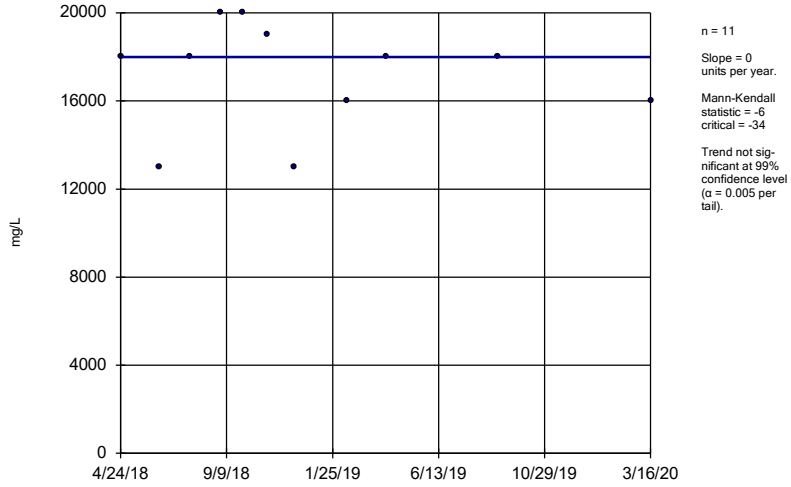
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-3



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = -6
critical = -34

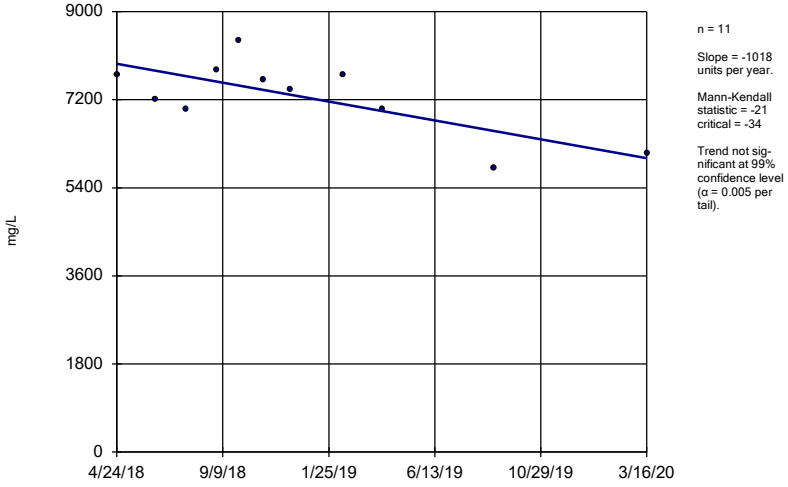
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-4



n = 11

Slope = -1018 units per year.

Mann-Kendall statistic = -21
critical = -34

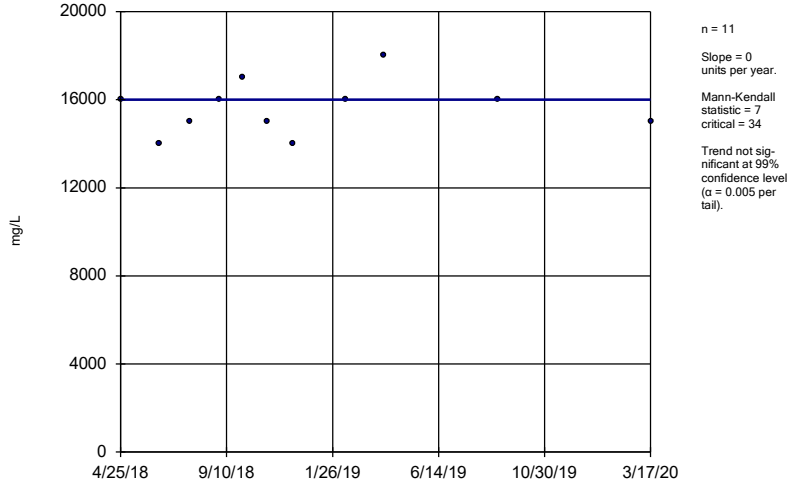
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-5



n = 11

Slope = 0 units per year.

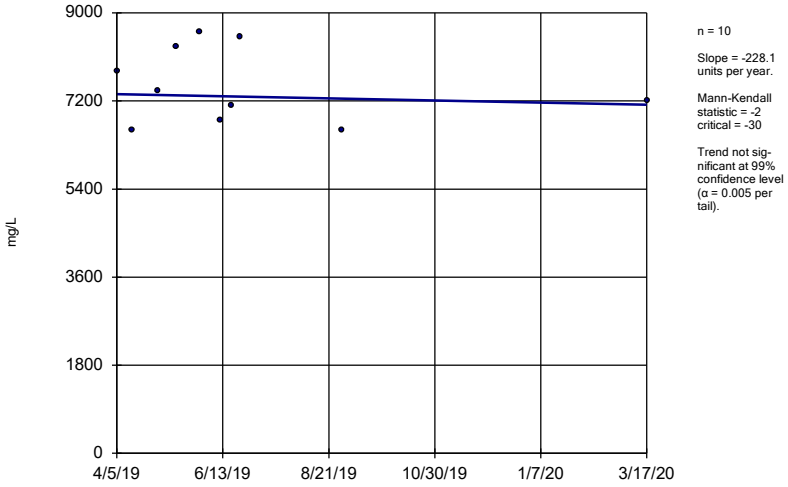
Mann-Kendall statistic = 7
critical = 34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sen's Slope Estimator

APMW-6R



n = 10

Slope = -228.1 units per year.

Mann-Kendall statistic = -2
critical = -30

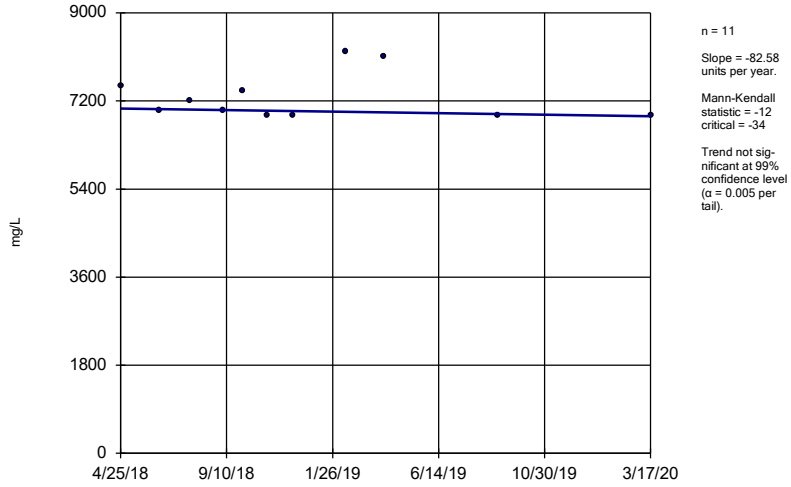
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-7



n = 11

Slope = -82.58 units per year.

Mann-Kendall statistic = -12
critical = -34

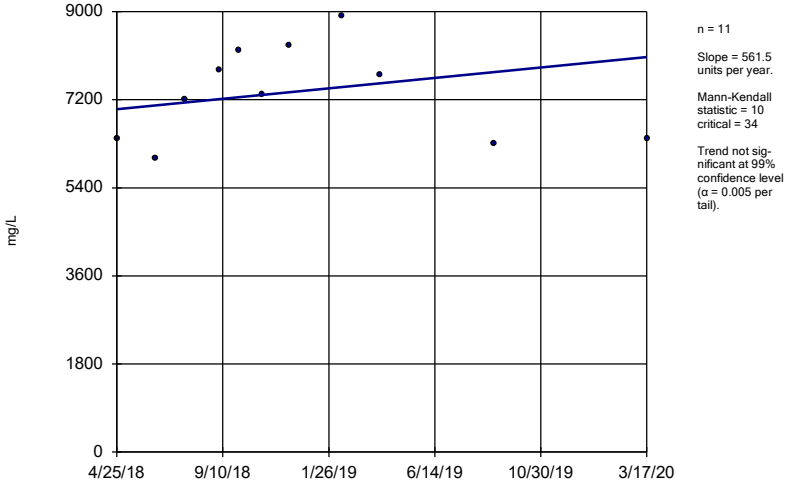
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-8



n = 11

Slope = 561.5 units per year.

Mann-Kendall statistic = 10
critical = 34

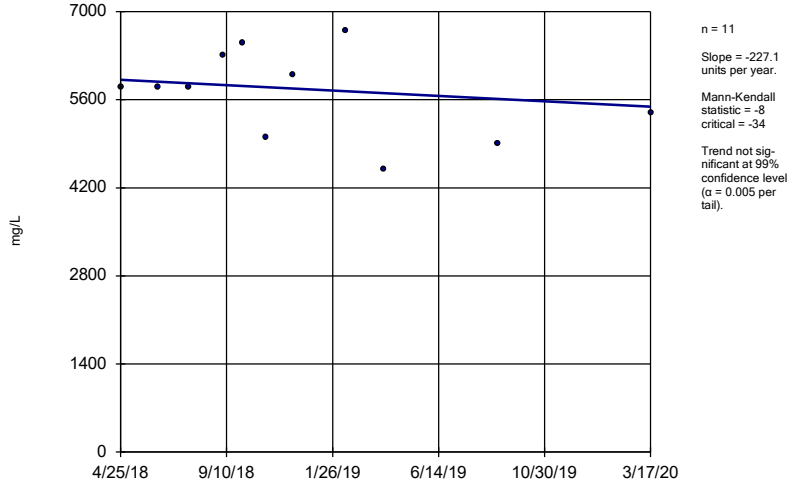
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

APMW-9



n = 11

Slope = -227.1 units per year.

Mann-Kendall statistic = -8
critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/11/2020 5:08 PM View: Trend Tests
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Confidence Intervals - Appendix IV

Confidence Interval Summary - Significant Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	APMW-10	0.1229	0.09711	0.01	Yes	11	0.11	0.01547	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-3	0.08637	0.06709	0.01	Yes	11	0.07673	0.01157	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-4	0.01848	0.01697	0.01	Yes	11	0.01773	0.0009045	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-5	0.2404	0.2123	0.01	Yes	11	0.2264	0.0169	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-6R	0.1607	0.1173	0.01	Yes	11	0.139	0.02606	0	None	No	0.01	Param.
Arsenic (mg/L)	APMW-8	0.08964	0.05927	0.01	Yes	11	0.07445	0.01822	0	None	No	0.01	Param.
Barium (mg/L)	APMW-2	3.387	2.827	2	Yes	11	3.109	0.3477	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-1R	8.55	5.815	5	Yes	11	7.183	1.641	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-2	20.23	17.66	5	Yes	11	18.95	1.541	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-3	7.157	5.705	5	Yes	11	6.431	0.8712	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-7	7.161	5.828	5	Yes	11	6.495	0.7994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-9	7.26	6.642	5	Yes	11	6.951	0.3708	0	None	No	0.01	Param.
Lithium (mg/L)	APMW-3	0.091	0.071	0.04	Yes	11	0.08027	0.01208	0	None	No	0.006	NP (normality)
Lithium (mg/L)	APMW-4	0.077	0.053	0.04	Yes	11	0.05982	0.009631	0	None	No	0.006	NP (normality)
Lithium (mg/L)	APMW-5	0.069	0.044	0.04	Yes	11	0.051	0.01052	0	None	No	0.006	NP (normality)
Lithium (mg/L)	APMW-6R	0.05973	0.05173	0.04	Yes	11	0.05573	0.004798	0	None	No	0.01	Param.
Lithium (mg/L)	APMW-8	0.114	0.07616	0.04	Yes	11	0.09591	0.02648	0	None	ln(x)	0.01	Param.
Molybdenum (mg/L)	APMW-6R	0.4403	0.3524	0.1	Yes	11	0.3964	0.05278	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-8	0.1658	0.1204	0.1	Yes	11	0.1431	0.02722	0	None	No	0.01	Param.

Confidence Interval Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	APMW-10	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-1R	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-2	0.002	0.002	0.006	No	11	0.001945	0.0001809	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-3	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-4	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-5	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-6R	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-7	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-8	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Antimony (mg/L)	APMW-9	0.002	0.002	0.006	No	11	0.002	0	100	None	No	0.006	NP (NDs)
Arsenic (mg/L)	**APMW-10**	**0.1229**	**0.09711**	**0.01**	**Yes**	**11**	**0.11**	**0.01547**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-1R	0.002315	0.001131	0.01	No	11	0.001723	0.0007104	9.091	None	No	0.01	Param.
Arsenic (mg/L)	APMW-2	0.00094	0.0005	0.01	No	11	0.0006145	0.0002519	63.64	None	No	0.006	NP (normality)
Arsenic (mg/L)	**APMW-3**	**0.08637**	**0.06709**	**0.01**	**Yes**	**11**	**0.07673**	**0.01157**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-4**	**0.01848**	**0.01697**	**0.01**	**Yes**	**11**	**0.01773**	**0.0009045**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-5**	**0.2404**	**0.2123**	**0.01**	**Yes**	**11**	**0.2264**	**0.0169**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**APMW-6R**	**0.1607**	**0.1173**	**0.01**	**Yes**	**11**	**0.139**	**0.02606**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-7	0.002274	0.0007438	0.01	No	11	0.001509	0.0009184	0	None	No	0.01	Param.
Arsenic (mg/L)	**APMW-8**	**0.08964**	**0.05927**	**0.01**	**Yes**	**11**	**0.07445**	**0.01822**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	APMW-9	0.001455	0.001073	0.01	No	11	0.001264	0.0002292	0	None	No	0.01	Param.
Barium (mg/L)	APMW-10	0.266	0.2249	2	No	11	0.2455	0.02464	0	None	No	0.01	Param.
Barium (mg/L)	APMW-1R	1.078	0.9143	2	No	11	0.9964	0.09852	0	None	No	0.01	Param.
Barium (mg/L)	**APMW-2**	**3.387**	**2.827**	**2**	**Yes**	**11**	**3.109**	**0.3477**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Barium (mg/L)	APMW-3	0.11	0.1	2	No	11	0.1034	0.006961	0	None	No	0.006	NP (normality)
Barium (mg/L)	APMW-4	0.5167	0.3561	2	No	11	0.4364	0.09636	0	None	No	0.01	Param.
Barium (mg/L)	APMW-5	0.1089	0.09327	2	No	11	0.1011	0.009386	0	None	No	0.01	Param.
Barium (mg/L)	APMW-6R	0.06834	0.05603	2	No	11	0.06218	0.007387	0	None	No	0.01	Param.
Barium (mg/L)	APMW-7	0.8729	0.5962	2	No	11	0.7345	0.166	0	None	No	0.01	Param.
Barium (mg/L)	APMW-8	0.2196	0.2022	2	No	11	0.2109	0.01044	0	None	No	0.01	Param.
Barium (mg/L)	APMW-9	0.45	0.42	2	No	11	0.4373	0.02102	0	None	No	0.006	NP (normality)
Beryllium (mg/L)	APMW-10	0.001	0.001	0.004	No	11	0.0009482	0.0001719	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-1R	0.001	0.001	0.004	No	11	0.0009264	0.0002442	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-2	0.001	0.00061	0.004	No	11	0.0008945	0.0002495	81.82	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-3	0.001	0.001	0.004	No	11	0.0009255	0.0002472	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-4	0.001	0.001	0.004	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-5	0.001	0.001	0.004	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-6R	0.001	0.001	0.004	No	11	0.0009418	0.000193	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-7	0.001	0.001	0.004	No	11	0.0009318	0.0002261	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-8	0.001	0.001	0.004	No	11	0.0009436	0.0001869	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	APMW-9	0.001	0.001	0.004	No	11	0.0009536	0.0001538	90.91	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-10	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-1R	0.001	0.001	0.005	No	11	0.00095	0.0001658	90.91	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-2	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-3	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-4	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-5	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-6R	0.001	0.00026	0.005	No	11	0.0008545	0.0003247	81.82	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-7	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-8	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	APMW-9	0.001	0.001	0.005	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Chromium (mg/L)	APMW-10	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-1R	0.0032	0.002	0.1	No	9	0.002133	0.0004	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-2	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-3	0.002	0.0014	0.1	No	9	0.001933	0.0002	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-4	0.00257	0.001474	0.1	No	9	0.002022	0.0005674	11.11	None	No	0.01	Param.

Confidence Interval Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	APMW-5	0.002607	0.001358	0.1	No	9	0.001756	0.0004126	44.44	Cohen`s	No	0.01	Param.
Chromium (mg/L)	APMW-6R	0.002	0.002	0.1	No	9	0.002	0	100	Cohen`s	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-7	0.002	0.0013	0.1	No	9	0.001622	0.0003032	33.33	None	No	0.002	NP (normality)
Chromium (mg/L)	APMW-8	0.0032	0.0014	0.1	No	9	0.002067	0.000469	77.78	None	No	0.002	NP (NDs)
Chromium (mg/L)	APMW-9	0.002	0.002	0.1	No	9	0.002	0	100	None	No	0.002	NP (NDs)
Cobalt (mg/L)	APMW-10	0.0005	0.00012	0.006	No	11	0.0004275	0.0001616	81.82	None	No	0.006	NP (NDs)
Cobalt (mg/L)	APMW-1R	0.0005	0.00017	0.006	No	11	0.0004073	0.0001299	27.27	None	No	0.006	NP (Cohens/xfrm)
Cobalt (mg/L)	APMW-2	0.0005	0.0005	0.006	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	APMW-3	0.002744	0.002256	0.006	No	11	0.0025	0.0002933	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-4	0.003831	0.003169	0.006	No	11	0.0035	0.0003975	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-5	0.0005	0.000079	0.006	No	11	0.0004231	0.0001711	81.82	None	No	0.006	NP (NDs)
Cobalt (mg/L)	APMW-6R	0.003925	0.001821	0.006	No	11	0.002873	0.001263	0	None	No	0.01	Param.
Cobalt (mg/L)	APMW-7	0.0005	0.00024	0.006	No	11	0.0004227	0.0001193	63.64	None	No	0.006	NP (normality)
Cobalt (mg/L)	APMW-8	0.0005	0.0005	0.006	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	APMW-9	0.0005	0.000089	0.006	No	11	0.0004248	0.0001673	81.82	None	No	0.006	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	APMW-10	3.183	2.405	5	No	11	2.794	0.467	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-1R**	**8.55**	**5.815**	**5**	**Yes**	**11**	**7.183**	**1.641**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**APMW-2**	**20.23**	**17.66**	**5**	**Yes**	**11**	**18.95**	**1.541**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**APMW-3**	**7.157**	**5.705**	**5**	**Yes**	**11**	**6.431**	**0.8712**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	APMW-4	2.825	1.795	5	No	11	2.31	0.6182	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-5	4.755	3.687	5	No	11	4.221	0.6409	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	APMW-6R	3.375	2.849	5	No	11	3.112	0.3153	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-7**	**7.161**	**5.828**	**5**	**Yes**	**11**	**6.495**	**0.7994**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	APMW-8	4.063	3.398	5	No	11	3.731	0.399	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	**APMW-9**	**7.26**	**6.642**	**5**	**Yes**	**11**	**6.951**	**0.3708**	**0**	**None**	**No**	**0.01**	**Param.**
Fluoride (mg/L)	APMW-10	0.7867	0.5666	4	No	12	0.6767	0.1402	0	None	No	0.01	Param.
Fluoride (mg/L)	APMW-1R	0.5	0.14	4	No	11	0.35	0.174	54.55	None	No	0.006	NP (normality)
Fluoride (mg/L)	APMW-2	0.1816	0.05758	4	No	11	0.1336	0.1306	9.091	None	ln(x)	0.01	Param.
Fluoride (mg/L)	APMW-3	0.606	0.3723	4	No	12	0.4892	0.1489	16.67	None	No	0.01	Param.
Fluoride (mg/L)	APMW-4	0.5468	0.4751	4	No	12	0.505	0.0664	8.333	None	x^4	0.01	Param.
Fluoride (mg/L)	APMW-5	0.5	0.09	4	No	11	0.24	0.2063	36.36	None	No	0.006	NP (normality)
Fluoride (mg/L)	APMW-6R	0.5	0.32	4	No	11	0.4627	0.08368	81.82	None	No	0.006	NP (NDs)
Fluoride (mg/L)	APMW-7	0.5	0.11	4	No	12	0.3092	0.4265	8.333	None	No	0.01	NP (normality)
Fluoride (mg/L)	APMW-8	1.047	0.822	4	No	12	0.9175	0.1855	0	None	x^3	0.01	Param.
Fluoride (mg/L)	APMW-9	0.5	0.06	4	No	11	0.1664	0.1724	18.18	None	No	0.006	NP (normality)
Lead (mg/L)	APMW-10	0.001	0.001	0.015	No	11	0.0009727	0.0001272	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-1R	0.001	0.001	0.015	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-2	0.001	0.001	0.015	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-3	0.001	0.001	0.015	No	11	0.0009527	0.0001568	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-4	0.001	0.001	0.015	No	11	0.0009655	0.0001146	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-5	0.001	0.00041	0.015	No	11	0.0008973	0.0002553	72.73	None	No	0.006	NP (normality)
Lead (mg/L)	APMW-6R	0.001	0.001	0.015	No	11	0.0009382	0.000205	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-7	0.001	0.001	0.015	No	11	0.001082	0.0002714	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-8	0.0013	0.001	0.015	No	11	0.001082	0.000194	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	APMW-9	0.001	0.00039	0.015	No	11	0.0008655	0.0003049	81.82	None	No	0.006	NP (NDs)
Lithium (mg/L)	APMW-10	0.02208	0.01148	0.04	No	11	0.017	0.007694	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	APMW-1R	0.01314	0.01014	0.04	No	11	0.01123	0.003109	9.091	None	x^3	0.01	Param.
Lithium (mg/L)	APMW-2	0.02782	0.02163	0.04	No	11	0.02473	0.003717	0	None	No	0.01	Param.
Lithium (mg/L)	**APMW-3**	**0.091**	**0.071**	**0.04**	**Yes**	**11**	**0.08027**	**0.01208**	**0**	**None**	**No**	**0.006**	**NP (normality)**
Lithium (mg/L)	**APMW-4**	**0.077**	**0.053**	**0.04**	**Yes**	**11**	**0.05982**	**0.009631**	**0**	**None**	**No**	**0.006**	**NP (normality)**
Lithium (mg/L)	**APMW-5**	**0.069**	**0.044**	**0.04**	**Yes**	**11**	**0.051**	**0.01052**	**0**	**None**	**No**	**0.006**	**NP (normality)**
Lithium (mg/L)	**APMW-6R**	**0.05973**	**0.05173**	**0.04**	**Yes**	**11**	**0.05573**	**0.004798**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	APMW-7	0.004	0.0021	0.04	No	10	0.0031	0.001523	30	None	No	0.011	NP (Cohens/xfrm)
Lithium (mg/L)	**APMW-8**	**0.114**	**0.07616**	**0.04**	**Yes**	**11**	**0.09591**	**0.02648**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Lithium (mg/L)	APMW-9	0.0053	0.0025	0.04	No	10	0.00388	0.001621	20	None	No	0.011	NP (Cohens/xfrm)

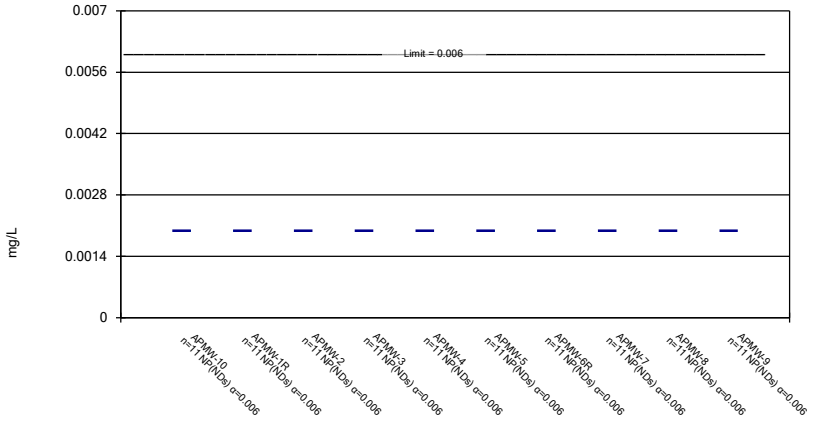
Confidence Interval Summary - All Results

Plant Watson Client: Southern Company Data: Plant Watson AP CCR Printed 6/18/2020, 4:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	APMW-10	0.0002	0.000085	0.002	No	9	0.0001872	0.00003833	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-1R	0.0002	0.00015	0.002	No	9	0.0001944	0.00001667	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-2	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-3	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-4	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-5	0.0002	0.000093	0.002	No	9	0.0001881	0.00003567	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-6R	0.0002	0.0002	0.002	No	9	0.0002	0	100	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-7	0.0002	0.00009	0.002	No	9	0.0001878	0.00003667	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-8	0.0002	0.000077	0.002	No	9	0.0001863	0.000041	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	APMW-9	0.00035	0.0002	0.002	No	9	0.0002167	0.00005	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	APMW-10	0.11	0.081	0.1	No	11	0.09855	0.01283	0	None	No	0.006	NP (normality)
Molybdenum (mg/L)	APMW-1R	0.005	0.005	0.1	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	APMW-2	0.005	0.005	0.1	No	11	0.004617	0.001269	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	APMW-3	0.07038	0.05907	0.1	No	11	0.06473	0.006784	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-4	0.01061	0.008246	0.1	No	11	0.009427	0.001417	0	None	No	0.01	Param.
Molybdenum (mg/L)	APMW-5	0.1063	0.0608	0.1	No	11	0.08355	0.0273	0	None	No	0.01	Param.
Molybdenum (mg/L)	**APMW-6R**	**0.4403**	**0.3524**	**0.1**	**Yes**	**11**	**0.3964**	**0.05278**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	APMW-7	0.0063	0.0047	0.1	No	11	0.005087	0.001532	45.45	None	No	0.006	NP (Cohens/xfrm)
Molybdenum (mg/L)	**APMW-8**	**0.1658**	**0.1204**	**0.1**	**Yes**	**11**	**0.1431**	**0.02722**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	APMW-9	0.005	0.00093	0.1	No	11	0.004257	0.001652	81.82	None	No	0.006	NP (NDs)
Selenium (mg/L)	APMW-10	0.005	0.00035	0.05	No	11	0.003755	0.002134	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-1R	0.005	0.005	0.05	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Selenium (mg/L)	APMW-2	0.005	0.00061	0.05	No	11	0.003791	0.002072	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-3	0.005	0.001	0.05	No	11	0.002652	0.001889	36.36	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-4	0.005	0.00055	0.05	No	11	0.003781	0.002089	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-5	0.005	0.0006	0.05	No	11	0.00381	0.002038	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-6R	0.005	0.005	0.05	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Selenium (mg/L)	APMW-7	0.005	0.00039	0.05	No	11	0.003746	0.002147	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-8	0.005	0.00049	0.05	No	11	0.003774	0.002101	72.73	None	No	0.006	NP (normality)
Selenium (mg/L)	APMW-9	0.005	0.00041	0.05	No	11	0.003772	0.002107	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	APMW-10	0.001	0.00058	0.002	No	11	0.0008845	0.0002743	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-1R	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-2	0.001	0.001	0.002	No	11	0.0009855	0.00004824	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-3	0.001	0.001	0.002	No	11	0.00092	0.0002653	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-4	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-5	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-6R	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-7	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-8	0.001	0.001	0.002	No	11	0.0009591	0.0002518	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	APMW-9	0.001	0.001	0.002	No	11	0.001055	0.0001809	90.91	None	No	0.006	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

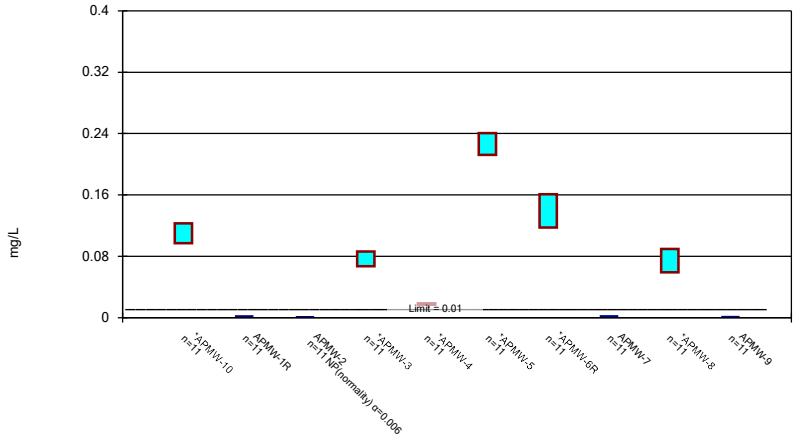


Constituent: Antimony Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

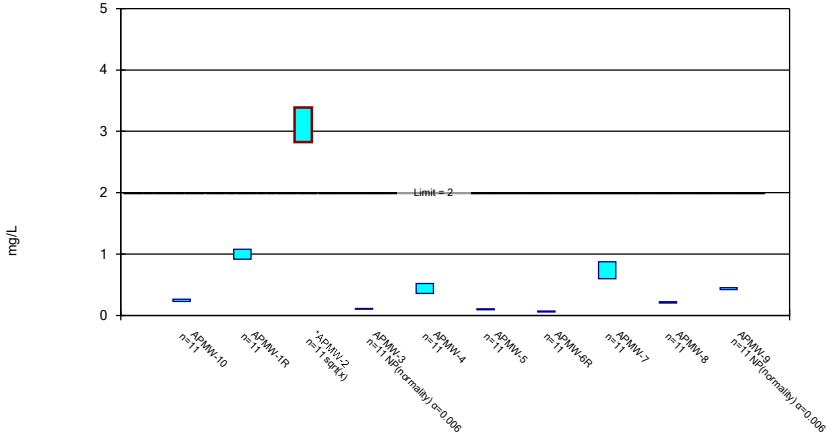


Constituent: Arsenic Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

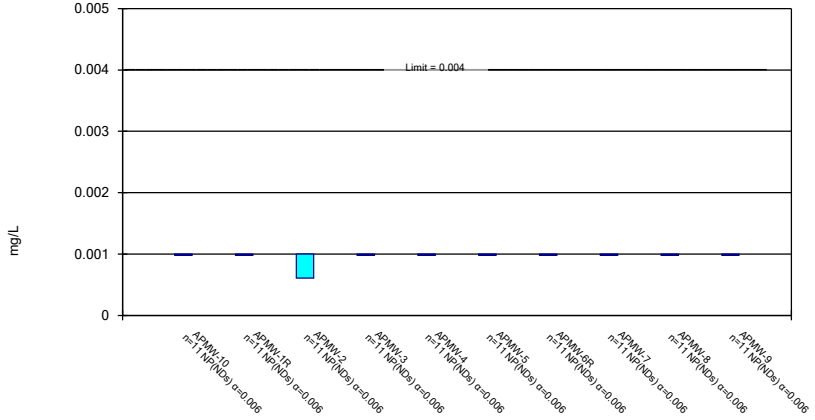


Constituent: Barium Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

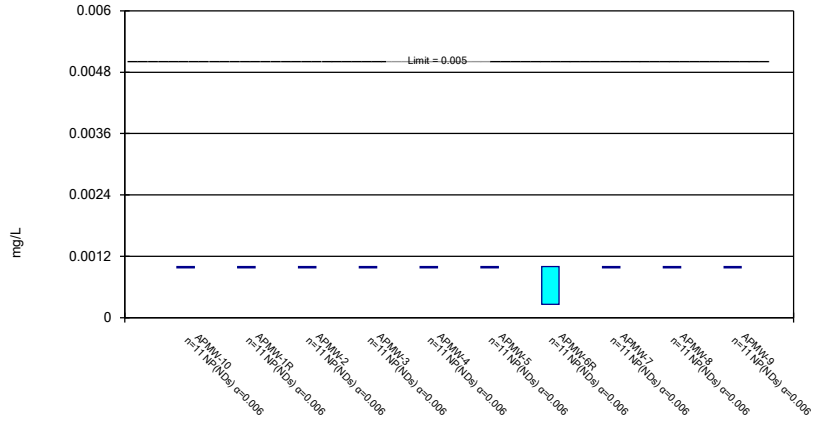
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Non-Parametric Confidence Interval

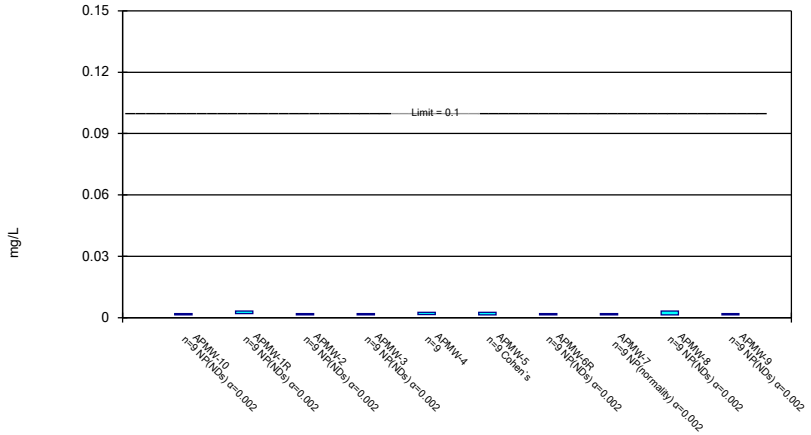
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Parametric and Non-Parametric (NP) Confidence Interval

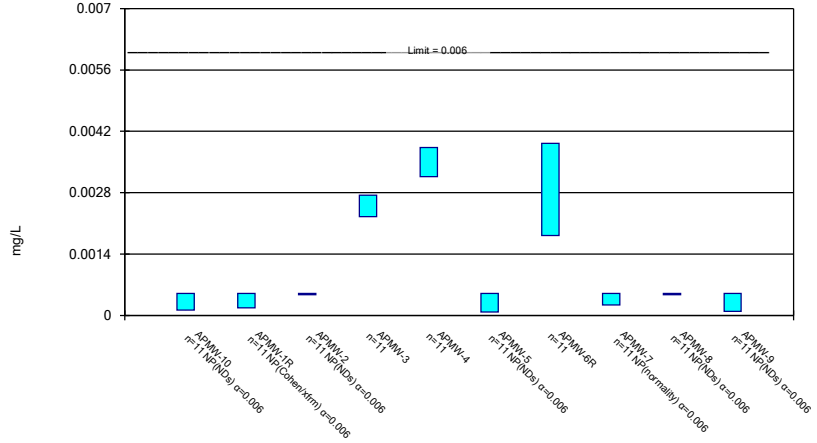
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Parametric and Non-Parametric (NP) Confidence Interval

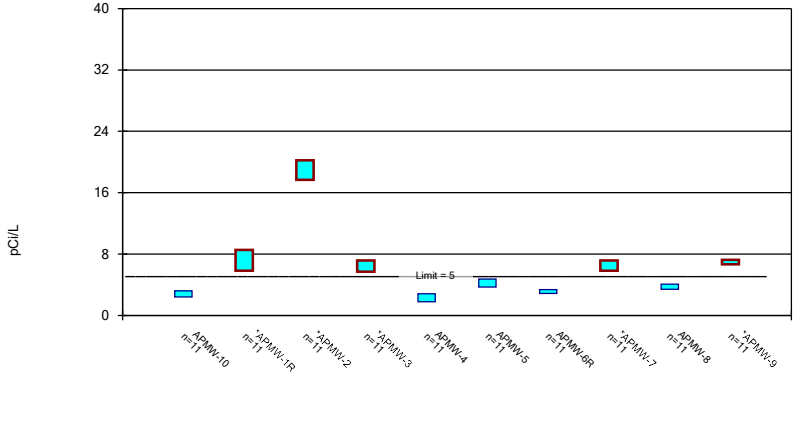
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Parametric Confidence Interval

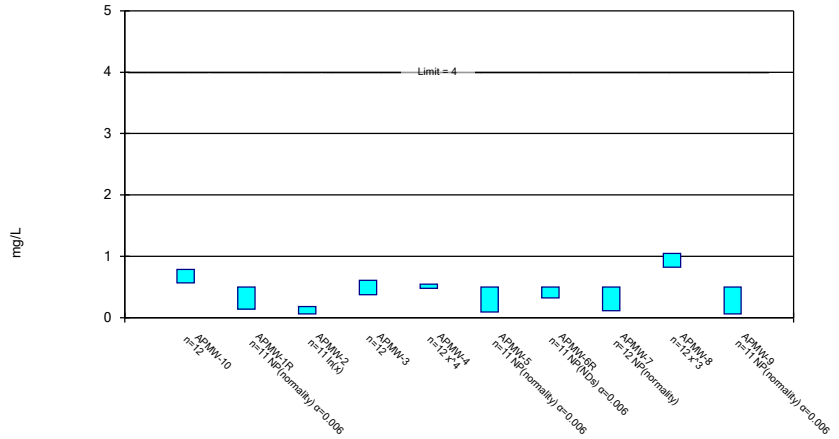
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP 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.

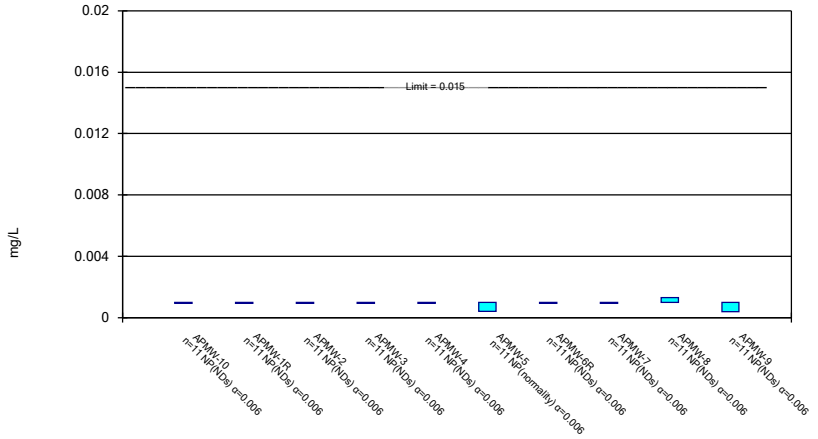


Constituent: Fluoride Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

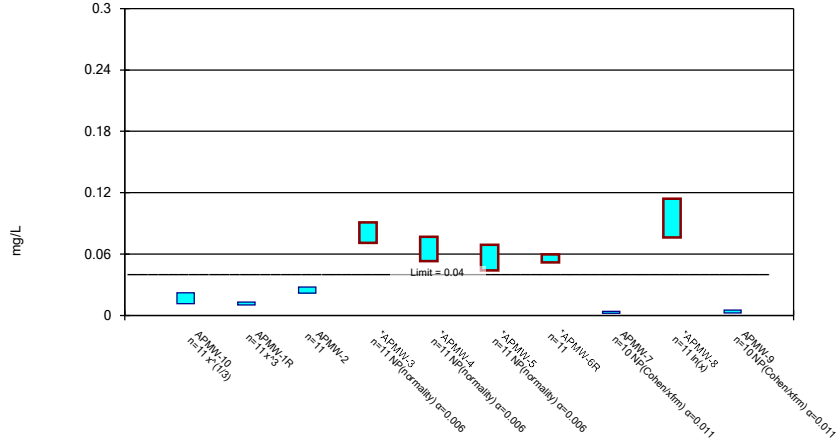


Constituent: Lead Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

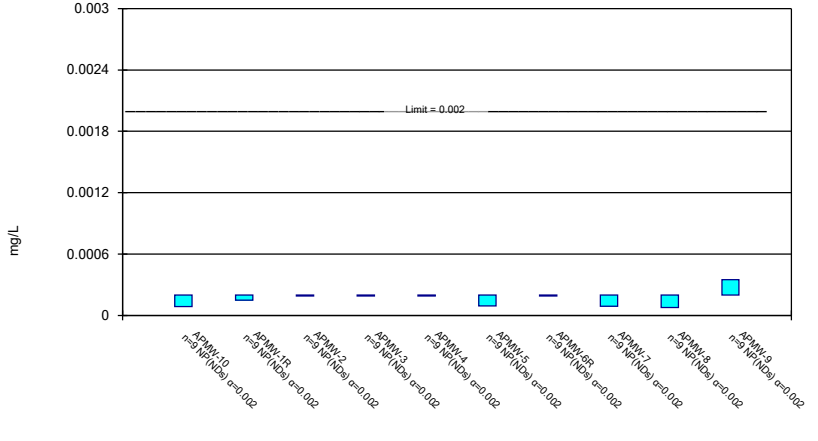


Constituent: Lithium Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

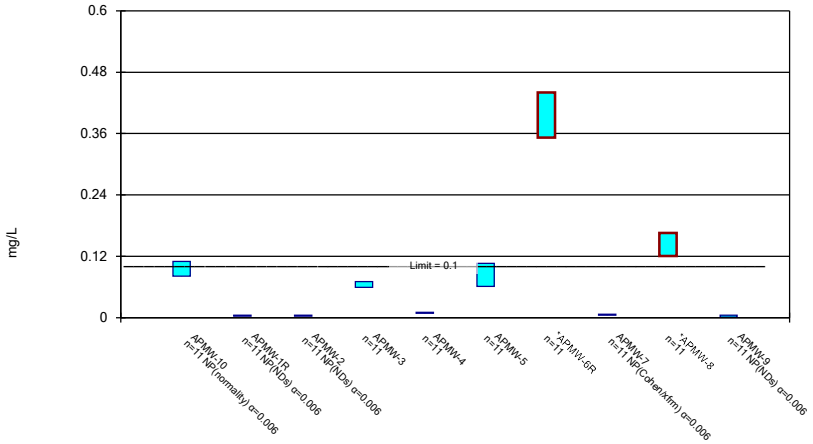
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

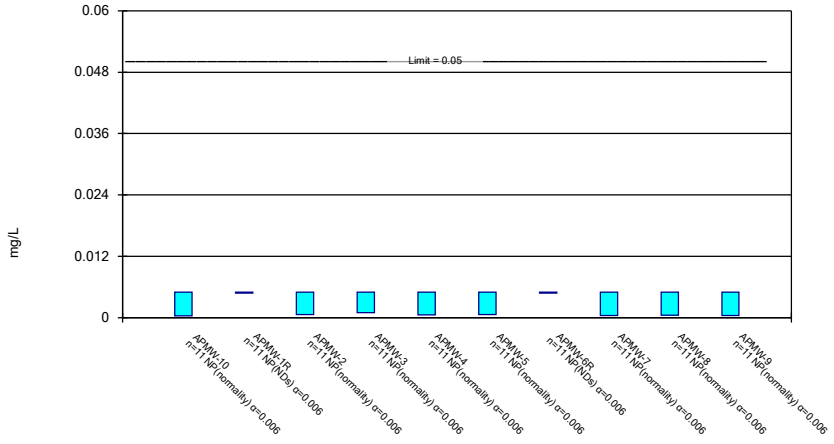


Constituent: Molybdenum Analysis Run 6/18/2020 4:10 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

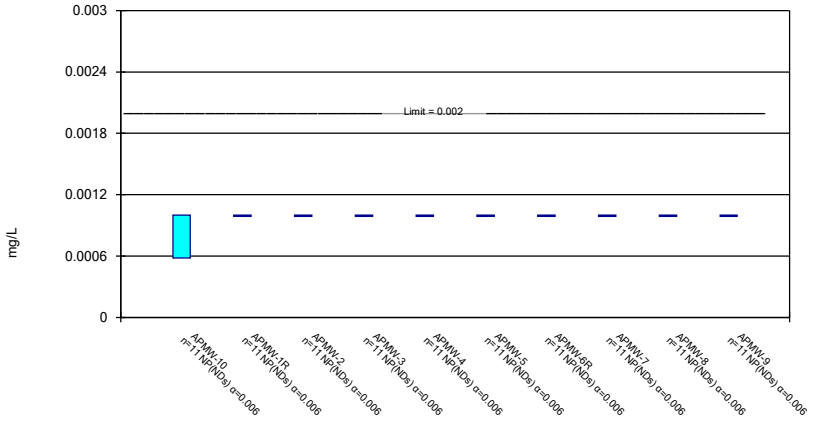


Constituent: Selenium Analysis Run 6/18/2020 4:11 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

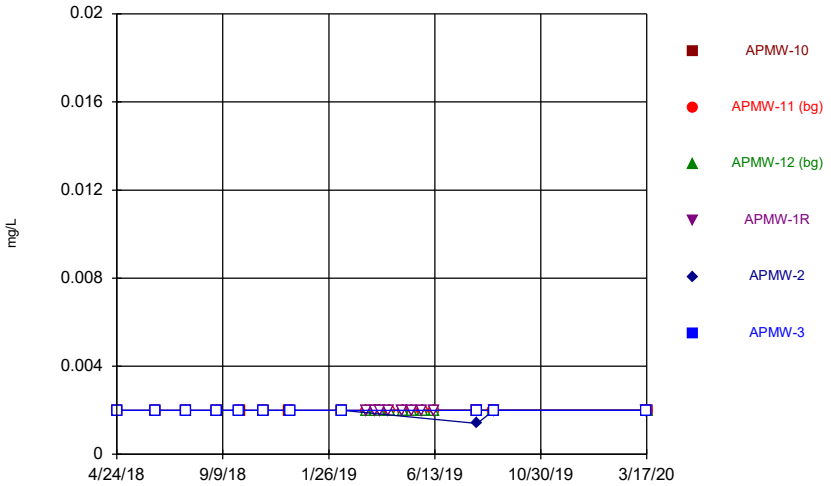


Constituent: Thallium Analysis Run 6/18/2020 4:11 PM View: Confidence Intervals
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Time Series

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

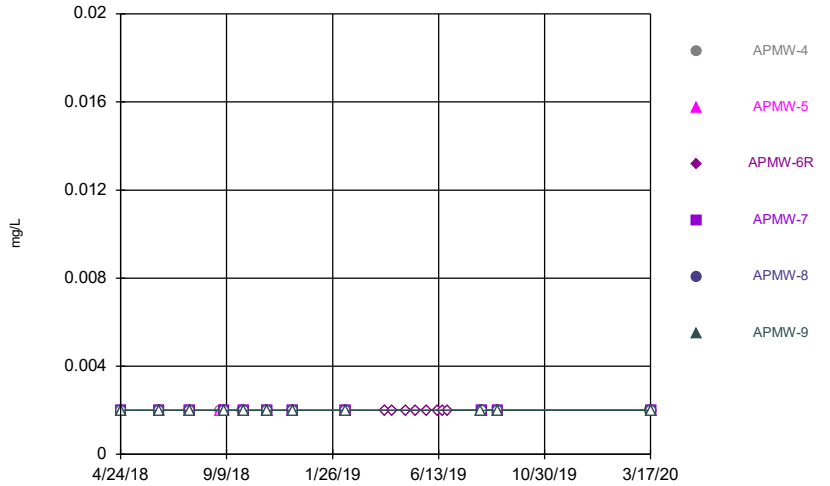
Time Series



Constituent: Antimony Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

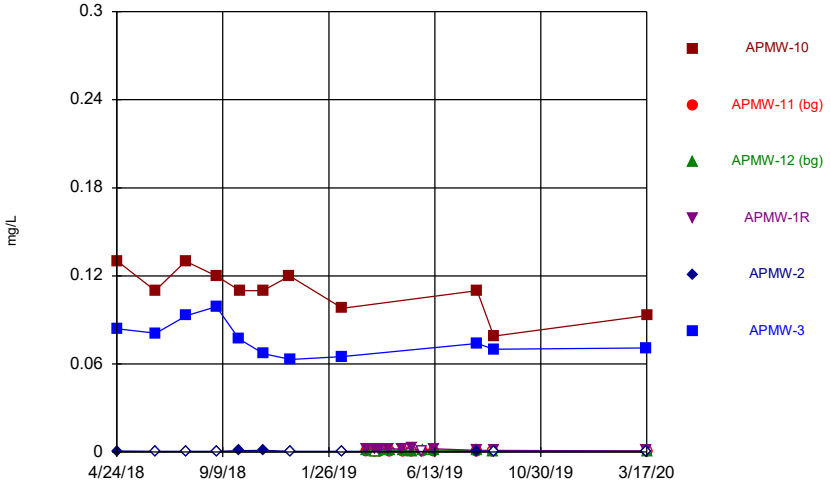
Time Series



Constituent: Antimony Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

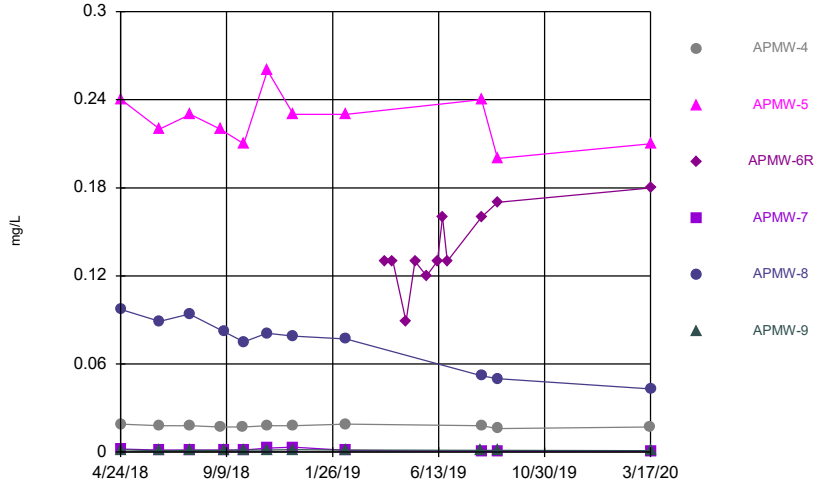
Time Series



Constituent: Arsenic Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

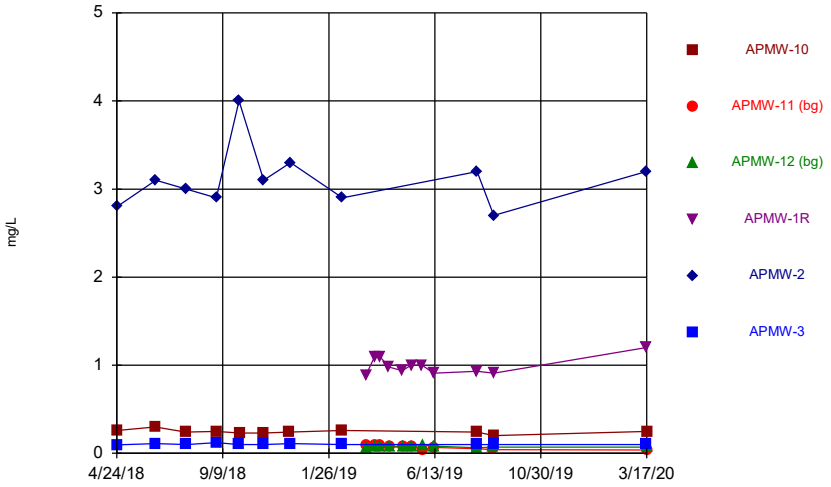
Time Series



Constituent: Arsenic Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

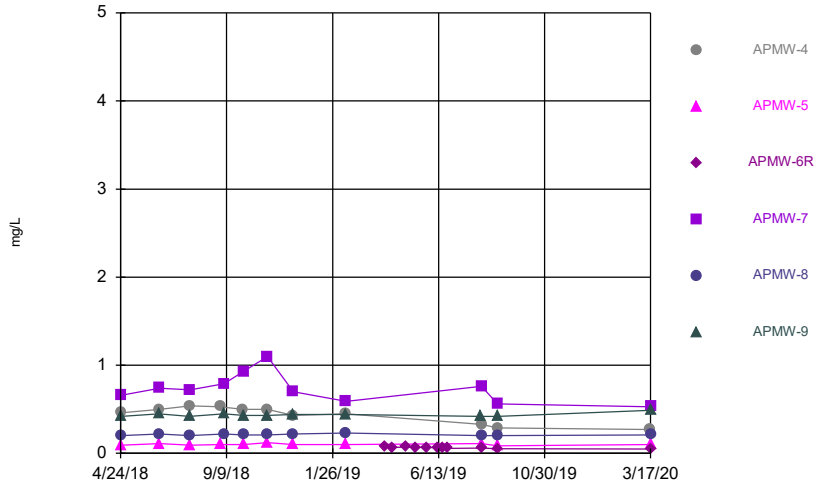
Time Series



Constituent: Barium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

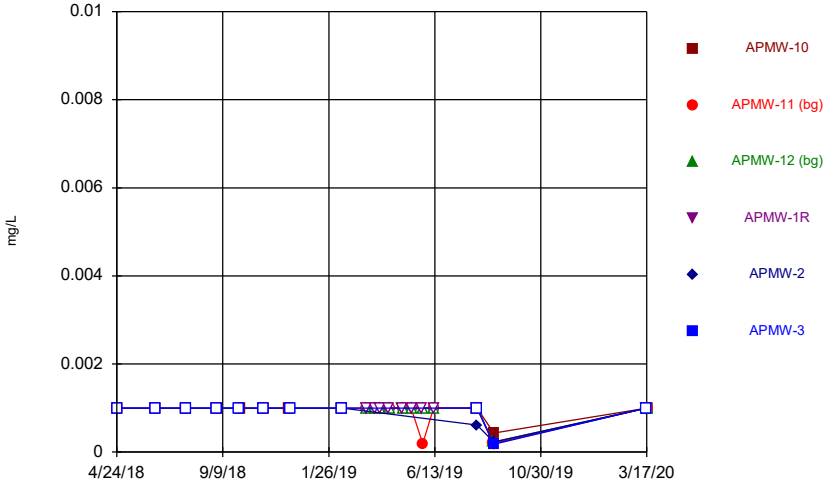
Time Series



Constituent: Barium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

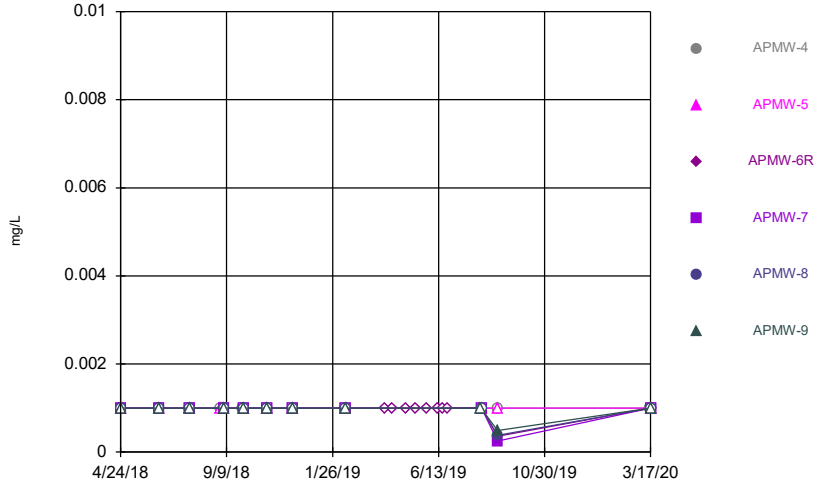
Time Series



Constituent: Beryllium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

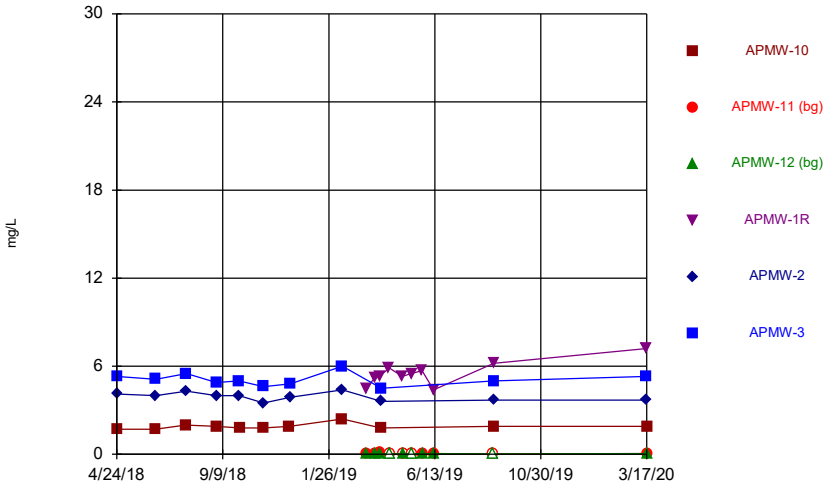
Time Series



Constituent: Beryllium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

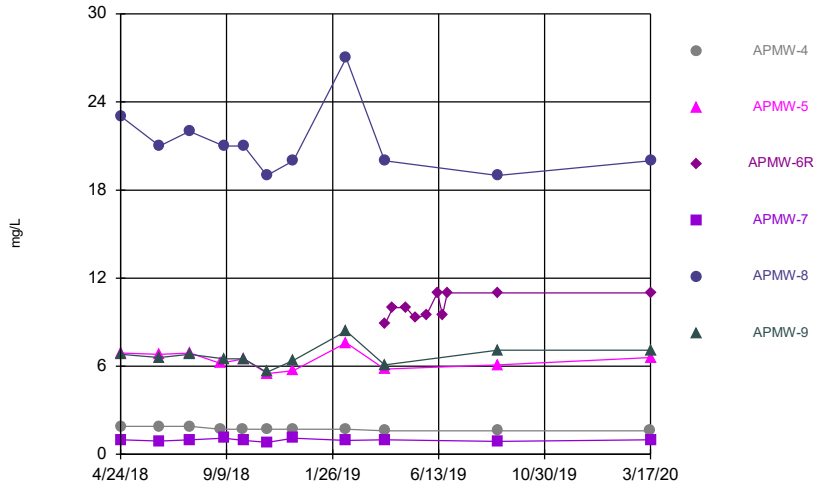
Time Series



Constituent: Boron Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

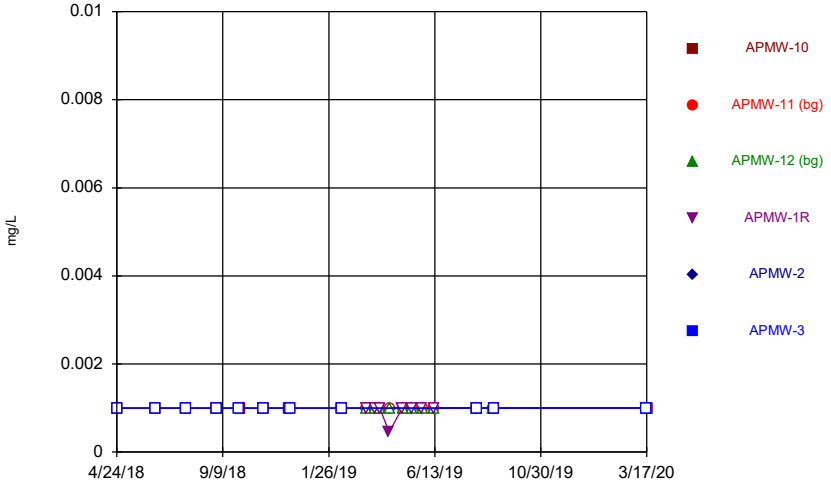
Time Series



Constituent: Boron Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

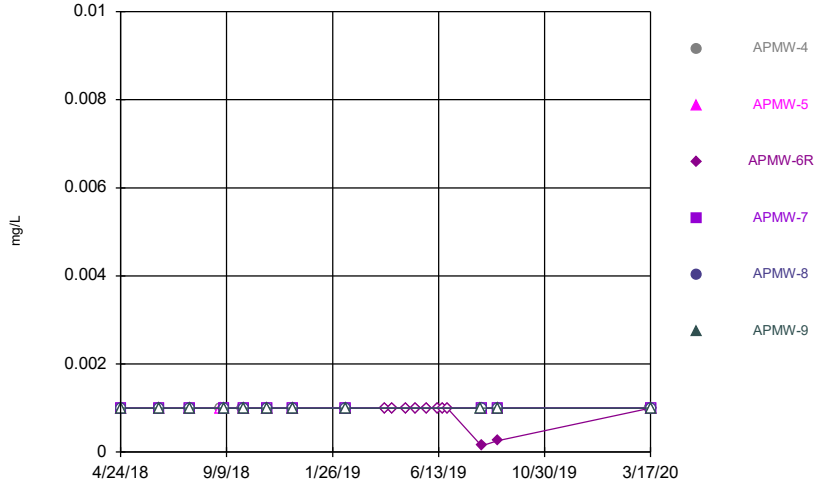
Time Series



Constituent: Cadmium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

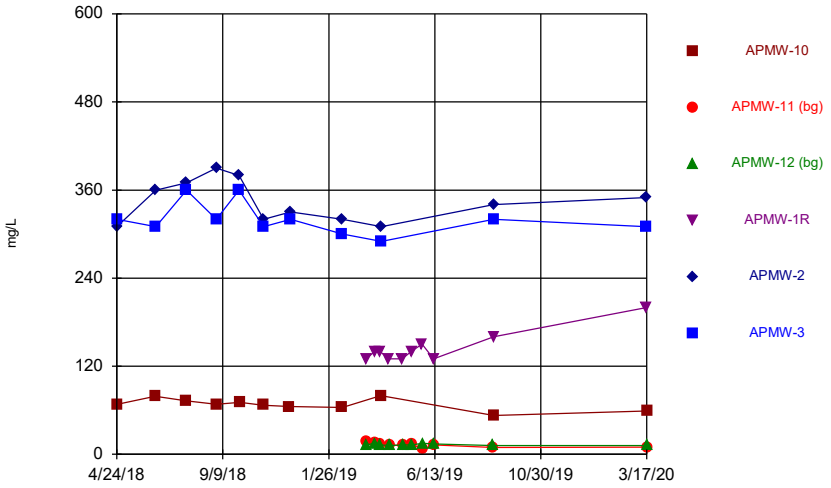
Time Series



Constituent: Cadmium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

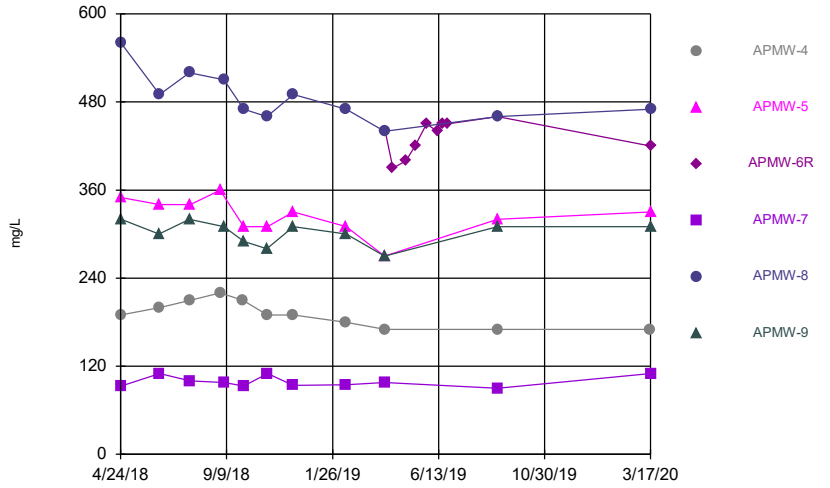
Time Series



Constituent: Calcium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

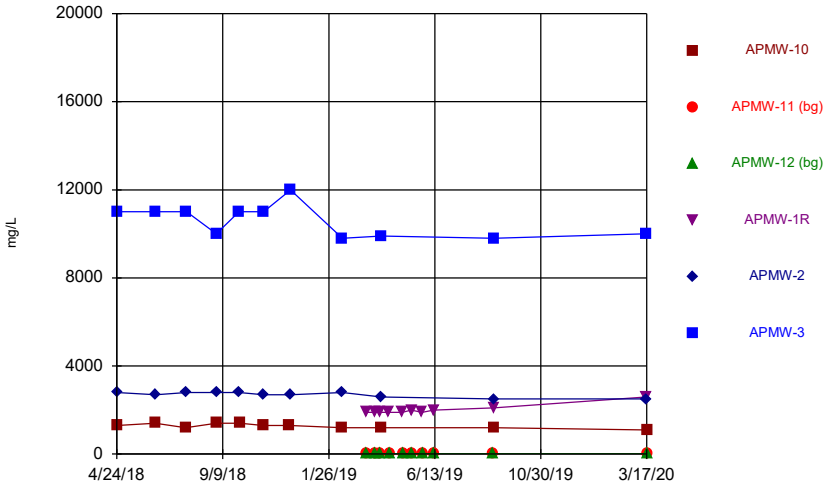
Time Series



Constituent: Calcium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

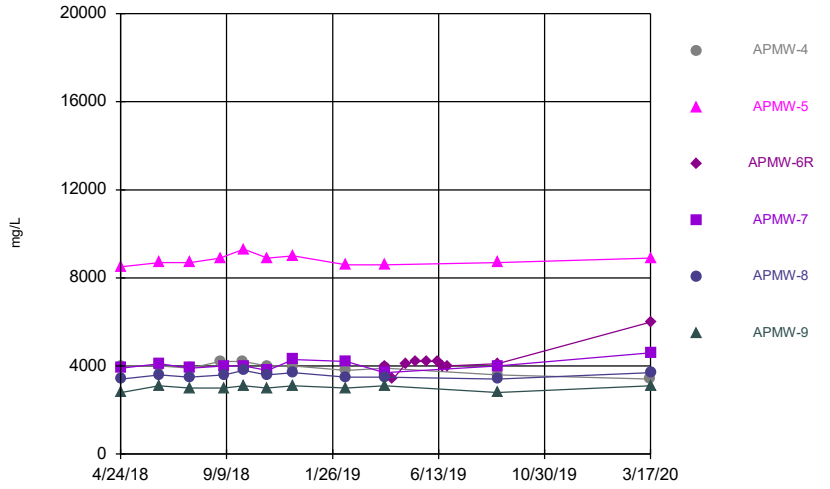
Time Series



Constituent: Chloride Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

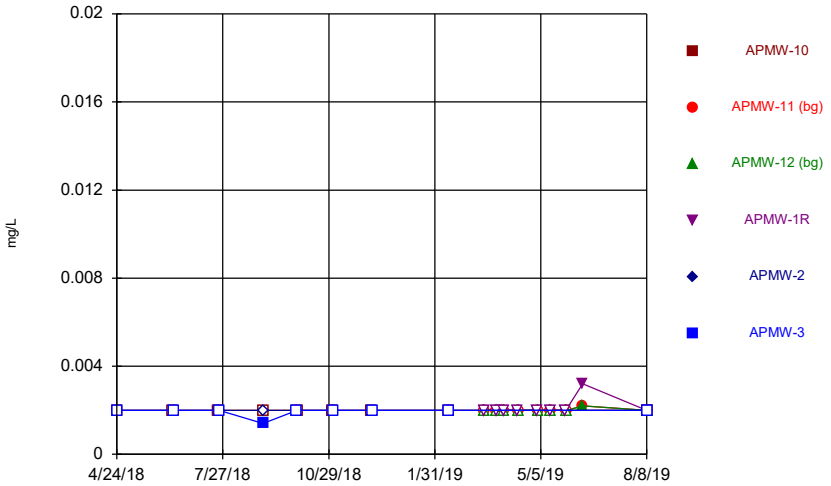
Time Series



Constituent: Chloride Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

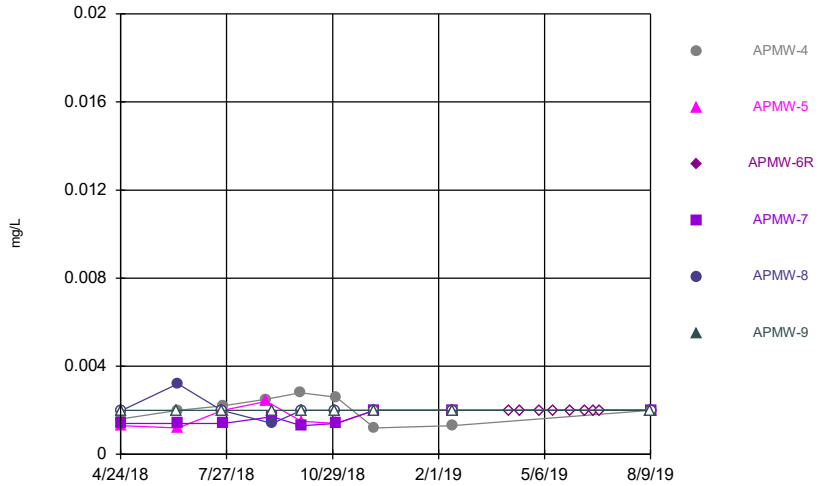
Time Series



Constituent: Chromium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

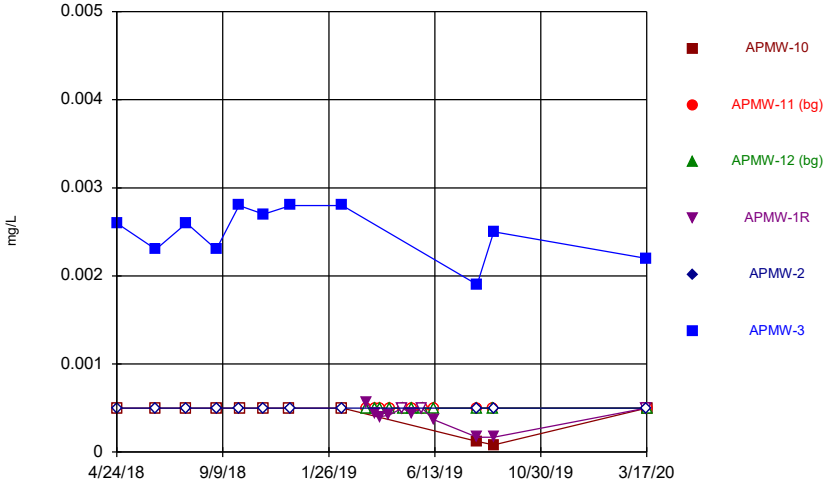
Time Series



Constituent: Chromium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

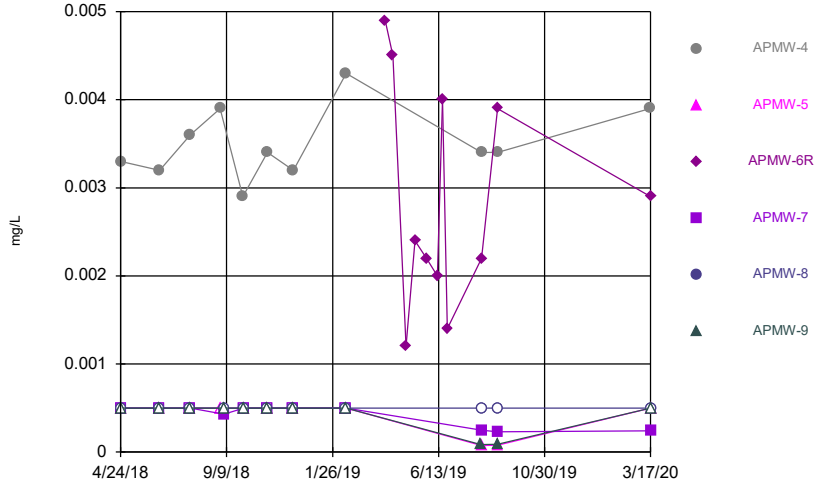
Time Series



Constituent: Cobalt Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

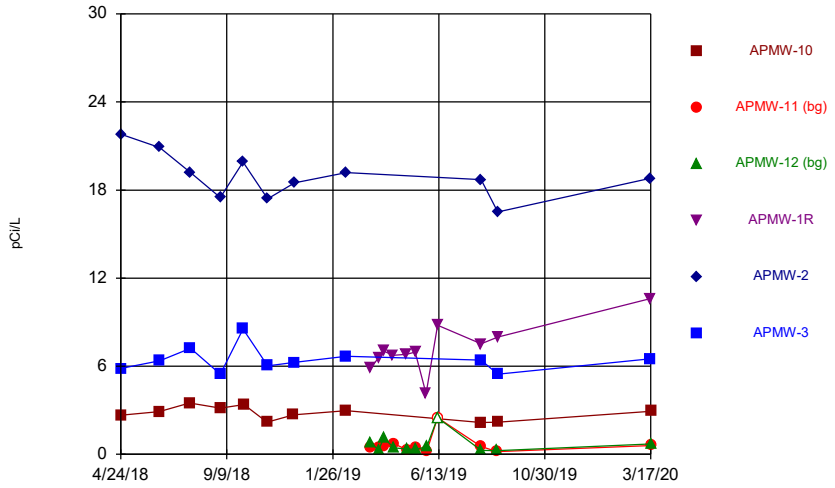
Time Series



Constituent: Cobalt Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

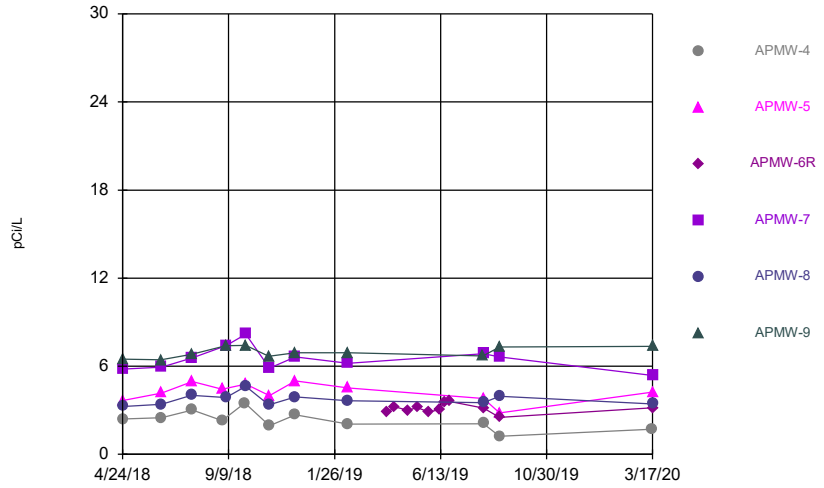
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

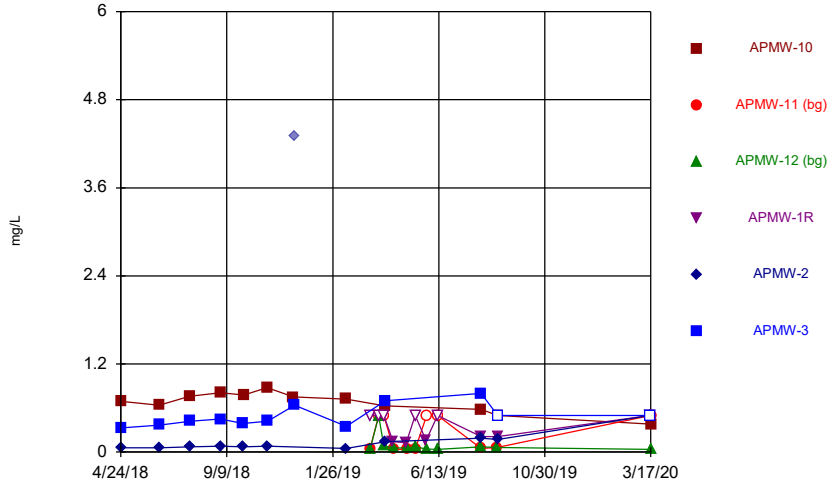
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

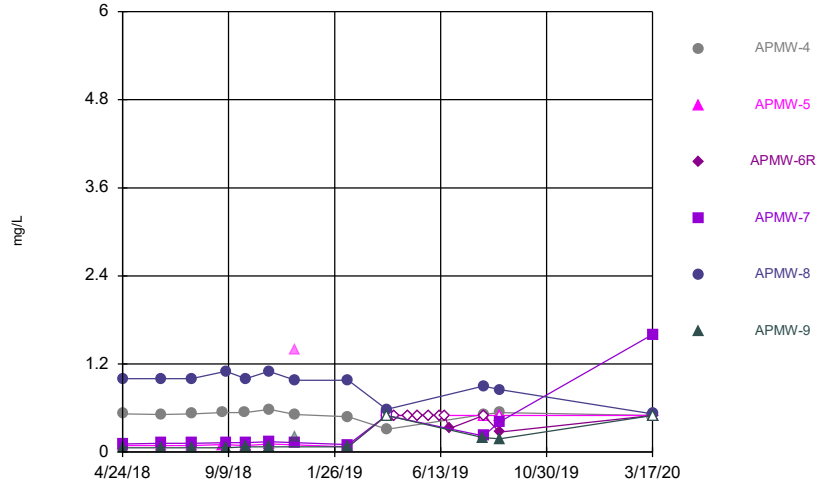
Time Series



Constituent: Fluoride Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

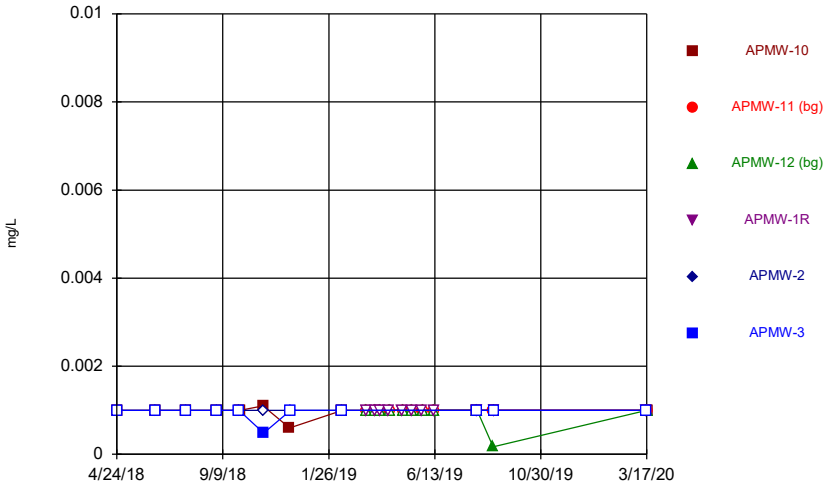
Time Series



Constituent: Fluoride Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

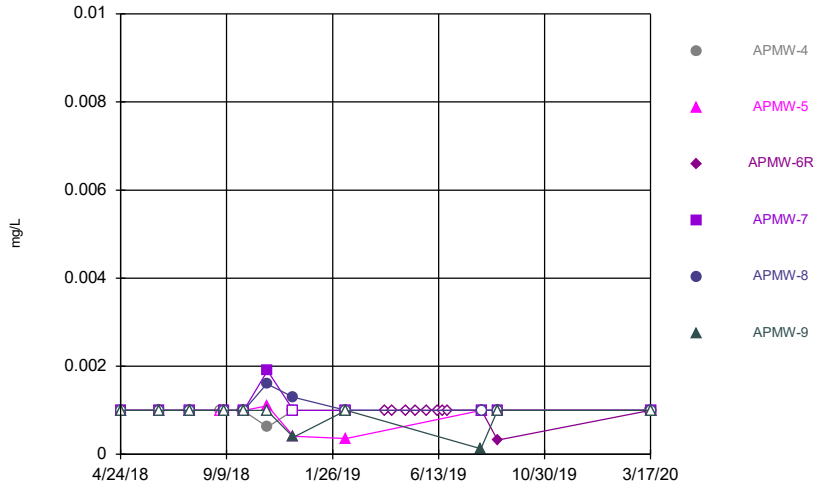
Time Series



Constituent: Lead Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

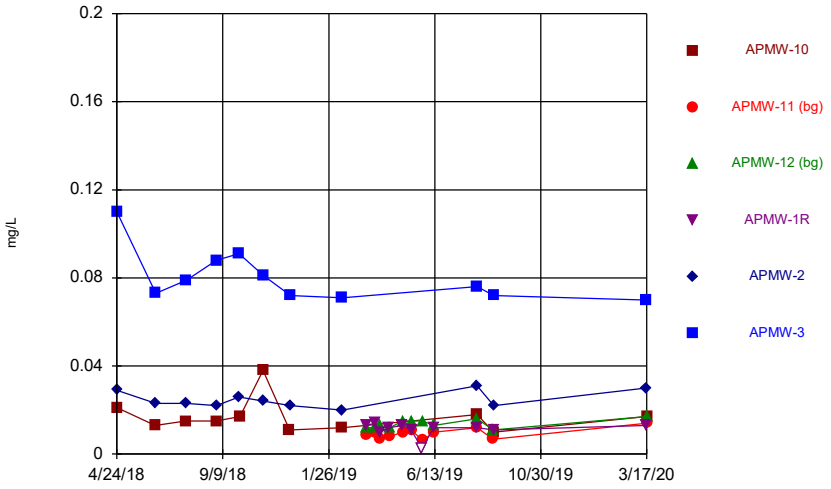
Time Series



Constituent: Lead Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

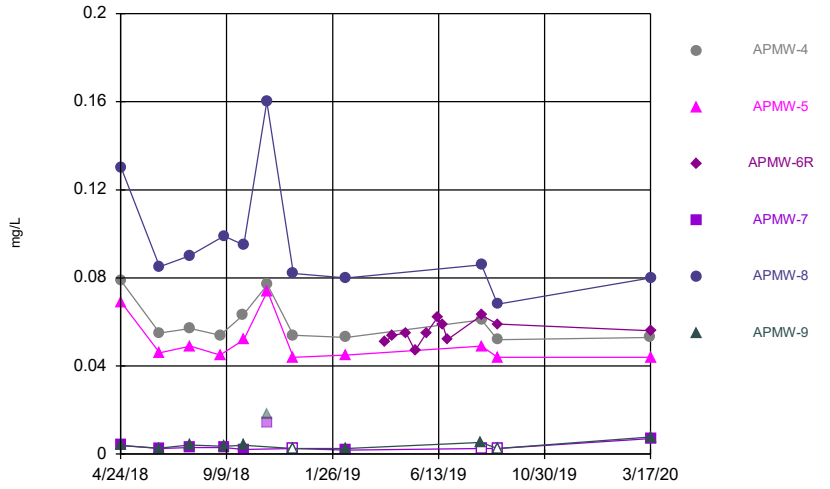
Time Series



Constituent: Lithium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

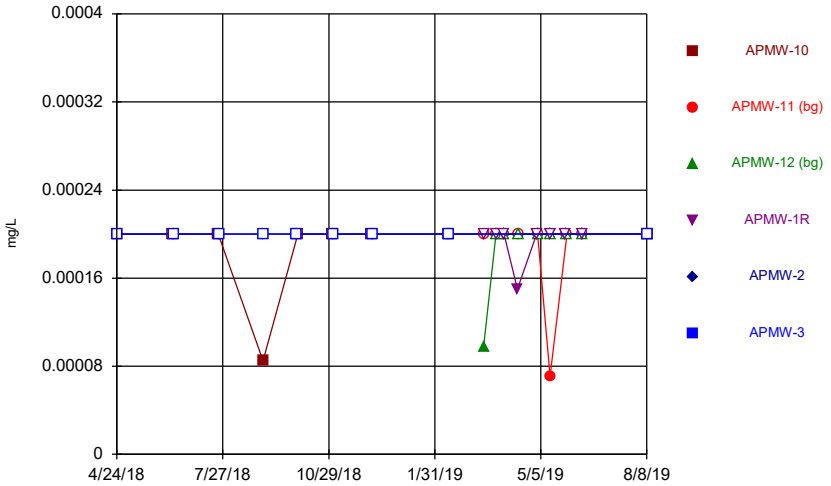
Time Series



Constituent: Lithium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

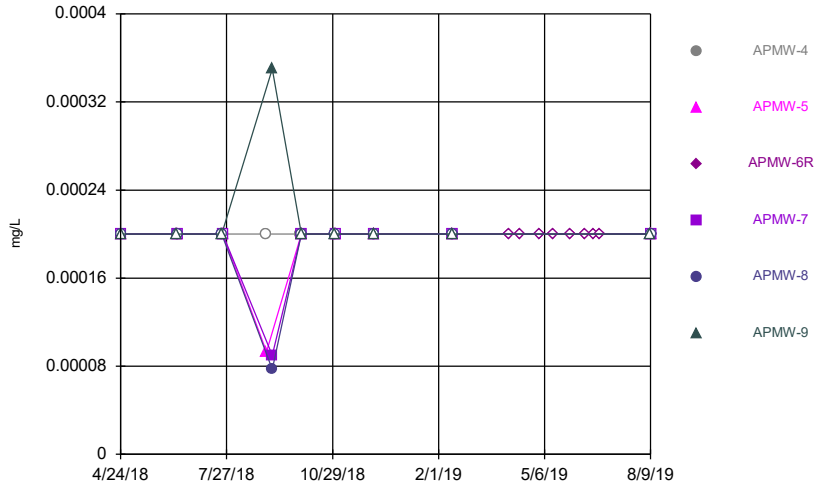
Time Series



Constituent: Mercury Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

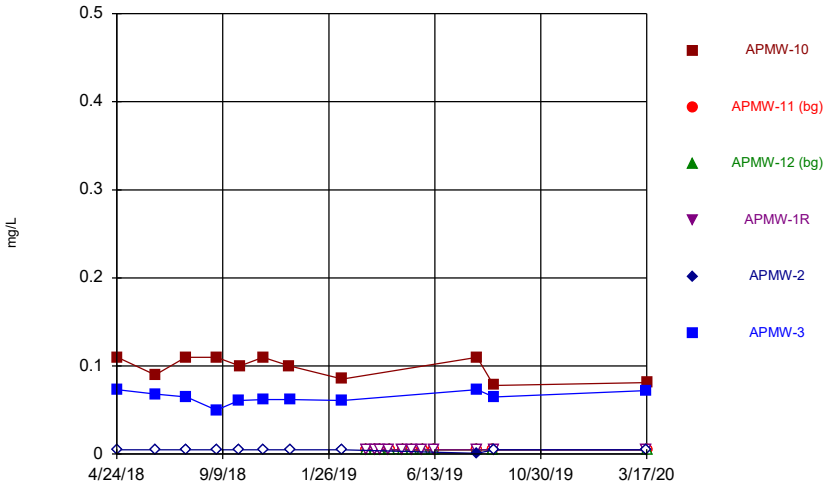
Time Series



Constituent: Mercury Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

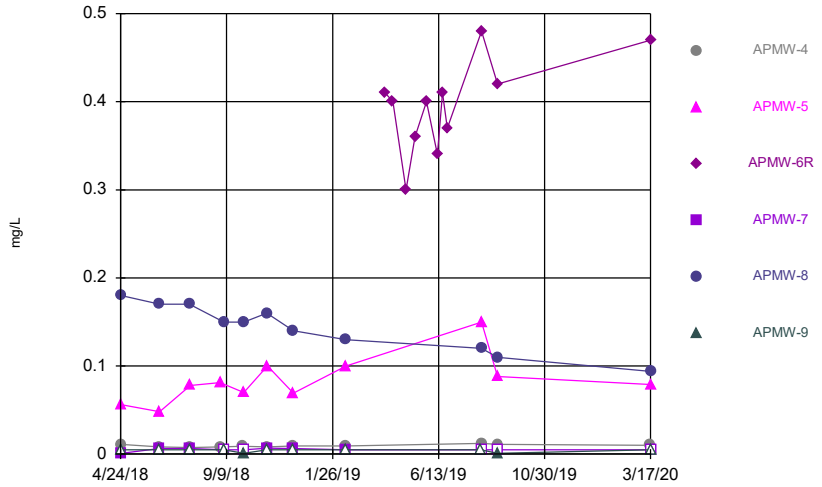
Time Series



Constituent: Molybdenum Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

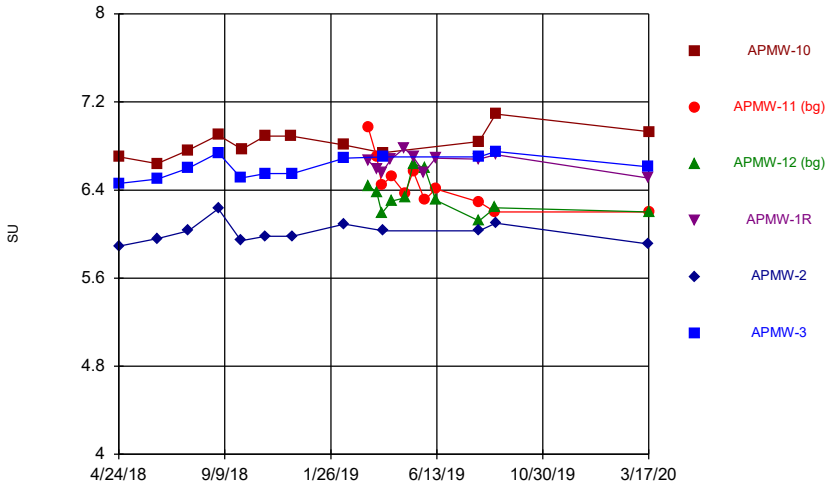
Time Series



Constituent: Molybdenum Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

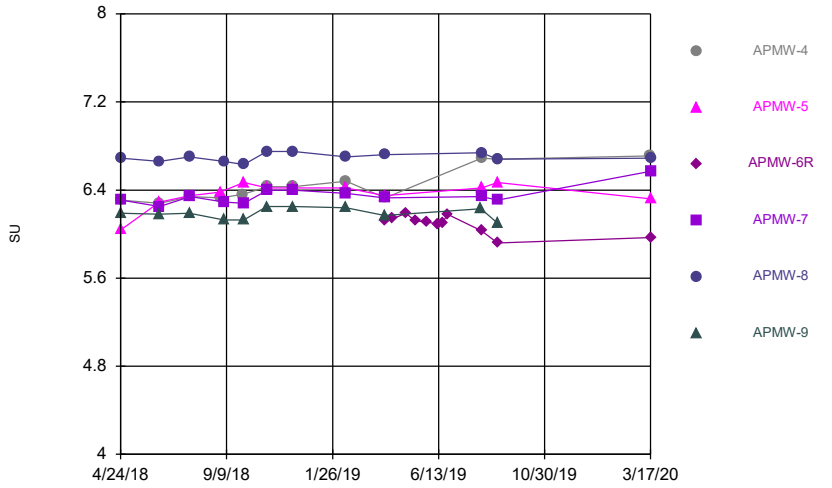
Time Series



Constituent: pH Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

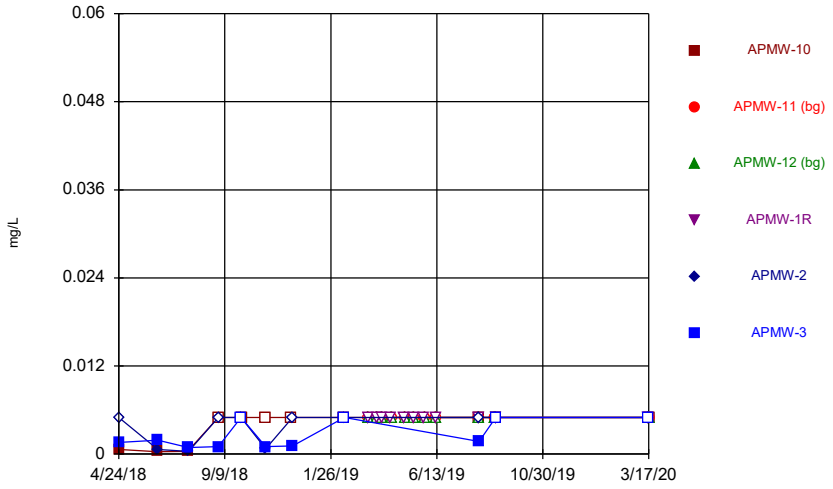
Time Series



Constituent: pH Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

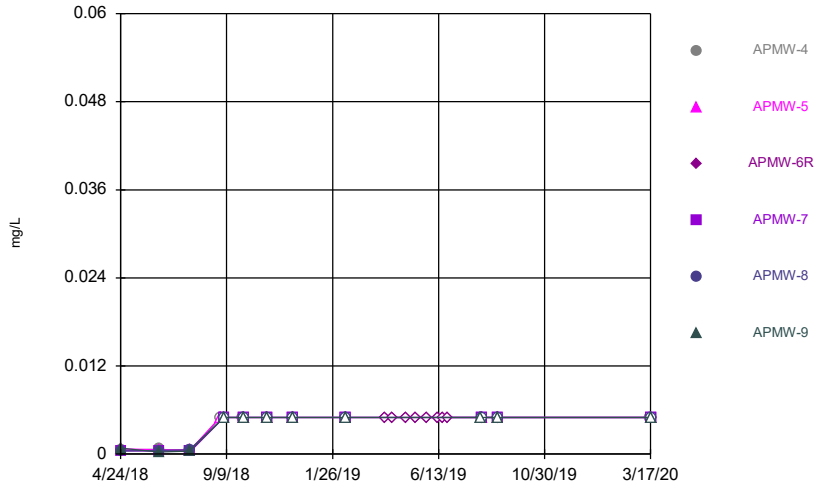
Time Series



Constituent: Selenium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

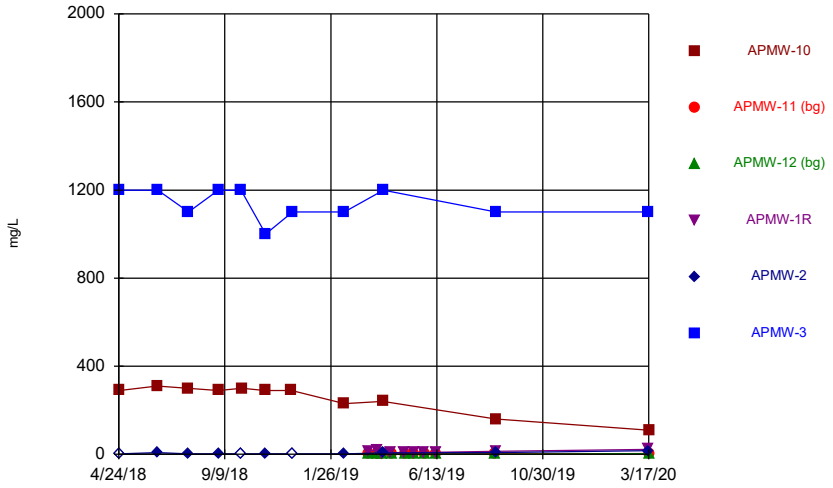
Time Series



Constituent: Selenium Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

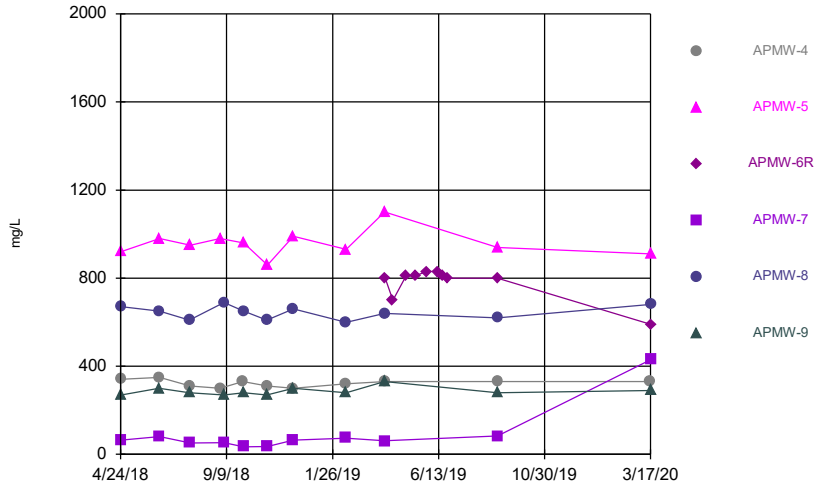
Time Series



Constituent: Sulfate Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

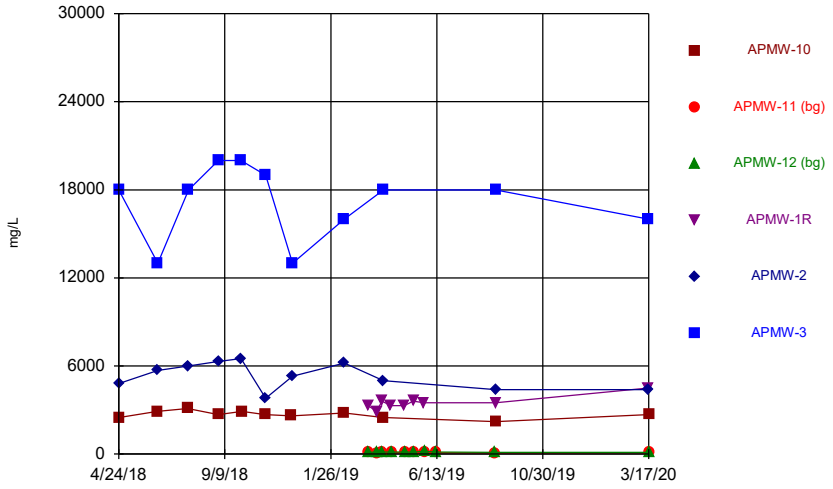
Time Series



Constituent: Sulfate Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

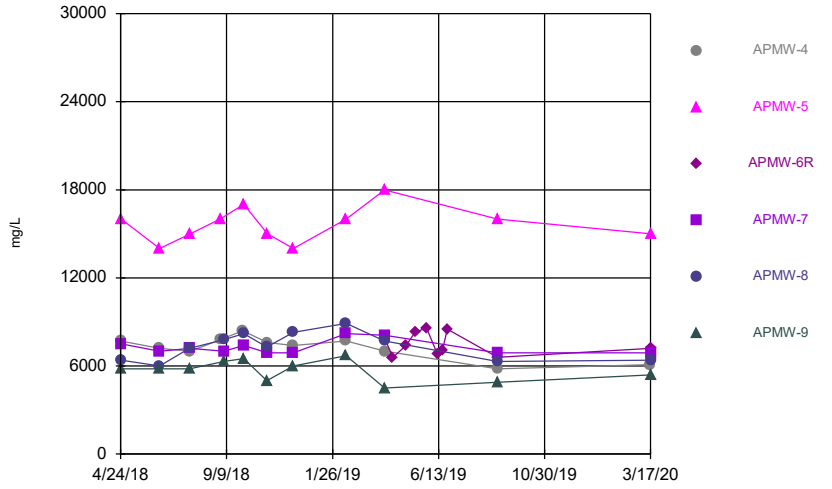
Time Series



Constituent: Total Dissolved Solids Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 6/18/2020 4:27 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.002	<0.002	<0.002		
4/25/2018	<0.002							<0.002	
6/13/2018	<0.002								
6/14/2018					<0.002	<0.002	<0.002	<0.002	
7/23/2018	<0.002								
7/24/2018					<0.002	<0.002	<0.002	<0.002	
9/1/2018	<0.002				<0.002	<0.002	<0.002	<0.002	
10/1/2018					<0.002	<0.002	<0.002		
10/2/2018	<0.002							<0.002	
11/1/2018	<0.002								
11/2/2018					<0.002	<0.002	<0.002	<0.002	
12/6/2018	<0.002						<0.002	<0.002	
12/7/2018					<0.002	<0.002			
2/13/2019	<0.002				<0.002	<0.002	<0.002	<0.002	
3/16/2019		<0.002	<0.002	<0.002					
3/27/2019		<0.002 (D)	<0.002 (D)	<0.002					
4/3/2019		<0.002 (D)	<0.002 (D)	<0.002					
4/5/2019									<0.002 (D)
4/15/2019				<0.002					<0.002
4/16/2019		<0.002	<0.002						
5/2/2019				<0.002					<0.002
5/3/2019		<0.002	<0.002						
5/14/2019		<0.002	<0.002	<0.002					<0.002
5/28/2019				<0.002					
5/29/2019		<0.002	<0.002						<0.002
6/12/2019		<0.002	<0.002	<0.002					<0.002
6/19/2019									<0.002
6/25/2019									<0.002
8/8/2019	<0.002	<0.002	<0.002	<0.002	0.0014 (J)	<0.002			
8/9/2019							<0.002	<0.002	<0.002
8/29/2019		<0.002	<0.002						
8/30/2019	<0.002			<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
3/16/2020				<0.002	<0.002	<0.002	<0.002		
3/17/2020	<0.002	<0.002	<0.002					<0.002	<0.002

Time Series

Constituent: Antimony (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	<0.002	<0.002	<0.002
6/13/2018			<0.002
6/14/2018	<0.002	<0.002	
7/23/2018		<0.002	<0.002
7/24/2018	<0.002		
9/6/2018	<0.002	<0.002	<0.002
10/2/2018	<0.002	<0.002	<0.002
11/1/2018		<0.002	<0.002
11/2/2018	<0.002		
12/6/2018	<0.002	<0.002	<0.002
2/13/2019	<0.002	<0.002	<0.002
8/8/2019			<0.002
8/9/2019	<0.002	<0.002	
8/30/2019	<0.002	<0.002	<0.002
3/17/2020	<0.002	<0.002	<0.002

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					0.00077 (J)	0.084	0.019		
4/25/2018	0.13							0.24	
6/13/2018	0.11								
6/14/2018					<0.001	0.081	0.018	0.22	
7/23/2018	0.13								
7/24/2018					<0.001	0.093	0.018	0.23	
9/1/2018	0.12				<0.001	0.099	0.017	0.22	
10/1/2018					0.00094 (J)	0.077	0.017		
10/2/2018	0.11							0.21	
11/1/2018	0.11								
11/2/2018					0.0012 (J)	0.067	0.018	0.26	
12/6/2018	0.12						0.018	0.23	
12/7/2018					<0.001	0.063			
2/13/2019	0.098				<0.001	0.065	0.019	0.23	
3/16/2019		0.00062 (J)	0.00084 (J)	0.0021					
3/27/2019		<0.001 (D)	<0.001 (D)	0.0019					
4/3/2019		<0.001 (D)	0.0013 (D)	0.0019					
4/5/2019									0.13 (D)
4/15/2019				0.0025					0.13
4/16/2019		<0.001	0.0013						
5/2/2019				0.0019					0.089
5/3/2019		<0.001	0.0011 (J)						
5/14/2019		<0.001	0.00061 (J)	0.0027					0.13
5/28/2019				<0.001					
5/29/2019		0.00037 (J)	0.0011						0.12
6/12/2019		0.00056 (J)	0.0013	0.0023					0.13
6/19/2019									0.16
6/25/2019									0.13
8/8/2019	0.11	<0.001	0.001	0.0012	0.00035 (J)	0.074			
8/9/2019							0.018	0.24	0.16
8/29/2019		<0.001	0.00041 (J)						
8/30/2019	0.079			0.0011	<0.001	0.07	0.016	0.2	0.17
3/16/2020				0.00085 (J)	<0.001	0.071	0.017		
3/17/2020	0.093	<0.001	0.00043 (J)					0.21	0.18

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	0.0021	0.097	0.0016
6/13/2018			0.001 (J)
6/14/2018	0.0015	0.089	
7/23/2018		0.094	0.0011 (J)
7/24/2018	0.0015		
9/6/2018	0.0013	0.082	0.0011 (J)
10/2/2018	0.0014	0.075	0.0015
11/1/2018		0.081	0.0014
11/2/2018	0.0028		
12/6/2018	0.0033	0.079	0.0016
2/13/2019	0.0012 (J)	0.077	0.0013
8/8/2019			0.0012
8/9/2019	0.00053 (J)	0.052	
8/30/2019	0.00044 (J)	0.05	0.0011
3/17/2020	0.00053 (J)	0.043	0.001

Time Series

Constituent: Barium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					2.8	0.097	0.46		
4/25/2018	0.26							0.093	
6/13/2018	0.3								
6/14/2018					3.1	0.11	0.5	0.11	
7/23/2018	0.24								
7/24/2018					3	0.1	0.54	0.093	
9/1/2018	0.25				2.9	0.12	0.53	0.1	
10/1/2018					4	0.1	0.5		
10/2/2018	0.23							0.1	
11/1/2018	0.23								
11/2/2018					3.1	0.1	0.5	0.12	
12/6/2018	0.24						0.43	0.1	
12/7/2018					3.3	0.11			
2/13/2019	0.26				2.9	0.1	0.45	0.1	
3/16/2019		0.09	0.069	0.89					
3/27/2019		0.095 (D)	0.079 (D)	1.1					
4/3/2019		0.085 (D)	0.075 (D)	1.1					
4/5/2019									0.071 (D)
4/15/2019				0.98					0.067
4/16/2019		0.081	0.072						
5/2/2019				0.94					0.071
5/3/2019		0.074	0.076						
5/14/2019		0.083	0.076	1					0.068
5/28/2019				1					
5/29/2019		0.04	0.091						0.067 (J)
6/12/2019		0.066	0.083	0.91					0.064 (J)
6/19/2019									0.059 (J)
6/25/2019									0.057 (J)
8/8/2019	0.24	0.053	0.065	0.93	3.2	0.1			
8/9/2019							0.33	0.11	0.058
8/29/2019		0.043	0.071						
8/30/2019	0.2			0.91	2.7	0.1	0.29	0.086	0.052
3/16/2020				1.2	3.2	0.1	0.27		
3/17/2020	0.25	0.037	0.07					0.1	0.05

Time Series

Constituent: Barium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	0.66	0.2	0.42
6/13/2018			0.45
6/14/2018	0.74	0.22	
7/23/2018		0.2	0.42
7/24/2018	0.72		
9/6/2018	0.79	0.22	0.45
10/2/2018	0.93	0.21	0.43
11/1/2018		0.21	0.43
11/2/2018	1.1		
12/6/2018	0.7	0.22	0.44
2/13/2019	0.59	0.23	0.44
8/8/2019			0.42
8/9/2019	0.76	0.2	
8/30/2019	0.56	0.2	0.42
3/17/2020	0.53	0.21	0.49

Time Series

Constituent: Beryllium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.001	<0.001	<0.001		
4/25/2018	<0.001							<0.001	
6/13/2018	<0.001								
6/14/2018					<0.001	<0.001	<0.001	<0.001	
7/23/2018	<0.001								
7/24/2018					<0.001	<0.001	<0.001	<0.001	
9/1/2018	<0.001				<0.001	<0.001	<0.001	<0.001	
10/1/2018					<0.001	<0.001	<0.001		
10/2/2018	<0.001							<0.001	
11/1/2018	<0.001								
11/2/2018					<0.001	<0.001	<0.001	<0.001	
12/6/2018	<0.001						<0.001	<0.001	
12/7/2018					<0.001	<0.001			
2/13/2019	<0.001				<0.001	<0.001	<0.001	<0.001	
3/16/2019		<0.001	<0.001	<0.001					
3/27/2019		<0.001 (D)	<0.001 (D)	<0.001					
4/3/2019		<0.001 (D)	<0.001 (D)	<0.001					
4/5/2019									<0.001 (D)
4/15/2019				<0.001					<0.001
4/16/2019		<0.001	<0.001						
5/2/2019				<0.001					<0.001
5/3/2019		<0.001	<0.001						
5/14/2019		<0.001	<0.001	<0.001					<0.001
5/28/2019				<0.001					
5/29/2019		0.00019 (J)	<0.001						<0.001
6/12/2019		<0.001	<0.001	<0.001					<0.001
6/19/2019									<0.001
6/25/2019									<0.001
8/8/2019	<0.001	<0.001	<0.001	<0.001	0.00061 (J)	<0.001			
8/9/2019							<0.001	<0.001	<0.001
8/29/2019		0.0002 (J)	0.00023 (J)						
8/30/2019	0.00043 (J)			0.00019 (J)	0.00023 (J)	0.00018 (J)	<0.001	<0.001	0.00036 (J)
3/16/2020				<0.001	<0.001	<0.001	<0.001		
3/17/2020	<0.001	<0.001	<0.001					<0.001	<0.001

Time Series

Constituent: Beryllium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	<0.001	<0.001	<0.001
6/13/2018			<0.001
6/14/2018	<0.001	<0.001	
7/23/2018		<0.001	<0.001
7/24/2018	<0.001		
9/6/2018	<0.001	<0.001	<0.001
10/2/2018	<0.001	<0.001	<0.001
11/1/2018		<0.001	<0.001
11/2/2018	<0.001		
12/6/2018	<0.001	<0.001	<0.001
2/13/2019	<0.001	<0.001	<0.001
8/8/2019			<0.001
8/9/2019	<0.001	<0.001	
8/30/2019	0.00025 (J)	0.00038 (J)	0.00049 (J)
3/17/2020	<0.001	<0.001	<0.001

Time Series

Constituent: Boron (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					4.1	5.3	1.9		
4/25/2018	1.7							6.9	
6/13/2018	1.7								
6/14/2018					4	5.1	1.9	6.8	
7/23/2018	2								
7/24/2018					4.3	5.5	1.9	6.9	
9/1/2018	1.9				4	4.9	1.7	6.2	
10/1/2018					4	5	1.7		
10/2/2018	1.8							6.5	
11/1/2018	1.8								
11/2/2018					3.5	4.6	1.7	5.5	
12/6/2018	1.9						1.7	5.7	
12/7/2018					3.9	4.8			
2/13/2019	2.4				4.4	6	1.7	7.6	
3/16/2019		0.028 (J)	0.035 (J)	4.5					
3/27/2019		0.027 (JD)	0.033 (JD)	5.2					
4/3/2019		0.089 (D)	0.023 (JD)	5.3					
4/4/2019	1.8							5.8	
4/5/2019					3.6	4.5	1.6		8.9 (D)
4/15/2019				5.9					10
4/16/2019		<0.08	<0.08						
5/2/2019				5.3					10
5/3/2019		<0.08	0.021 (J)						
5/14/2019		<0.08	<0.08	5.5					9.3
5/28/2019				5.7					
5/29/2019		0.034 (J)	0.044 (J)						9.5
6/12/2019		0.05 (J)	0.047 (J)	4.4					11
6/19/2019									9.5
6/25/2019									11
8/29/2019		<0.08	<0.08						
8/30/2019	1.9			6.2	3.7	5	1.6	6.1	11
3/16/2020				7.2	3.7	5.3	1.6		
3/17/2020	1.9	0.057 (J)	0.057 (J)					6.6	11

Time Series

Constituent: Boron (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	1	23	6.8
6/13/2018			6.6
6/14/2018	0.91	21	
7/23/2018		22	6.8
7/24/2018	1		
9/6/2018	1.1	21	6.5
10/2/2018	0.95	21	6.5
11/1/2018		19	5.6
11/2/2018	0.82		
12/6/2018	1.1	20	6.4
2/13/2019	0.95	27	8.4
4/4/2019	0.98	20	6.1
8/30/2019	0.88	19	7.1
3/17/2020	0.98	20	7.1

Time Series

Constituent: Cadmium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.001	<0.001	<0.001		
4/25/2018	<0.001							<0.001	
6/13/2018	<0.001								
6/14/2018					<0.001	<0.001	<0.001	<0.001	
7/23/2018	<0.001								
7/24/2018					<0.001	<0.001	<0.001	<0.001	
9/1/2018	<0.001				<0.001	<0.001	<0.001	<0.001	
10/1/2018					<0.001	<0.001	<0.001		
10/2/2018	<0.001							<0.001	
11/1/2018	<0.001								
11/2/2018					<0.001	<0.001	<0.001	<0.001	
12/6/2018	<0.001						<0.001	<0.001	
12/7/2018					<0.001	<0.001			
2/13/2019	<0.001				<0.001	<0.001	<0.001	<0.001	
3/16/2019		<0.001	<0.001	<0.001					
3/27/2019		<0.001 (D)	<0.001 (D)	<0.001					
4/3/2019		<0.001 (D)	<0.001 (D)	<0.001					
4/5/2019									<0.001 (D)
4/15/2019				0.00045 (J)					<0.001
4/16/2019		<0.001	<0.001						
5/2/2019				<0.001					<0.001
5/3/2019		<0.001	<0.001						
5/14/2019		<0.001	<0.001	<0.001					<0.001
5/28/2019				<0.001					
5/29/2019		<0.001	<0.001						<0.001
6/12/2019		<0.001	<0.001	<0.001					<0.001
6/19/2019									<0.001
6/25/2019									<0.001
8/8/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			
8/9/2019							<0.001	<0.001	0.00014 (J)
8/29/2019		<0.001	<0.001						
8/30/2019	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	0.00026 (J)
3/16/2020				<0.001	<0.001	<0.001	<0.001		
3/17/2020	<0.001	<0.001	<0.001					<0.001	<0.001

Time Series

Constituent: Cadmium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	<0.001	<0.001	<0.001
6/13/2018			<0.001
6/14/2018	<0.001	<0.001	
7/23/2018		<0.001	<0.001
7/24/2018	<0.001		
9/6/2018	<0.001	<0.001	<0.001
10/2/2018	<0.001	<0.001	<0.001
11/1/2018		<0.001	<0.001
11/2/2018	<0.001		
12/6/2018	<0.001	<0.001	<0.001
2/13/2019	<0.001	<0.001	<0.001
8/8/2019			<0.001
8/9/2019	<0.001	<0.001	
8/30/2019	<0.001	<0.001	<0.001
3/17/2020	<0.001	<0.001	<0.001

Time Series

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					310	320	190		
4/25/2018	68							350	
6/13/2018	79								
6/14/2018					360	310	200	340	
7/23/2018	73								
7/24/2018					370	360	210	340	
9/1/2018	68				390	320	220	360	
10/1/2018					380	360	210		
10/2/2018	71							310	
11/1/2018	67								
11/2/2018					320	310	190	310	
12/6/2018	65						190	330	
12/7/2018					330	320			
2/13/2019	64				320	300	180	310	
3/16/2019		17	13	130					
3/27/2019		16 (D)	15 (D)	140					
4/3/2019		15 (D)	13 (D)	140					
4/4/2019	80							270	
4/5/2019					310	290	170		440 (D)
4/15/2019				130					390
4/16/2019		13	12						
5/2/2019				130					400
5/3/2019		12	13						
5/14/2019		14	13	140					420
5/28/2019				150					
5/29/2019		7	15						450
6/12/2019		13	14	130					440
6/19/2019									450
6/25/2019									450
8/29/2019		9.4	12						
8/30/2019	53			160	340	320	170	320	460
3/16/2020				200	350	310	170		
3/17/2020	59	9.8	12					330	420

Time Series

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	93	560	320
6/13/2018			300
6/14/2018	110	490	
7/23/2018		520	320
7/24/2018	100		
9/6/2018	98	510	310
10/2/2018	93	470	290
11/1/2018		460	280
11/2/2018	110		
12/6/2018	94	490	310
2/13/2019	95	470	300
4/4/2019	98	440	270
8/30/2019	90	460	310
3/17/2020	110	470	310

Time Series

Constituent: Chloride (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					2800	11000	4000		
4/25/2018	1300							8500	
6/13/2018	1400								
6/14/2018					2700	11000	4000	8700	
7/23/2018	1200								
7/24/2018					2800	11000	3900	8700	
9/1/2018	1400				2800	10000	4200	8900	
10/1/2018					2800	11000	4200		
10/2/2018	1400							9300	
11/1/2018	1300								
11/2/2018					2700	11000	4000	8900	
12/6/2018	1300						4000	9000	
12/7/2018					2700	12000			
2/13/2019	1200				2800	9800	3800	8600	
3/16/2019		9.3	14	1900					
3/27/2019		8.2 (D)	15 (D)	1900					
4/3/2019		8.7 (D)	15 (D)	1900					
4/4/2019	1200							8600	
4/5/2019					2600	9900	3900		4000 (D)
4/15/2019				1900					3400
4/16/2019		8.7	14						
5/2/2019				1900					4100
5/3/2019		9.3	15						
5/14/2019		8.8	15	2000					4200
5/28/2019				1900					
5/29/2019		8.8	14						4200
6/12/2019		8.8	15	2000					4200
6/19/2019									4000
6/25/2019									4000
8/29/2019		8.1	14						
8/30/2019	1200			2100	2500	9800	3600	8700	4100
3/16/2020				2600	2500	10000	3400		
3/17/2020	1100	8.2	14					8900	6000

Time Series

Constituent: Chloride (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	3900	3400	2800
6/13/2018			3100
6/14/2018	4100	3600	
7/23/2018		3500	3000
7/24/2018	3900		
9/6/2018	4000	3600	3000
10/2/2018	4000	3800	3100
11/1/2018		3600	3000
11/2/2018	3800		
12/6/2018	4300	3700	3100
2/13/2019	4200	3500	3000
4/4/2019	3700	3500	3100
8/30/2019	4000	3400	2800
3/17/2020	4600	3700	3100

Time Series

Constituent: Chromium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.002	<0.002	0.0016 (J)		
4/25/2018	<0.002							0.0013 (J)	
6/13/2018	<0.002								
6/14/2018					<0.002	<0.002	0.002 (J)	0.0012 (J)	
7/23/2018	<0.002								
7/24/2018					<0.002	<0.002	0.0022 (J)	<0.002	
9/1/2018	<0.002				<0.002	0.0014 (J)	0.0025	0.0024 (J)	
10/1/2018					<0.002	<0.002	0.0028		
10/2/2018	<0.002							0.0015 (J)	
11/1/2018	<0.002								
11/2/2018					<0.002	<0.002	0.0026	0.0014 (J)	
12/6/2018	<0.002						0.0012 (J)	<0.002	
12/7/2018					<0.002	<0.002			
2/13/2019	<0.002				<0.002	<0.002	0.0013 (J)	<0.002	
3/16/2019		<0.002	<0.002	<0.002					
3/27/2019		<0.002 (D)	<0.002 (D)	<0.002					
4/3/2019		<0.002 (D)	<0.002 (D)	<0.002					
4/5/2019									<0.002 (D)
4/15/2019				<0.002					<0.002
4/16/2019		<0.002	<0.002						
5/2/2019				<0.002					<0.002
5/3/2019		<0.002	<0.002						
5/14/2019		<0.002	<0.002	<0.002					<0.002
5/28/2019				<0.002					
5/29/2019		<0.002	<0.002						<0.002
6/12/2019		0.0022	0.0022	0.0032					<0.002
6/19/2019									<0.002
6/25/2019									<0.002
8/8/2019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002			
8/9/2019							<0.002	<0.002	<0.002

Time Series

Constituent: Chromium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	0.0014 (J)	<0.002	<0.002
6/13/2018			<0.002
6/14/2018	0.0014 (J)	0.0032	
7/23/2018		<0.002	<0.002
7/24/2018	0.0014 (J)		
9/6/2018	0.0017 (J)	0.0014 (J)	<0.002
10/2/2018	0.0013 (J)	<0.002	<0.002
11/1/2018		<0.002	<0.002
11/2/2018	0.0014 (J)		
12/6/2018	<0.002	<0.002	<0.002
2/13/2019	<0.002	<0.002	<0.002
8/8/2019			<0.002
8/9/2019	<0.002	<0.002	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.0005	0.0026	0.0033		
4/25/2018	<0.0005							<0.0005	
6/13/2018	<0.0005								
6/14/2018					<0.0005	0.0023 (J)	0.0032	<0.0005	
7/23/2018	<0.0005								
7/24/2018					<0.0005	0.0026	0.0036	<0.0005	
9/1/2018	<0.0005				<0.0005	0.0023 (J)	0.0039	<0.0005	
10/1/2018					<0.0005	0.0028	0.0029		
10/2/2018	<0.0005							<0.0005	
11/1/2018	<0.0005								
11/2/2018					<0.0005	0.0027	0.0034	<0.0005	
12/6/2018	<0.0005						0.0032	<0.0005	
12/7/2018					<0.0005	0.0028			
2/13/2019	<0.0005				<0.0005	0.0028	0.0043	<0.0005	
3/16/2019		<0.0005	<0.0005	0.00057 (J)					
3/27/2019		<0.0005 (D)	<0.0005 (D)	0.00044 (J)					
4/3/2019		<0.0005 (D)	<0.0005 (D)	0.0004 (J)					
4/5/2019									0.0049 (D)
4/15/2019				0.00042 (J)					0.0045
4/16/2019		<0.0005	<0.0005						
5/2/2019				<0.0005					0.0012 (J)
5/3/2019		<0.0005	<0.0005						
5/14/2019		<0.0005	<0.0005	0.00044 (J)					0.0024 (J)
5/28/2019				<0.0005					
5/29/2019		<0.0005	<0.0005						0.0022 (J)
6/12/2019		<0.0005	<0.0005	0.00037 (J)					0.002 (J)
6/19/2019									0.004 (J)
6/25/2019									0.0014 (J)
8/8/2019	0.00012 (J)	<0.0005	<0.0005	0.00017 (J)	<0.0005	0.0019			
8/9/2019							0.0034	7.5E-05 (J)	0.0022
8/29/2019		<0.0005	<0.0005						
8/30/2019	8.2E-05 (J)			0.00017 (J)	<0.0005	0.0025	0.0034	7.9E-05 (J)	0.0039
3/16/2020				<0.0005	<0.0005	0.0022	0.0039		
3/17/2020	<0.0005	<0.0005	<0.0005					<0.0005	0.0029

Time Series

Constituent: Cobalt (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	<0.0005	<0.0005	<0.0005
6/13/2018			<0.0005
6/14/2018	<0.0005	<0.0005	
7/23/2018		<0.0005	<0.0005
7/24/2018	<0.0005		
9/6/2018	0.00043 (J)	<0.0005	<0.0005
10/2/2018	<0.0005	<0.0005	<0.0005
11/1/2018		<0.0005	<0.0005
11/2/2018	<0.0005		
12/6/2018	<0.0005	<0.0005	<0.0005
2/13/2019	<0.0005	<0.0005	<0.0005
8/8/2019			8.4E-05 (J)
8/9/2019	0.00025 (J)	<0.0005	
8/30/2019	0.00023 (J)	<0.0005	8.9E-05 (J)
3/17/2020	0.00024 (J)	<0.0005	<0.0005

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					21.8	5.84	2.4		
4/25/2018	2.66							3.67	
6/13/2018	2.91								
6/14/2018					20.9	6.37	2.5	4.18	
7/23/2018	3.49								
7/24/2018					19.2	7.22	3.01	4.95	
9/1/2018	3.15				17.5	5.46	2.3	4.44	
10/1/2018					19.9	8.54	3.49		
10/2/2018	3.38							4.79	
11/1/2018	2.19								
11/2/2018					17.4	6.02	1.94	4	
12/6/2018	2.69						2.68	5.01	
12/7/2018					18.5	6.26			
2/13/2019	2.97				19.2	6.67	2.05	4.53	
3/16/2019		0.421	0.765	5.87					
3/27/2019		0.499	0.306 (U)	6.56					
4/3/2019		0.526	1.12	7.03					
4/5/2019									2.85
4/15/2019				6.75					3.24
4/16/2019		0.73	0.447						
5/2/2019				6.82					3
5/3/2019		0.32 (U)	0.357						
5/14/2019		0.431 (U)	0.342 (U)	6.96					3.2
5/28/2019				4.12					
5/29/2019		0.205 (U)	0.519 (U)						2.88
6/12/2019		<5	<5	8.8					3.04
6/19/2019									3.59
6/25/2019									3.61
8/8/2019	2.16	0.535	0.262 (U)	7.52	18.7	6.41			
8/9/2019							2.09	3.81	3.14
8/29/2019		0.19 (U)	0.253 (U)						
8/30/2019	2.19			7.98	16.5	5.45	1.24	2.82	2.52
3/16/2020				10.6	18.8	6.5	1.71		
3/17/2020	2.94	0.596	0.703					4.23	3.16

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	5.8	3.26	6.49
6/13/2018			6.43
6/14/2018	5.94	3.41	
7/23/2018		4.02	6.82
7/24/2018	6.56		
9/6/2018	7.39	3.86	7.4
10/2/2018	8.19	4.63	7.43
11/1/2018		3.37	6.67
11/2/2018	5.87		
12/6/2018	6.64	3.92	6.92
2/13/2019	6.19	3.66	6.91
8/8/2019			6.71
8/9/2019	6.86	3.52	
8/30/2019	6.63	3.96	7.32
3/17/2020	5.37	3.43	7.36

Time Series

Constituent: Fluoride (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					0.06 (J)	0.33	0.52		
4/25/2018	0.69							0.09 (J)	
6/13/2018	0.64								
6/14/2018					0.06 (J)	0.37	0.51	0.09 (J)	
7/23/2018	0.76								
7/24/2018					0.07 (J)	0.42	0.52	0.09 (J)	
9/1/2018	0.81				0.08 (J)	0.45	0.54	0.1	
10/1/2018					0.07 (J)	0.39	0.54		
10/2/2018	0.78							0.09 (J)	
11/1/2018	0.88								
11/2/2018					0.08 (J)	0.42	0.58	0.11	
12/6/2018	0.75						0.51	1.4 (o)	
12/7/2018					4.3 (o)	0.64			
2/13/2019	0.72				0.05 (J)	0.35	0.48	0.07 (J)	
3/16/2019		0.047 (J)	0.041 (J)	<0.5					
3/27/2019		<0.5 (D)	0.49 (D)	<0.5					
4/3/2019		<0.5 (D)	0.086 (JD)	<0.5					
4/4/2019	0.63							<0.5	
4/5/2019					0.14 (J)	0.7 (J)	0.31 (J)		<0.5 (D)
4/15/2019				0.14 (J)					<0.5
4/16/2019		0.034 (J)	0.055 (J)						
5/2/2019				0.13 (J)					<0.5
5/3/2019		0.042 (J)	0.058 (J)						
5/14/2019		0.039 (J)	0.071 (J)	<0.5					<0.5
5/28/2019				0.16 (J)					
5/29/2019		<0.5	0.042 (J)						<0.5
6/12/2019		<0.5	0.037 (J)	<0.5					<0.5
6/19/2019									<0.5
6/25/2019									0.32 (J)
8/8/2019	0.58	0.051 (J)	0.072 (J)	0.21 (J)	0.19 (J)	0.8 (J)			
8/9/2019							0.51	<0.5	<0.5
8/29/2019		0.061 (J)	0.065 (J)						
8/30/2019	0.5			0.21 (J)	0.17 (J)	<0.5	0.54 (J)	<0.5	0.27 (J)
3/16/2020				<0.5	<0.5	<0.5	<0.5		
3/17/2020	0.38	<0.5	0.036 (J)					<0.5	<0.5

Time Series

Constituent: Fluoride (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	0.11	1	0.06 (J)
6/13/2018			0.06 (J)
6/14/2018	0.12	1	
7/23/2018		1	0.06 (J)
7/24/2018	0.12		
9/6/2018	0.13	1.1	0.06 (J)
10/2/2018	0.13	1	0.07 (J)
11/1/2018		1.1	0.07 (J)
11/2/2018	0.14		
12/6/2018	0.13	0.98	0.21 (o)
2/13/2019	0.1	0.98	0.07 (J)
4/4/2019	<0.5	0.58 (J)	<0.5
8/8/2019			0.2 (J)
8/9/2019	0.22 (J)	0.9 (J)	
8/30/2019	0.41 (J)	0.85 (J)	0.18 (J)
3/17/2020	1.6	0.52 (J)	<0.5

Time Series

Constituent: Lead (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.001	<0.001	<0.001		
4/25/2018	<0.001							<0.001	
6/13/2018	<0.001								
6/14/2018					<0.001	<0.001	<0.001	<0.001	
7/23/2018	<0.001								
7/24/2018					<0.001	<0.001	<0.001	<0.001	
9/1/2018	<0.001				<0.001	<0.001	<0.001	<0.001	
10/1/2018					<0.001	<0.001	<0.001		
10/2/2018	<0.001							<0.001	
11/1/2018	0.0011 (J)								
11/2/2018					<0.001	0.00048 (J)	0.00062 (J)	0.0011 (J)	
12/6/2018	0.0006 (J)						<0.001	0.00041 (J)	
12/7/2018					<0.001	<0.001			
2/13/2019	<0.001				<0.001	<0.001	<0.001	0.00036 (J)	
3/16/2019		<0.001	<0.001	<0.001					
3/27/2019		<0.001 (D)	<0.001 (D)	<0.001					
4/3/2019		<0.001 (D)	<0.001 (D)	<0.001					
4/5/2019									<0.001 (D)
4/15/2019				<0.001					<0.001
4/16/2019		<0.001	<0.001						
5/2/2019				<0.001					<0.001
5/3/2019		<0.001	<0.001						
5/14/2019		<0.001	<0.001	<0.001					<0.001
5/28/2019				<0.001					
5/29/2019		<0.001	<0.001						<0.001
6/12/2019		<0.001	<0.001	<0.001					<0.001
6/19/2019									<0.001
6/25/2019									<0.001
8/8/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			
8/9/2019							<0.001	<0.001	<0.001
8/29/2019		<0.001	0.00017 (J)						
8/30/2019	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	0.00032 (J)
3/16/2020				<0.001	<0.001	<0.001	<0.001		
3/17/2020	<0.001	<0.001	<0.001					<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	<0.001	<0.001	<0.001
6/13/2018			<0.001
6/14/2018	<0.001	<0.001	
7/23/2018		<0.001	<0.001
7/24/2018	<0.001		
9/6/2018	<0.001	<0.001	<0.001
10/2/2018	<0.001	<0.001	<0.001
11/1/2018		0.0016	<0.001
11/2/2018	0.0019		
12/6/2018	<0.001	0.0013	0.00039 (J)
2/13/2019	<0.001	<0.001	<0.001
8/8/2019			0.00013 (J)
8/9/2019	<0.001	<0.001	
8/30/2019	<0.001	<0.001	<0.001
3/17/2020	<0.001	<0.001	<0.001

Time Series

Constituent: Lithium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					0.029	0.11	0.079		
4/25/2018	0.021							0.069	
6/13/2018	0.013								
6/14/2018					0.023	0.073	0.055	0.046	
7/23/2018	0.015								
7/24/2018					0.023	0.079	0.057	0.049	
9/1/2018	0.015				0.022	0.088	0.054	0.045	
10/1/2018					0.026	0.091	0.063		
10/2/2018	0.017							0.052	
11/1/2018	0.038								
11/2/2018					0.024 (J)	0.081	0.077	0.074	
12/6/2018	0.011						0.054	0.044	
12/7/2018					0.022	0.072			
2/13/2019	0.012				0.02	0.071	0.053	0.045	
3/16/2019		0.0088	0.012	0.013					
3/27/2019		0.01 (D)	0.012 (D)	0.014					
4/3/2019		0.0068 (D)	0.013 (D)	0.01					
4/5/2019									0.051 (D)
4/15/2019				0.012					0.054
4/16/2019		0.0081	0.012						
5/2/2019				0.013					0.055
5/3/2019		0.01	0.015						
5/14/2019		0.011	0.015	0.011					0.047
5/28/2019				<0.005					
5/29/2019		0.0062	0.015						0.055
6/12/2019		0.0099	0.013	0.012					0.062
6/19/2019									0.059
6/25/2019									0.052
8/8/2019	0.018	0.012	0.016	0.012	0.031	0.076			
8/9/2019							0.061	0.049	0.063
8/29/2019		0.0067	0.011						
8/30/2019	0.01			0.011	0.022	0.072	0.052	0.044	0.059
3/16/2020				0.013	0.03	0.07	0.053		
3/17/2020	0.017	0.014	0.017					0.044	0.056

Time Series

Constituent: Lithium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	0.004 (J)	0.13	0.0039 (J)
6/13/2018			0.0027 (J)
6/14/2018	0.0026 (J)	0.085	
7/23/2018		0.09	0.0041 (J)
7/24/2018	0.003 (J)		
9/6/2018	0.0029 (J)	0.099	0.0035 (J)
10/2/2018	0.0021 (J)	0.095	0.004 (J)
11/1/2018		0.16	0.018 (o)
11/2/2018	0.014 (o)		
12/6/2018	<0.005	0.082	<0.005
2/13/2019	0.0018 (J)	0.08	0.0026 (J)
8/8/2019			0.0053
8/9/2019	<0.005	0.086	
8/30/2019	<0.005	0.068	<0.005
3/17/2020	0.0071	0.08	0.0077

Time Series

Constituent: Mercury (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.0002	<0.0002	<0.0002		
4/25/2018	<0.0002							<0.0002	
6/13/2018	<0.0002								
6/14/2018					<0.0002	<0.0002	<0.0002	<0.0002	
7/23/2018	<0.0002								
7/24/2018					<0.0002	<0.0002	<0.0002	<0.0002	
9/1/2018	8.5E-05 (J)				<0.0002	<0.0002	<0.0002	9.3E-05 (J)	
10/1/2018					<0.0002	<0.0002	<0.0002		
10/2/2018	<0.0002							<0.0002	
11/1/2018	<0.0002								
11/2/2018					<0.0002	<0.0002	<0.0002	<0.0002	
12/6/2018	<0.0002						<0.0002	<0.0002	
12/7/2018					<0.0002	<0.0002			
2/13/2019	<0.0002				<0.0002	<0.0002	<0.0002	<0.0002	
3/16/2019		<0.0002	9.7E-05 (J)	<0.0002					
3/27/2019		<0.0002 (D)	<0.0002 (D)	<0.0002					
4/3/2019		<0.0002 (D)	<0.0002 (D)	<0.0002					
4/5/2019									<0.0002 (D)
4/15/2019				0.00015 (J)					<0.0002
4/16/2019		<0.0002	<0.0002						
5/2/2019				<0.0002					<0.0002
5/3/2019		<0.0002	<0.0002						
5/14/2019		7.1E-05 (J)	<0.0002	<0.0002					<0.0002
5/28/2019				<0.0002					
5/29/2019		<0.0002	<0.0002						<0.0002
6/12/2019		<0.0002	<0.0002	<0.0002					<0.0002
6/19/2019									<0.0002
6/25/2019									<0.0002
8/8/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
8/9/2019							<0.0002	<0.0002	<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	<0.0002	<0.0002	<0.0002
6/13/2018			<0.0002
6/14/2018	<0.0002	<0.0002	
7/23/2018		<0.0002	<0.0002
7/24/2018	<0.0002		
9/6/2018	9E-05 (J)	7.7E-05 (J)	0.00035
10/2/2018	<0.0002	<0.0002	<0.0002
11/1/2018		<0.0002	<0.0002
11/2/2018	<0.0002		
12/6/2018	<0.0002	<0.0002	<0.0002
2/13/2019	<0.0002	<0.0002	<0.0002
8/8/2019			<0.0002
8/9/2019	<0.0002	<0.0002	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.005	0.073	0.011 (J)		
4/25/2018	0.11							0.056	
6/13/2018	0.09								
6/14/2018					<0.005	0.068	0.0083 (J)	0.048	
7/23/2018	0.11								
7/24/2018					<0.005	0.065	0.0075 (J)	0.078	
9/1/2018	0.11				<0.005	0.05	0.0082 (J)	0.081	
10/1/2018					<0.005	0.061	0.0088 (J)		
10/2/2018	0.1							0.07	
11/1/2018	0.11								
11/2/2018					<0.005	0.062	0.0083 (J)	0.1	
12/6/2018	0.1						0.0093 (J)	0.069	
12/7/2018					<0.005	0.062			
2/13/2019	0.085				<0.005	0.061	0.0093 (J)	0.1	
3/16/2019		<0.005	<0.005	<0.005					
3/27/2019		<0.005 (D)	<0.005 (D)	<0.005					
4/3/2019		<0.005 (D)	<0.005 (D)	<0.005					
4/5/2019									0.41 (D)
4/15/2019				<0.005					0.4
4/16/2019		<0.005	<0.005						
5/2/2019				<0.005					0.3
5/3/2019		<0.005	<0.005						
5/14/2019		<0.005	<0.005	<0.005					0.36
5/28/2019				<0.005					
5/29/2019		<0.005	<0.005						0.4
6/12/2019		<0.005	<0.005	<0.005					0.34
6/19/2019									0.41
6/25/2019									0.37
8/8/2019	0.11	<0.005	<0.005	<0.005	0.00079 (J)	0.073			
8/9/2019							0.012	0.15	0.48
8/29/2019		<0.005	<0.005						
8/30/2019	0.078			<0.005	<0.005	0.065	0.011	0.088	0.42
3/16/2020				<0.005	<0.005	0.072	0.01		
3/17/2020	0.081	<0.005	<0.005					0.079	0.47

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	0.00096 (J)	0.18	<0.005
6/13/2018			<0.005
6/14/2018	0.0062 (J)	0.17	
7/23/2018		0.17	<0.005
7/24/2018	0.0063 (J)		
9/6/2018	<0.005	0.15	<0.005
10/2/2018	<0.005	0.15	0.0009 (J)
11/1/2018		0.16	<0.005
11/2/2018	0.0066 (J)		
12/6/2018	0.0062 (J)	0.14	<0.005
2/13/2019	0.0047 (J)	0.13	<0.005
8/8/2019			<0.005
8/9/2019	<0.005	0.12	
8/30/2019	<0.005	0.11	0.00093 (J)
3/17/2020	<0.005	0.094	<0.005

Time Series

Constituent: pH (SU) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					5.89	6.46	6.31		
4/25/2018	6.7							6.04	
6/13/2018	6.64								
6/14/2018					5.96	6.5	6.28	6.29	
7/23/2018	6.76								
7/24/2018					6.03	6.6	6.34	6.35	
9/1/2018	6.9				6.23	6.74	6.33	6.38	
10/1/2018					5.94	6.51	6.36		
10/2/2018	6.77							6.47	
11/1/2018	6.89								
11/2/2018					5.98	6.55	6.43	6.42	
12/6/2018	6.89						6.43	6.42	
12/7/2018					5.98	6.55			
2/13/2019	6.81				6.09	6.69	6.48	6.42	
3/16/2019		6.97	6.44	6.67					
3/27/2019		6.7	6.38	6.59					
4/3/2019		6.45	6.19	6.56					
4/4/2019	6.74							6.35	
4/5/2019					6.03	6.7	6.33		6.12
4/15/2019				6.68					6.14
4/16/2019		6.52	6.3						
5/2/2019				6.78					6.19
5/3/2019		6.37	6.33						
5/14/2019		6.57	6.64	6.7					6.12
5/28/2019				6.56					
5/29/2019		6.31	6.6						6.11
6/12/2019		6.41	6.31	6.69					6.09
6/19/2019									6.1
6/25/2019									6.18
8/8/2019	6.84	6.29	6.12	6.68	6.03	6.7			
8/9/2019							6.69	6.42	6.03
8/29/2019		6.2	6.24						
8/30/2019	7.09			6.72	6.1	6.75	6.68	6.47	5.92
3/16/2020				6.51	5.91	6.61	6.71		
3/17/2020	6.93	6.2	6.2					6.32	5.97

Time Series

Constituent: pH (SU) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	6.31	6.69	6.19
6/13/2018			6.18
6/14/2018	6.25	6.66	
7/23/2018		6.7	6.19
7/24/2018	6.34		
9/6/2018	6.29	6.66	6.13
10/2/2018	6.28	6.63	6.13
11/1/2018		6.75	6.25
11/2/2018	6.4		
12/6/2018	6.4	6.75	6.25
2/13/2019	6.37	6.7	6.24
4/4/2019	6.33	6.72	6.17
8/8/2019			6.23
8/9/2019	6.34	6.74	
8/30/2019	6.31	6.68	6.1
3/17/2020	6.57	6.69	

Time Series

Constituent: Selenium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<0.005	0.0016	0.00055 (J)		
4/25/2018	0.00061 (J)							0.00071 (J)	
6/13/2018	0.00034 (J)								
6/14/2018					0.00061 (J)	0.0019	0.00068 (J)	0.0006 (J)	
7/23/2018	0.00035 (J)								
7/24/2018					0.00037 (J)	0.00087 (J)	0.00036 (J)	0.0006 (J)	
9/1/2018	<0.005				<0.005	0.001 (J)	<0.005	<0.005	
10/1/2018					<0.005	<0.005	<0.005		
10/2/2018	<0.005							<0.005	
11/1/2018	<0.005								
11/2/2018					0.00072 (J)	0.001 (J)	<0.005	<0.005	
12/6/2018	<0.005						<0.005	<0.005	
12/7/2018					<0.005	0.0011 (J)			
2/13/2019	<0.005				<0.005	<0.005	<0.005	<0.005	
3/16/2019		<0.005	<0.005	<0.005					
3/27/2019		<0.005 (D)	<0.005 (D)	<0.005					
4/3/2019		<0.005 (D)	<0.005 (D)	<0.005					
4/5/2019									<0.005 (D)
4/15/2019				<0.005					<0.005
4/16/2019		<0.005	<0.005						
5/2/2019				<0.005					<0.005
5/3/2019		<0.005	<0.005						
5/14/2019		<0.005	<0.005	<0.005					<0.005
5/28/2019				<0.005					
5/29/2019		<0.005	<0.005						<0.005
6/12/2019		<0.005	<0.005	<0.005					<0.005
6/19/2019									<0.005
6/25/2019									<0.005
8/8/2019	<0.005	<0.005	<0.005	<0.005	<0.005	0.0017 (J)			
8/9/2019							<0.005	<0.005	<0.005
8/29/2019		<0.005	<0.005						
8/30/2019	<0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/16/2020				<0.005	<0.005	<0.005	<0.005		
3/17/2020	<0.005	<0.005	<0.005					<0.005	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	0.00046 (J)	0.00042 (J)	0.00081 (J)
6/13/2018			0.00027 (J)
6/14/2018	0.00039 (J)	0.00049 (J)	
7/23/2018		0.0006 (J)	0.00041 (J)
7/24/2018	0.00036 (J)		
9/6/2018	<0.005	<0.005	<0.005
10/2/2018	<0.005	<0.005	<0.005
11/1/2018		<0.005	<0.005
11/2/2018	<0.005		
12/6/2018	<0.005	<0.005	<0.005
2/13/2019	<0.005	<0.005	<0.005
8/8/2019			<0.005
8/9/2019	<0.005	<0.005	
8/30/2019	<0.005	<0.005	<0.005
3/17/2020	<0.005	<0.005	<0.005

Time Series

Constituent: Sulfate (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					<5	1200	340		
4/25/2018	290							920	
6/13/2018	310								
6/14/2018					7.2	1200	350	980	
7/23/2018	300								
7/24/2018					2.7 (J)	1100	310	950	
9/1/2018	290				1.5 (J)	1200	300	980	
10/1/2018					<5	1200	330		
10/2/2018	300							960	
11/1/2018	290								
11/2/2018					1.9 (J)	1000	310	860	
12/6/2018	290						300	990	
12/7/2018					<5	1100			
2/13/2019	230				1.5 (J)	1100	320	930	
3/16/2019		3.6	0.88 (J)	14					
3/27/2019		0.81 (JD)	1.3 (D)	19					
4/3/2019		1.1 (D)	1.9 (D)	4.6 (J)					
4/4/2019	240							1100	
4/5/2019					7	1200	330		800 (D)
4/15/2019				8.6					700
4/16/2019		0.68 (J)	2.5						
5/2/2019				6					810
5/3/2019		1.1	1.3						
5/14/2019		1.3	2.2	5.8					810
5/28/2019				9.4					
5/29/2019		2.1	1.2						830
6/12/2019		1.9	1.1	8.8					830
6/19/2019									810
6/25/2019									800
8/29/2019		2.3	1.1						
8/30/2019	160			13	8.4	1100	330	940	800
3/16/2020				23	16	1100	330		
3/17/2020	110	3.7	3.2					910	590

Time Series

Constituent: Sulfate (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	65	670	270
6/13/2018			300
6/14/2018	81	650	
7/23/2018		610	280
7/24/2018	52		
9/6/2018	53	690	270
10/2/2018	34	650	280
11/1/2018		610	270
11/2/2018	35		
12/6/2018	65	660	300
2/13/2019	74	600	280
4/4/2019	61	640	330
8/30/2019	83	620	280
3/17/2020	430	680	290

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-10	APMW-11 (bg)	APMW-12 (bg)	APMW-1R	APMW-2	APMW-3	APMW-4	APMW-5	APMW-6R
4/24/2018					4800	18000	7700		
4/25/2018	2500							16000	
6/13/2018	2900								
6/14/2018					5700	13000	7200	14000	
7/23/2018	3100								
7/24/2018					6000	18000	7000	15000	
9/1/2018	2700				6300	20000	7800	16000	
10/1/2018					6500	20000	8400		
10/2/2018	2900							17000	
11/1/2018	2700								
11/2/2018					3800	19000	7600	15000	
12/6/2018	2600						7400	14000	
12/7/2018					5300	13000			
2/13/2019	2800				6200	16000	7700	16000	
3/16/2019		120	150	3300					
3/27/2019		63 (D)	110 (D)	2900					
4/3/2019		100 (D)	150 (D)	3600					
4/4/2019	2500							18000	
4/5/2019					5000	18000	7000		7800 (D)
4/15/2019				3300					6600
4/16/2019		110	150						
5/2/2019				3300					7400
5/3/2019		91	130						
5/14/2019		120	150	3600					8300
5/28/2019				3500					
5/29/2019		140	180						8600
6/12/2019		100	130						6800
6/19/2019									7100
6/25/2019									8500
8/29/2019		73	110						
8/30/2019	2200			3500	4400	18000	5800	16000	6600
3/16/2020				4500	4400	16000	6100		
3/17/2020	2700	95	120					15000	7200

Time Series

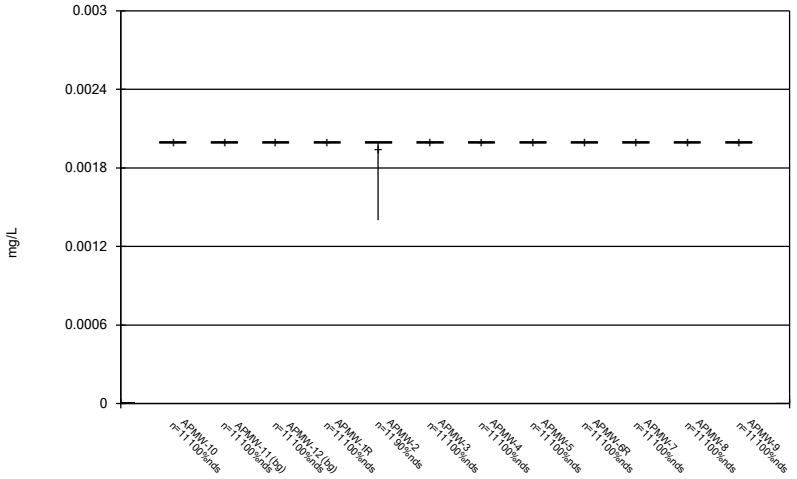
Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/18/2020 4:31 PM View: Descriptive

Plant Watson Client: Southern Company Data: Plant Watson AP CCR

	APMW-7	APMW-8	APMW-9
4/25/2018	7500	6400	5800
6/13/2018			5800
6/14/2018	7000	6000	
7/23/2018		7200	5800
7/24/2018	7200		
9/6/2018	7000	7800	6300
10/2/2018	7400	8200	6500
11/1/2018		7300	5000
11/2/2018	6900		
12/6/2018	6900	8300	6000
2/13/2019	8200	8900	6700
4/4/2019	8100	7700	4500
8/30/2019	6900	6300	4900
3/17/2020	6900	6400	5400

Box Plots

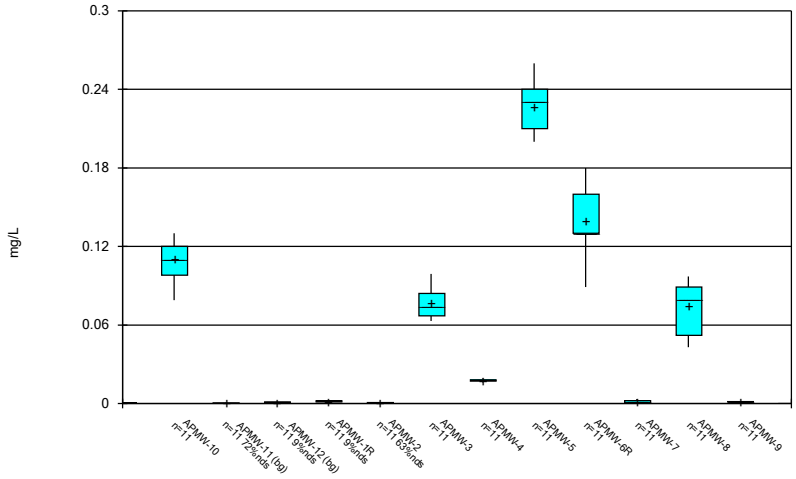
Box & Whiskers Plot



Constituent: Antimony Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

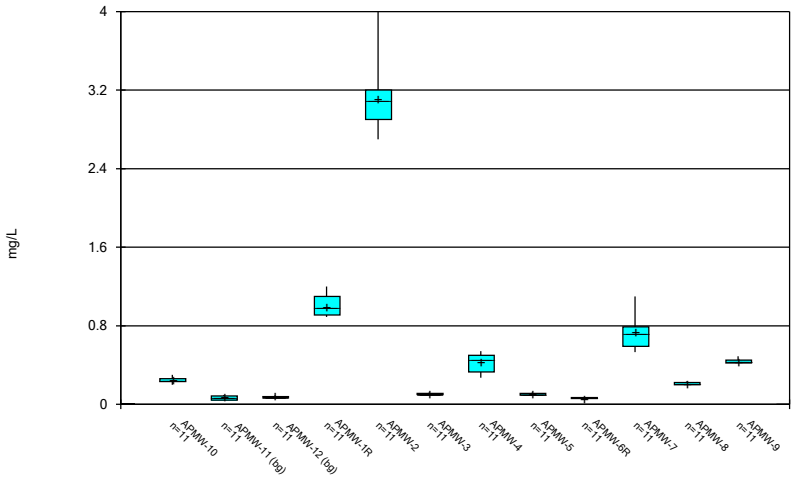
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

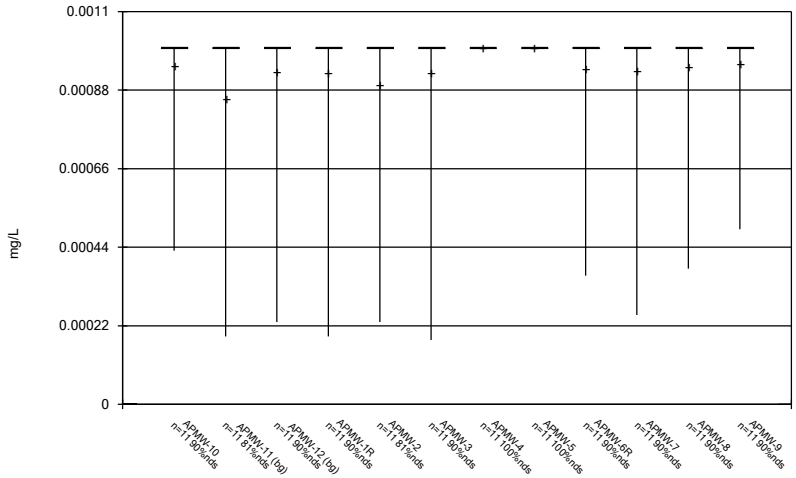
Box & Whiskers Plot



Constituent: Barium Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

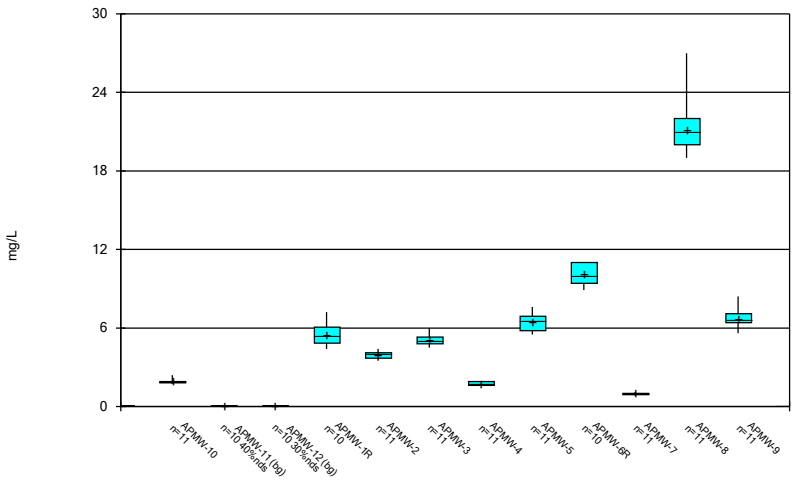
Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

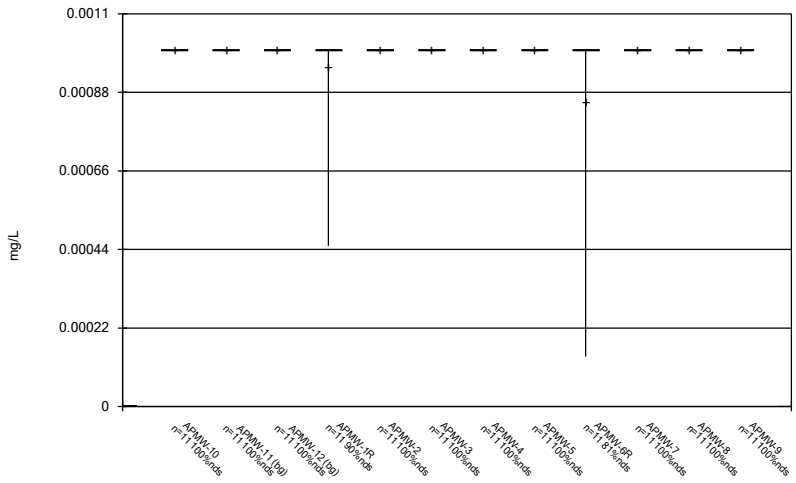
Box & Whiskers Plot



Constituent: Boron Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

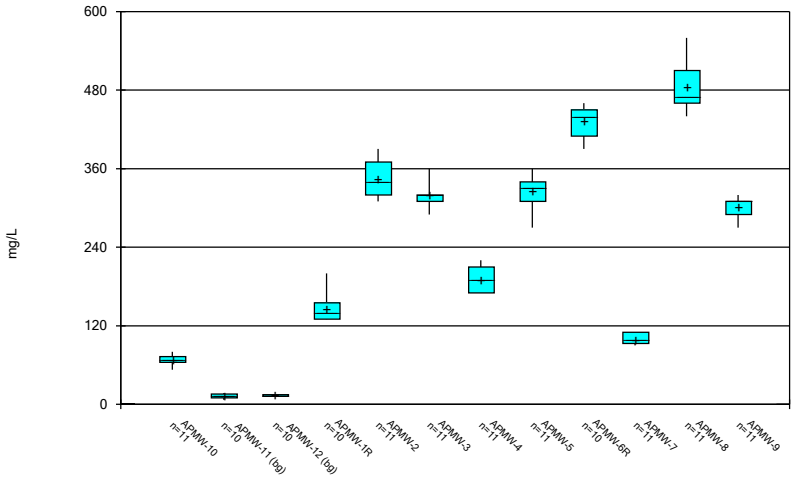
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

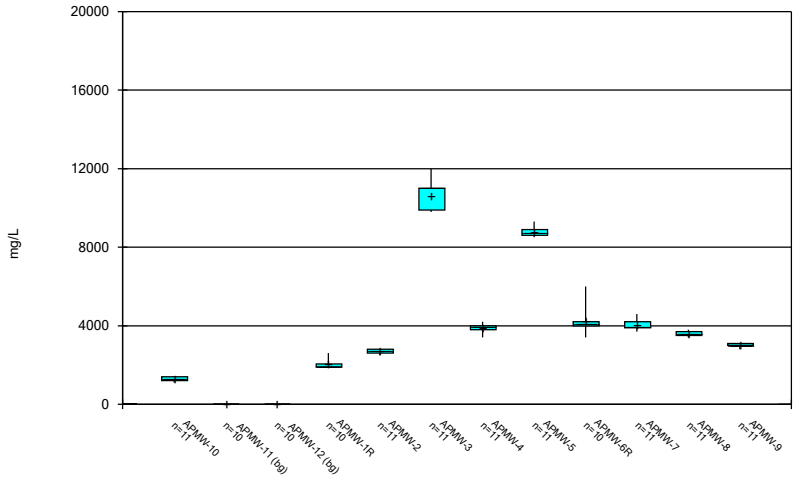
Box & Whiskers Plot



Constituent: Calcium Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

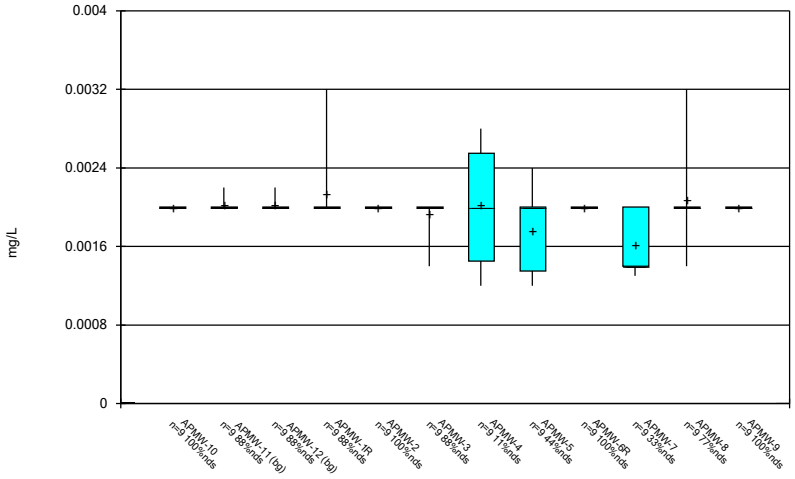
Box & Whiskers Plot



Constituent: Chloride Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

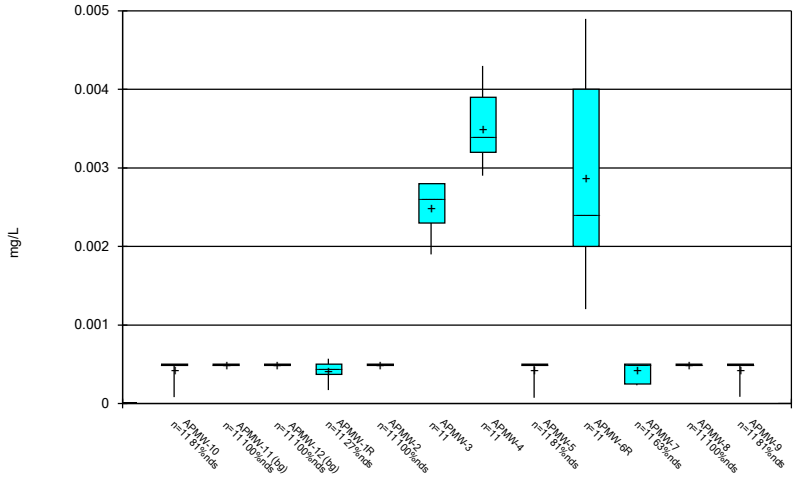
Box & Whiskers Plot



Constituent: Chromium Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

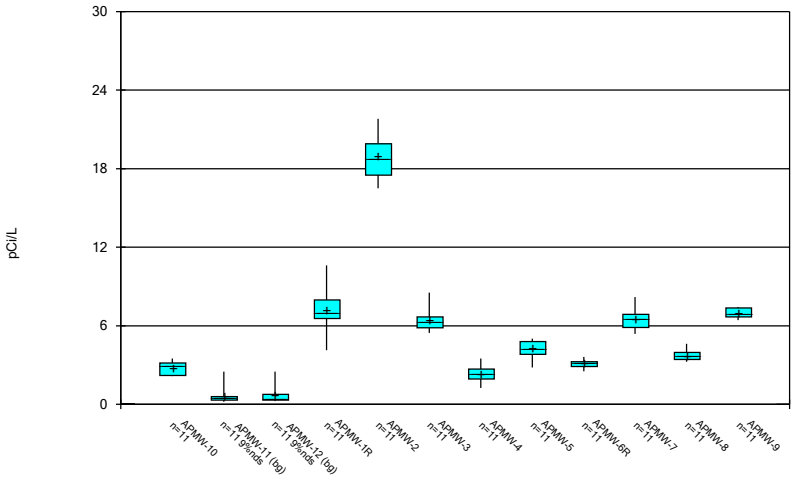
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

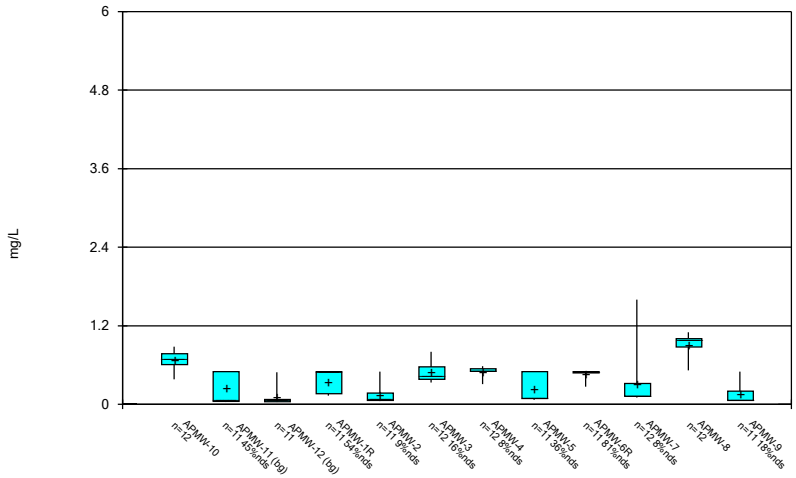
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

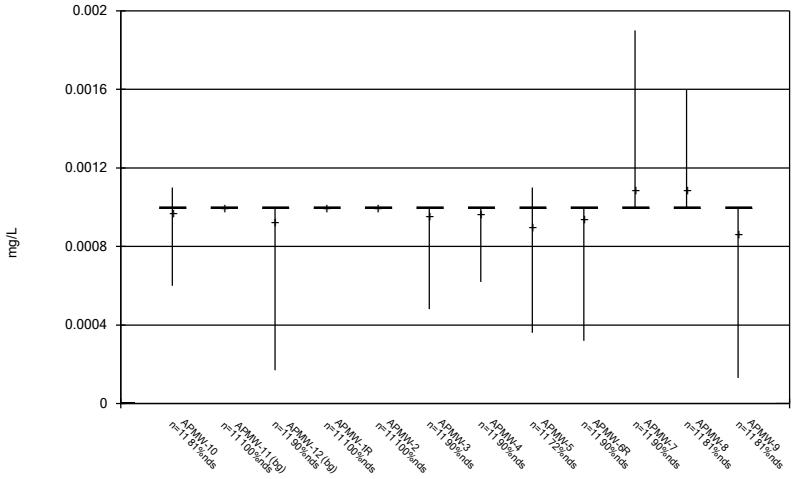
Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

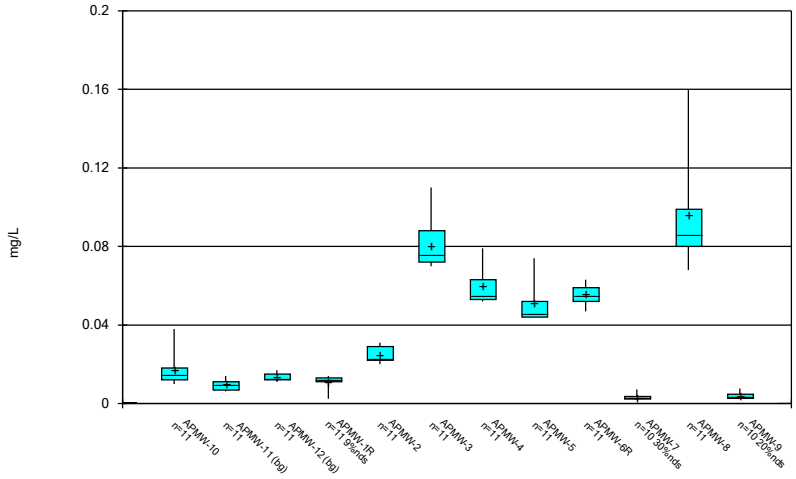
Box & Whiskers Plot



Constituent: Lead Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

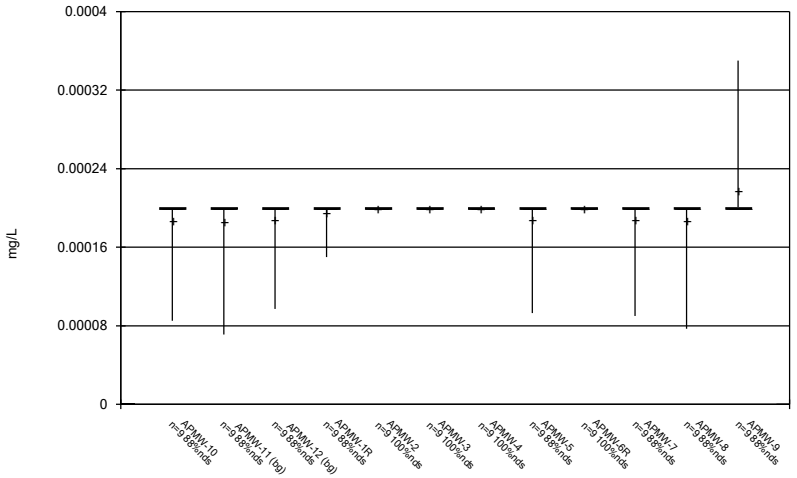
Box & Whiskers Plot



Constituent: Lithium Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

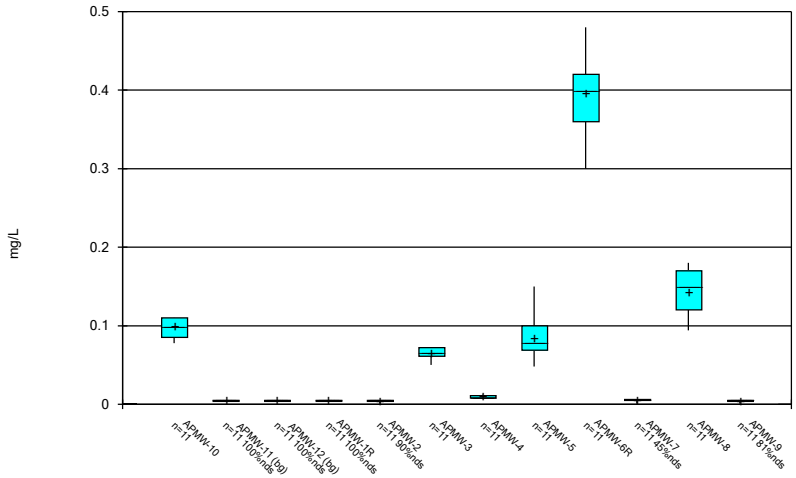
Box & Whiskers Plot



Constituent: Mercury Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

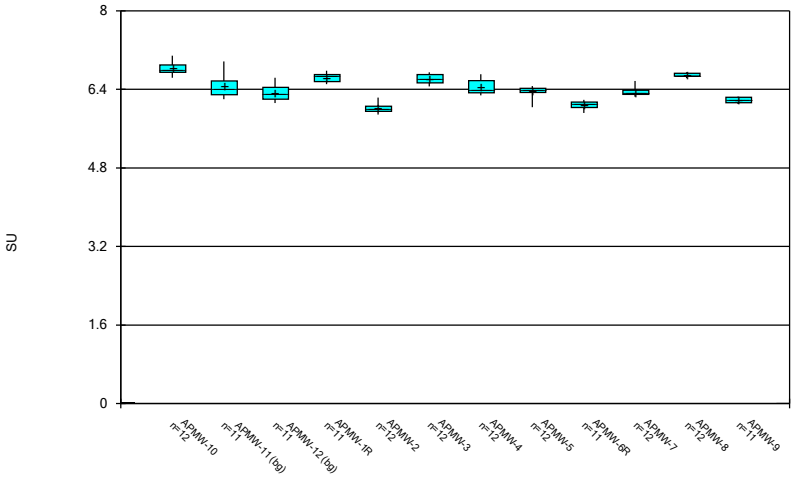
Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

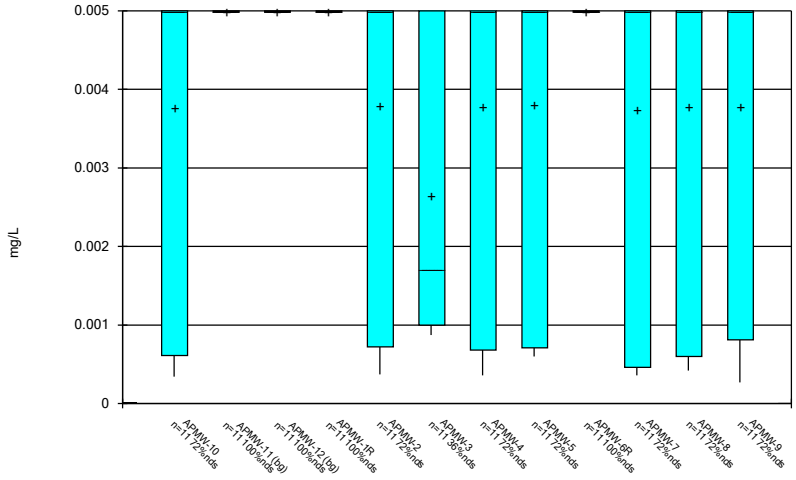
Box & Whiskers Plot



Constituent: pH Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

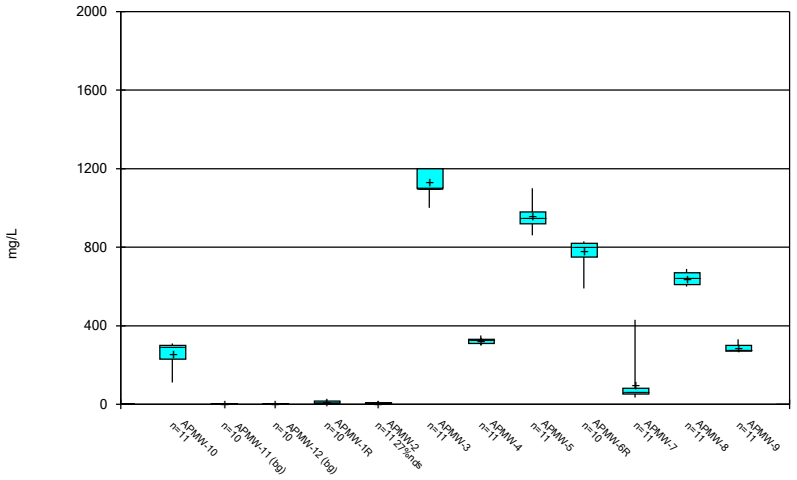
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

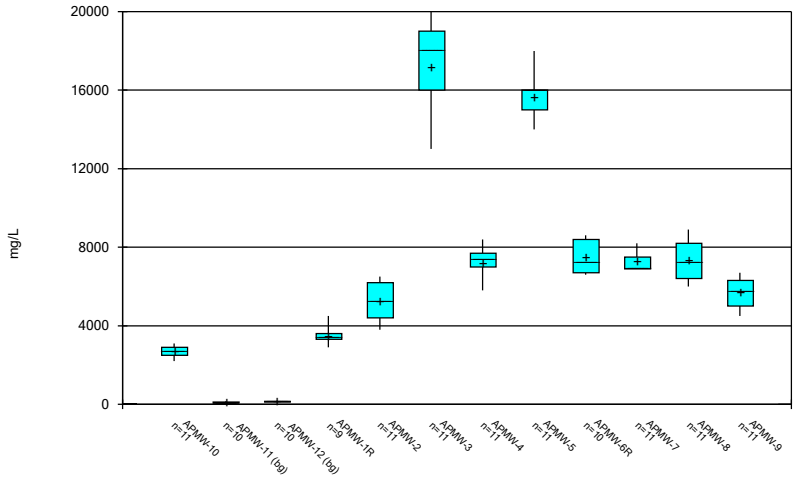
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

Sanitas™ v.9.6.26 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 6/18/2020 4:38 PM View: Descriptive
Plant Watson Client: Southern Company Data: Plant Watson AP CCR

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Semi-Annual Progress Report

Date:	August 1, 2020
To:	Charles Blount, Mississippi Power Company
Copies to:	Brant Pettis, Balch & Bingham, LLP; Lauren Parker-Collins and Eric Wallis, Southern Company Services
From:	Lane Dorman, Lauren Fitzgerald, and Ben Amos Geosyntec Consultants, Inc.
Subject:	Semi-Annual Progress Report, Plant Watson, Gulfport, MS Geosyntec Project: FR3795

INTRODUCTION

In accordance with Part 3. B. of Agreed Order No. 7010 19 executed December 23, 2019 between the Mississippi Commission on Environmental Quality and Mississippi Power Company (Mississippi Power) (Agreed Order), Mississippi Power submitted the *Groundwater Monitoring Report*[1] on February 21, 2020 to the Mississippi Department of Environmental Quality (MDEQ). The Agreed Order was associated with the former ash pond at Mississippi Power Plant Jack Watson Electric Generating Plant (Plant Watson) in Harrison County near the city of Gulfport, Mississippi (**Figure 1**) that was closed in accordance with the CCR regulations (hereinafter referred to as the Former CCR Unit. The *Groundwater Monitoring Report* documented installation of the Professional Engineer (PE)-certified coal combustion residual (CCR) groundwater monitoring system for the Former CCR Unit (wells APMW-1 through APMW-12) and the groundwater monitoring activities completed from 2018 through 2019 to comply with the United States Environmental Protection Agency (USEPA) CCR rule (40 C.F.R. Part 257 Subpart D). In addition to the field data and analytical results provided in the *Groundwater Monitoring Report*, Mississippi Power provided results of Appendix IV statistical analysis. Statistical analysis of

[1] Southern Company Services, 2020. Groundwater Monitoring Report. Mississippi Power Company. Plant Watson Former CCR Unit. 21 February.

Appendix IV data identified statistically significant levels (SSLs) over groundwater protection standards (GWPSs) in groundwater at the Former CCR Unit as follows (**Figure 2**):

- Arsenic: APMW-3, APMW-4, APMW-5, APMW-6R, APMW-8, and APMW-10
- Barium: APMW-2
- Radium 226+228: APMW-1R, APMW-2, APMW-3, APMW-7, and APMW-9
- Lithium: APMW-3, APMW-4, APMW-5, APMW-6R, and APMW-8
- Molybdenum: APMW-6R and APMW-8

A notification of SSLs dated January 13, 2020 was placed in the Operating Record and subsequently on the Mississippi Power CCR compliance website in accordance with the CCR rule.

In accordance with Part 3. E. of the Agreed Order, Geosyntec Consultants, Inc. (Geosyntec) prepared this *Semi-Annual Progress Report* to detail activities completed since the April 13, 2020 submittal of the *Anticipated 2020 Schedule and Plan for Comprehensive Groundwater Investigation* (i.e., Part 3. C. of the Agreed Order). In summary, activities completed during the previous semi-annual period include the following:

- Installing and sampling new background wells;
- Completing a direct push technology (DPT) soil investigation;
- Installing and sampling vertical delineation wells;
- Sampling surface water for horizontal delineation; and
- Initiating aquifer performance testing.

These activities were conducted to evaluate groundwater conditions at the Former CCR Unit, which is located southeast of Plant Watson and west of the Biloxi River (**Figure 1**).

The Former CCR Unit operated on 102-acres to support coal-fired electricity generation at Plant Watson until April 2015. Intake and discharge canals were installed to the north and west of the Former CCR Unit, respectively, and water from the intake canal was used to sluice coal combustion residuals (CCR) into the Former CCR Unit during coal-fired operations. In 2015, Plant Watson converted to a natural gas fired electricity generation process and the Former CCR Unit was subsequently closed in May 2018. As part of closure, the Former CCR Unit was dewatered to remove free liquids. CCR material remaining in the Former CCR Unit was graded and a final cover system was installed. The final cover system consists of a ClosureTurf® cover system

manufactured by WatershedGeo™ that consists of a 50-mil linear low-density polyethylene (LLDPE) geomembrane overlain by an engineered synthetic turf. The final cover system was designed to limit infiltration of precipitation and promote precipitation runoff to discharge points along the intake and discharge canals along the perimeter of the Former CCR Unit.

INVESTIGATION ACTIVITIES

The following sections provide a summary of the investigation activities completed through July 31, 2020 following submittal of the *Anticipated 2020 Schedule and Plan for Comprehensive Groundwater Investigation* on April 13, 2020. These activities further characterized the geologic and groundwater flow conditions of the conceptual site model (CSM) and further evaluated the nature and extent of Appendix IV constituents with SSLs (i.e., arsenic, barium, radium 226+228, lithium, and molybdenum). The completed investigation activities included the following:

- new background monitoring well installation, development, and sampling;
- a DPT soil investigation to support a planned alternate source demonstration (ASD);
- installation, development, and sampling of seven vertical delineation wells;
- collection of surface water samples to evaluate surface water quality relative to groundwater SSLs; and
- aquifer performance testing.

This progress report includes a summary of the data collected during the DPT investigation, unless otherwise noted. Data from other activities and evaluation of the data will be presented in the *Comprehensive Groundwater Investigation Report* in December 2020.

Background Monitoring Well Installation

Four new background monitoring wells (APMW-13, APMW-14, APMW-15, and APMW-16) were installed the week of June 15, 2020 northeast of the Former CCR Unit (**Figure 2**). The installation of new background wells was completed to expand the background network and incorporate more groundwater quality from marsh environments that may be more representative of background conditions for the Former CCR Unit.

The new background monitoring wells were installed by Universal Engineering Services, a licensed driller in the State of Mississippi, using mud rotary drilling methods with Geosyntec and Southern Company Civil Field Services providing direction regarding well placement. Monitoring

wells were developed beginning on July 9, 2020 following inclement weather delays. Well development activities included purging and surging with submersible, inertial, and/or peristaltic pumps to remove accumulated sediment and reduce groundwater turbidity in the monitoring wells prior to sampling. The target turbidity during well development was less than 10 nephelometric turbidity units (NTU). The target turbidity was not achieved at APMW-5D after multiple days of development.

The wells were given at least one week to equilibrate following development prior to groundwater sampling. Groundwater sampling was initiated the week of July 20, 2020. Given the elevated turbidity at APMW-5D, both total and dissolved (i.e., field-filtered with a 0.45 micron in-line filter) groundwater samples were collected for laboratory analysis. Groundwater samples were collected for Appendix III and Appendix IV CCR constituents.

During drilling of the new background wells (i.e., APMW-13, APMW-14, APMW-15, and APMW-16), Geosyntec personnel collected soil samples from the Unit 3 aquifer and overlying Unit 2 clays. Soil samples were collected for Appendix IV CCR constituents and radionuclides (uranium, thorium, radium 226, radium 228, and combined radium).

Groundwater and soil samples were sent to TestAmerica, a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory, under chain of custody protocols.

Each well was surveyed for location and top of casing elevation by Southern Company Civil Field Services on July 9, 2020.

ASD DPT Investigation

Based on review of the groundwater monitoring data collected in 2018 and 2019, ASDs are being advanced for radium and barium SSLs. The ASD approach includes evaluating naturally-occurring site materials as the source for detected constituents. To collect samples, DPT borings were advanced at the locations shown on **Figure 3**. DPT borings were performed by Walker Hill Environmental, a licensed driller in the State of Mississippi, with Geosyntec and Southern Company Civil Field Services providing direction over DPT placement beginning on April 20, 2020 through April 28, 2020.

- Ten DPT borings (DPT-1 through DPT-10) were collocated with the ten downgradient compliance monitoring wells (APMW-1 through APMW-10 in the CCR monitoring well network).

- Three DPT borings (DPT-11 through DPT-13) were completed in the vicinity of APMW-11 and APMW-12, the existing background monitoring well locations.

Soil samples were collected from both the Unit 2 clay and the Unit 3 aquifer within each DPT borehole. Groundwater samples were collected from the ten downgradient CCR monitoring wells (APMW-1 through APMW-10). Soil and groundwater samples were analyzed for the following analytes.

DPT Locations or Monitoring Wells [Environmental Media]	Analytes	Compiled Data Location
DPT-1 through DPT-10 [Soil]	Appendix IV Uranium Thorium Acid Volatile Sulfides Barium (field X-ray fluorescence; XRF)	Table 1a
	Barite (X-ray diffraction; XRD)	Table 2
DPT-11 through DPT-13 [Soil]	Appendix IV Uranium Thorium	Table 1a
APMW-1 through APMW-10 [Groundwater]	Sulfate Sulfide (field test and laboratory) Radionuclides (only APMW-5)	Table 1b
	Microbial Community Analysis	Not available

In addition, the potential for soils collected adjacent to the existing background wells, APMW-11 and APMW-12, to leach radionuclides, gross alpha, and gross beta was evaluated through a leaching protocol using Unit 3 groundwater from APMW-5. Groundwater and soil samples were sent to TestAmerica (a NELAP accredited laboratory), Mineralogy, Inc. (soil XRD analysis only), and Omega Bioservices (microbial community analysis only) under chain of custody protocols. Compiled analytical results from TestAmerica and Mineralogy, Inc. are provided in **Tables 1a, 1b, and 2**, and TestAmerica laboratory reports are presented in **Appendix A**. The microbial community analysis performed by Omega Bioservices is under review and will be submitted under separate cover.

Nature and Extent Investigation

Investigating the nature and extent of Appendix IV SSLs included both vertical and horizontal investigation. During the period of April 28, 2020 through May 16, 2020, seven vertical delineation monitoring wells were installed adjacent to existing CCR monitoring wells APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-8, and APMW-10 (**Figure 4**). Monitoring well installation was completed by Cascade Environmental, a licensed driller in the State of

Mississippi, using rotosonic drilling methods, with Geosyntec providing direction regarding well placements.

The seven vertical delineation monitoring wells were installed to assess the vertical extent of arsenic, lithium, and molybdenum in groundwater observed in Unit 3 by targeting the interbedded sands within the underlying Unit 4 clays. Monitoring well development was initiated on July 2, 2020 in accordance with the same methods utilized for the new background wells. After at least one week of stabilization, groundwater sample collection was initiated the week of July 13, 2020; samples were analyzed for Appendix III and Appendix IV CCR constituents. Groundwater samples were sent to TestAmerica, a NELAP accredited laboratory, under chain of custody protocols. Finally, each well was surveyed for location and top of casing elevation by Southern Company Civil Field Services on July 9, 2020.

The nature and extent investigation also included evaluating horizontal extent with respect to adjacent surface water. On July 1, 2020, surface water samples were collected from new and existing surface water sampling locations as shown on **Figure 5**. Samples were analyzed for: Appendix III and Appendix IV CCR constituents and total and dissolved hardness, total alkalinity, carbonate alkalinity, and bicarbonate alkalinity. Surface water samples were sent to TestAmerica, a NELAP accredited laboratory, under chain of custody protocols.

Aquifer Performance Test (APT) Program

The APT designed at Plant Watson was conducted from June 15, 2020 to July 3, 2020 in general accordance with the *Aquifer Performance Test* (*APT) Workplan* approved by MDEQ on June 5, 2020. Testing was performed to provide information on the hydraulic properties of the ash contained within the Former CCR Unit and the subsurface sandy aquifer (Unit 3) beneath the Former CCR Unit. The APT included water extraction from select wells and piezometers described in the workplan and shown on **Figure 6**, while measuring water levels in the extraction well and adjacent observation wells (when present).

A temporary pipeline system was installed by Coastal Engineering to convey extracted water to a frac tank prior to periodic discharge into the ash leachate pond (outfall 202) at Plant Watson in accordance with approval from MDEQ.

During the APT, samples were collected from each extraction well and analyzed for ammonia, chlorine, total polychlorinated biphenyls (PCBs), sulfate, nitrates, bromide, fluoride, pH, and the priority pollutants listed in USEPA's Form 2C application for steam electric power plants pursuant to the request for approval from MDEQ dated June 5, 2020. Groundwater samples were sent to TestAmerica, a NELAP accredited laboratory, under chain of custody protocols. Analytical results

and individual well discharge volumes will be provided to MDEQ on or before August 17, 2020, 45 days following completion of the APT program.

Two weeks prior to commencing individual APTs, numerous wells screened in ash and Unit 3 aquifer were (re)developed to assess potential pumping rates and prepare for pumping during the APT program. Wells were (re)developed surging and purging with an electric submersible pump or a pneumatic pump to remove excess turbidity that had accumulated in the wells prior to APT pumping. Well development was conducted by Geosyntec and Huss Drilling beginning on June 1, 2020 at well 4A-GS. Other wells redeveloped during this effort included TW-1, TW-2, TW-3, 5S-GS, 6S-GS, and 3S-GS. Redevelopment attempts were made at 1S-GS and 2S-GS; however, these wells were observed to be damaged preventing installation of submersible pumps. These wells were removed from the testing program. Testing was planned at 7S-GS; however, this well was dry and could not be tested.

Water levels in both the ash and Unit 3 wells were measured throughout the APT via a combination of transducers and manual measurements. In addition, Geosyntec installed temporary staff gauges in the intake and discharge canals prior to the APT program to monitor tidal fluctuations during the test.

A total of seven APTs were completed between June 15, 2020 and July 3, 2020. The APT design consisted of step drawdown, constant head and constant rate tests, with or without vacuum assistance, and recovery from Unit 3 at TW-1, TW-2, and TW-3 and ash at 3S-GS, 4A-GS, 5S-GS, and 6S-GS while monitoring water levels in the vicinity of each well (**Figure 6**).

DEVIATIONS FROM SCHEDULE AND PLAN

Deviations occurred from the *Anticipated 2020 Schedule and Plan for Comprehensive Groundwater Investigation*. Inclement weather, subcontractor/equipment availability, and scope development changes resulted in minor delays as detailed in the inset schedule below. Regulatory deadlines for report submittal were not impacted by the slight schedule alterations. Southern Company Services and Mississippi Power were notified of delays and involved in scope refinements. The anticipated schedule for August to December 2020 activities, including submittal of the *Comprehensive Groundwater Investigation Report* to MDEQ in December 2020, is generally consistent with that presented in the *Anticipated 2020 Schedule and Plan for Comprehensive Groundwater Investigation*.

Schedule of Activities for the *Comprehensive Groundwater Investigation Report*

Anticipated Date of Initiation	Actual Date of Initiation	Activity
Mid-April	April 20, 2020	ASD sample collection
Late-April	June 15, 2020	Background monitoring well installation
Late-April	April 28, 2020	Vertical nature and extent investigation – install seven vertical delineation monitoring wells
Mid-May	June 1, 2020	APT Program
Late-May	July 1, 2020	Horizontal nature and extent investigation – comprehensive surface water sampling event
June 12, 2020	June 12, 2020	Posted 60-day Assessment of Corrective Measures (ACM) extension request to the Operating Record
Late-April	July 2, 2020	Background and vertical delineation monitoring well development and sampling
August 11, 2020	August 11, 2020	Post ACM to the Operating Record
--	August 17, 2020	Submit analytical data and individual well discharge volumes from the APT program
December 8, 2020	December 8, 2020	Submit the *Comprehensive Groundwater Investigation*

* * * * *

TABLES

Table 1a.
Summary of Soil Analytical Results for Alternate Source Demonstration Investigation
Plant Watson, Gulfport, Mississippi

Sample ID	Sample Date	Depth (ft bgs)	Acid Volatile Sulfide (mg/kg)	Barium (average field XRF[1]) (ppm)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Lead (mg/kg)	Lithium (mg/kg)	Molybdenum (mg/kg)	Selenium (mg/kg)	Thallium mg/kg)	Uranium (mg/kg)	Thorium (mg/kg)	Ra 226 (pCi/g)	Ra 228 (pCi/g)	Combined Ra (pCi/g)
DPT-1-SS U2	4/20/2020	(22-24)	<6.55	1894	<0.226	4.17	10.6	0.149	<0.0271	7.51	0.285	4.09	2.85	0.721	0.566	<0.226	0.564	3.20	0.315	0.608	0.923
DPT-1-SS U3	4/20/2020	(38-40)	<6.08	1023	<0.256	<0.512	8.07	0.217	<0.0307	2.30	0.936	3.29	1.26 J	0.471 J	<0.410	<0.256	0.347	1.24	0.272	0.515	0.786
DPT-2-SS U2	4/21/2020	(26-27)	<6.12	365	<0.279	0.735 J	83.7	0.617	<0.0335	3.24	0.110 J	13.1	2.42	<0.279	1.31	<0.279	0.743	4.91	0.706	0.840	1.55
DPT-2-SS U3	4/21/2020	(37-38)	<6.00	278	<0.257	<0.514	2.23 J	<0.0514	<0.0309	1.29	0.215 J	0.629	<0.514	<0.257	<0.411	<0.257	<0.0514	0.273	<0.00380	<0.158	<0.162
DPT-3-SS U2	4/21/2020	(24-25)	<8.39	291	<0.300	5.10	65.8	0.853	0.222	9.84	13.5	9.68	3.28	0.813	1.45	<0.300	1.48	5.90	0.510	0.760	1.27
DPT-3-SS U3	4/21/2020	(29-30)	<5.76	328	<0.221	4.52	2.42	0.0483 J	0.0332 J	1.09 J	6.64	0.925	0.875 J	0.553 J	<0.354	<0.221	0.142	0.247	<0.0467	<0.144	<0.191
DPT-4-SS U2	4/21/2020	(15-16)	<13.1	206	<0.478	6.93	176	0.197 J	<0.0574	8.01	1.70	3.23	3.73	3.53	1.15 J	<0.478	1.10	1.44	0.292	0.428	0.721
DPT-4-SS U3	4/21/2020	(28-29)	<5.88	230	<0.213	<0.425	4.19	<0.0425	<0.0255	<0.479	0.150 J	0.512	0.530 J	<0.213	<0.340	<0.213	0.0523 J	0.108 J	<0.0385	<0.123	<0.162
DPT-5-SS U2	4/22/2020	(17-18)	<6.59	258	<0.233	1.28	60.3	0.331	<0.0280	5.96	0.743	7.82	2.40	<0.233	0.744	<0.233	0.384	4.06	0.307	<0.354	0.661
DPT-5-SS U3	4/22/2020	(23-24)	<6.1	244	<0.218	<0.437	6.64	<0.0437	<0.0262	0.629 J	<0.0819	0.436	<0.437	0.263 J	<0.349	<0.218	<0.0437	0.129 J	0.133	<0.238	<0.370
DPT-6-SS U2	4/22/2020	(11-12)	<7.54	293	<0.293	1.75	20.5	0.192	<0.0352	7.74	1.08	10.1	2.79	0.536 J	0.848	<0.293	0.689	4.58	0.475	0.767	1.24
DPT-6-SS U3	4/22/2020	(25-26)	<6.42	368	<0.220	0.963 J	2.22	0.0472 J	<0.0263	0.642 J	0.0979 J	0.405	0.462 J	3.14	<0.351	<0.220	<0.0439	0.117 J	<0.0201	<0.00443	<0.0245
DPT-7-SS U2	4/23/2020	(18-19)	<6.47	430	<0.233	2.00	20.4	0.248	<0.0280	6.02	1.33	9.95	3.23	<0.233	0.893	<0.233	0.418	4.11	0.433	0.547	0.98
DPT-7-SS U3	4/23/2020	(27-28)	<8.74	193	<0.231	<0.463	2.69	<0.0463	<0.0278	0.705 J	0.32	0.802	<0.463	<0.231	<0.370	<0.231	0.0474 J	0.300	0.333	0.406	0.739
DPT-8-SS U2	4/24/2020	(25-26)	<7.53	278	<0.220	1.55	17.5	0.0663 J	<0.0264	3.81	0.568	3.32	1.81	0.273 J	<0.353	<0.220	0.365	1.89	0.311	0.439	0.751
DPT-8-SS U3	4/24/2020	(39-40)	<6.24	340	<0.234	<0.468	2.37	<0.0468	<0.0281	0.865 J	<0.0878	1.63	<0.468	2.60	<0.374	<0.234	0.108 J	0.818	0.364	0.48	0.844
DPT-9-SS U2	4/24/2020	(27-28)	<6.4	228	<0.219	1.40	25.3	0.231	<0.0263	4.86	0.280	6.39	1.97	<0.219	0.914	<0.219	0.451	3.76	0.459	0.497	0.956
DPT-9-SS U3	4/24/2020	(32-33)	<5.6	223	<0.234	<0.467	1.03 J	<0.0467	<0.0280	0.734 J	<0.0876	0.322 J	<0.467	<0.234	<0.374	<0.234	0.0491 J	0.159 J	<0.0899	<0.302	<0.392
DPT-10-SS U2	4/24/2020	(22-23)	<5.82	287	<0.218	1.03 J	26.0	0.0740 J	<0.0261	3.95	0.255	4.91	2.94	<0.218	0.481 J	<0.218	0.259	2.37	0.428	0.618	1.05
DPT-10-SS U3	4/24/2020	(25-26)	<6.45	194	<0.228	<0.456	1.37 J	<0.0456	<0.0274	0.880 J	<0.0855	0.526	0.834 J	0.339 J	<0.365	<0.228	<0.0456	0.171 J	<0.0708	<0.125	<0.196
DPT-11-SS U2	4/27/2020	(17-33)	--	--	<0.274	9.06	30.6	1.32	0.0468 J	7.85	5.07	10.6	6.72	1.12	2.07	<0.274	2.27	6.12	1.02	1.02	2.04
DPT-11-SS U3	4/27/2020	(36-48)	--	--	<0.230	<0.460	6.67	0.0577 J	<0.0276	1.66	0.936	2.23	1.17	0.374 J	<0.368	<0.230	0.817	0.988	0.162	<0.112	<0.275
DPT-12-SS U2	4/27/2020	(24-34)	--	--	<0.229	0.803 J	22.6	0.164	<0.0275	3.12	0.335	9.82	4.70	0.263 J	0.751	<0.229	0.984	4.47	0.773	0.502	1.28
DPT-12-SS U3	4/27/2020	(35-48)	--	--	<0.221	<0.441	0.996 J	<0.0441	<0.0265	<0.496	0.144 J	0.384	<0.441	<0.221	<0.353	<0.221	<0.0441	0.118 J	<0.0734	<0.179	<0.253
DPT-13-SS U2	4/28/2020	(28-40)	--	--	<0.235	0.796 J	32.8	0.495	<0.0282	7.10	0.968	11.4	4.62	0.691	1.18	<0.235	1.06	6.37	0.491	<0.275	0.767
DPT-13-SS U3	4/28/2020	(44-52)	--	--	<0.232	<0.464	1.06 J	<0.0464	<0.0279	<0.522	0.194 J	0.291 J	<0.464	<0.232	<0.372	<0.232	<0.0464	0.110 J	<0.0634	<0.00751	<0.0709

Notes:

1. Field barium concentrations were the average of three individual field measurements (XRF = X-Ray Fluorescence).
2. Ra indicates Radium
3. U2 indicates Unit 2 and U3 indicates Unit 3
4. DPT indicates Direct Push Technology; SS indicates soil sample
5. ft bgs indicates feet below ground surface; -- indicates not measured
6. J indicates result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value; < indicates the analyte was analyzed for but not detected above the concentration
7. mg/kg indicates milligrams per kilogram; pCi/g indicates picocuries per gram; ppm indicates parts per million

Table 1b.
Summary of Select Groundwater and Leachate Analytical Results for Alternate Source Demonstration Investigation
Plant Watson, Gulfport, Mississippi

Sample ID	Sample Date	Uranium (mg/L)	Thorium (mg/L)	Gross Alpha (pCi/L)	Gross Beta (pCi/L)	Ra 226 (pCi/L)	Ra 228 (pCi/L)	Combined Ra (pCi/L)	Sulfide (field Hach kit) (mg/L)	Sulfide (mg/L)	Sulfate (mg/L)
DPT-11-SS-U2 Leachate	4/27/2020	<0.0004	<0.0009	136	<49	3.66	2.44	6.11	--	--	--
APWM-1R	4/21/2020	--	--	--	--	--	--	--	0.37	0.771	2.4 J
APMW-2	4/21/2020	--	--	--	--	--	--	--	0.00	<0.0570	1.56 J
AMPW-3	4/21/2020	--	--	--	--	--	--	--	0.00	<0.0570	1060
APMW-4	4/21/2020	--	--	--	--	--	--	--	1.96	2.09	302
APMW-5	4/21/2020	<0.0004	<0.0009	<56	55.8	0.351	3.02	3.37	0.00	<0.0570	963
APMW-6R	4/21/2020	--	--	--	--	--	--	--	0.00	<0.0570	818
APMW-7	4/20/2020	--	--	--	--	--	--	--	5.3	4.29	72.4
APMW-8	4/20/2020	--	--	--	--	--	--	--	0.477	0.620	615
APMW-9	4/20/2020	--	--	--	--	--	--	--	0.00	<0.0570	290
APMW-10	4/20/2020	--	--	--	--	--	--	--	0.00	0.0671 J	88.9

Notes:

1. Ra indicates Radium
2. U2 indicates Unit 2
3. DPT indicates Direct Push Technology; SS = soil sample
4. -- indicates not measured
5. J indicates result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
6. < indicates the analyte was analyzed for but not detected above the concentration
7. mg/L indicates milligrams per liter; pCi/L indicates picocuries per liter

Table 2.
X-Ray Diffraction (XRD) Analytical Results
Plant Watson, Gulfport, Mississippi

Sample ID	Depth (ft bgs)	Unit	Quartz (SiO_2)	Plagioclase Feldspar ($(Na,Ca)AlSi_3O_8$)	K-Feldspar ($KAlSi_3O_8$)	Goethite (alpha-FeOOH)	Halite (NaCl)	Pyrite (FeS_2)	Siderite ($FeCO_3$)	Anhydrite ($CaSO_4$)	Magnetite (alpha-Fe_3O_4)	Clay/Mica	Amorphous
DPT-1-SS U2	(22-24)	%	74	--	0.5	1.5	--	--	--	--	--	24	--
DPT-1-SS U3	(38-40)	%	97	--	2	--	--	<0.5	--	--	--	1	--
DPT-2-SS U2	(26-27)	%	69	0.5	1	--	--	--	--	--	--	29.5	--
DPT-2-SS U3	(37-38)	%	99	--	0.5	--	--	<0.5	--	--	--	0.5	--
DPT-3-SS U2	(24-25)	%	64	--	2.5	--	--	--	--	0.5	--	33	--
DPT-3-SS U3	(29-30)	%	97.5	--	0.5	--	0.5	0.5	--	--	--	1	--
DPT-4-SS U2	(15-16)	%	35	0.5	0.5	--	--	--	--	--	--	34	30
DPT-4-SS U3	(28-29)	%	99	--	0.5	--	--	--	--	--	0.5	--	--
DPT-5-SS U2	(17-18)	%	84	0.5	2	--	--	--	0.5	--	--	13	--
DPT-5-SS U3	(23-24)	%	100	--	--	--	--	--	--	--	--	--	--
DPT-6-SS U2	(11-12)	%	85	--	1	--	--	--	--	--	--	14	--
DPT-6-SS U3	(25-26)	%	100	--	--	--	--	--	--	--	--	--	--
DPT-7-SS U2	(18-19)	%	67	<0.5	2	--	--	1	--	--	--	30	--
DPT-7-SS U3	(27-28)	%	90	--	2	--	--	--	--	--	--	8	--
DPT-8-SS U2	(25-26)	%	64	--	1	--	--	--	--	--	--	35	--
DPT-8-SS U3	(39-40)	%	100	--	<0.2	--	--	--	--	--	--	<0.2	--
DPT-9-SS U2	(27-28)	%	48	--	1	2	--	--	1.5	--	0.5	47	--
DPT-9-SS U3	(32-33)	%	99	--	0.5	--	--	--	--	--	0.5	--	--
DPT-10-SS U2	(22-23)	%	58.5	--	0.5	--	--	--	--	--	--	41	--
DPT-10-SS U3	(25-26)	%	100	--	--	--	--	--	--	--	--	--	--

Notes:

1. ft bgs indicates feet below ground surface; -- indicates not detected
2. U2 inidcates Unit 2 and U3 indicates Unit 3
3. DPT indicates Direct Push Technology; SS indicates soil sample
4. Barite was not detected above 0.5% in any samples (0.5% is the detection limit for barite via XRD).

FIGURES

Legend

- Former CCR Unit Boundary
- RaceTrac Gas Station Property Boundary
- Plant Watson Property Boundary

Notes:
1. Property boundary georeferenced from Southern Company Services, 2020. Groundwater Monitoring Report. Mississippi Power Company. Plant Watson Ash Pond. 21 February.
2. CCR - Coal Combustion Residuals
3. Aerial Source: Google Earth Imagery 3/18/2019

N

0 1,000 Feet

Site Location Map

Plant Watson
Gulfport, Mississippi

Geosyntec consultants

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Figure 1

ARO-01:N:\Mississippi Power\Plant Watson\03_GIS\MXD\07_Semi_Annual_Progress_Report_2020\Rev2\Fig1_SiteMap.mxd 7/23/2020 3:15:37 PM

Legend

- APMW-1 — CCR Monitoring Well
- APMW-13 — New Background CCR Monitoring Well
- APMW-11 — Existing Background CCR Monitoring Well
- Former CCR Unit Boundary

Notes:
1. The new background CCR monitoring well locations were surveyed July 2020.
2. CCR - Coal Combustion Residuals
3. Aerial Source: Google Earth Imagery 3/18/2019

N

0 600 Feet

CCR Monitoring Well Network

Plant Watson
Gulfport, Mississippi

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Figure 2

ARO-01:N:\Mississippi Power\Plant Watson\03_GIS\MXD\07_Semi_Annual_Progress_Report_2020\Rev2\Fig2_CCR_Monitoring_Well_Network.mxd 7/23/2020 3:23:19 PM

Legend

- APMW-1 — CCR Monitoring Well
- APMW-13 — New Background CCR Monitoring Well
- APMW-11 — Existing Background CCR Monitoring Well
- DPT-11 — DPT Boring
- Former CCR Unit Boundary

Notes:
1. The new background CCR monitoring well locations and DPT locations were surveyed July 2020.
2. CCR - Coal Combustion Residuals
3. DPT - Direct push technology
4. Aerial Source: Google Earth Imagery 3/18/2019

N

0 600 Feet

DPT Sample Locations for Alternate Source Demonstration

Plant Watson
Gulfport, Mississippi

Geosyntec consultants

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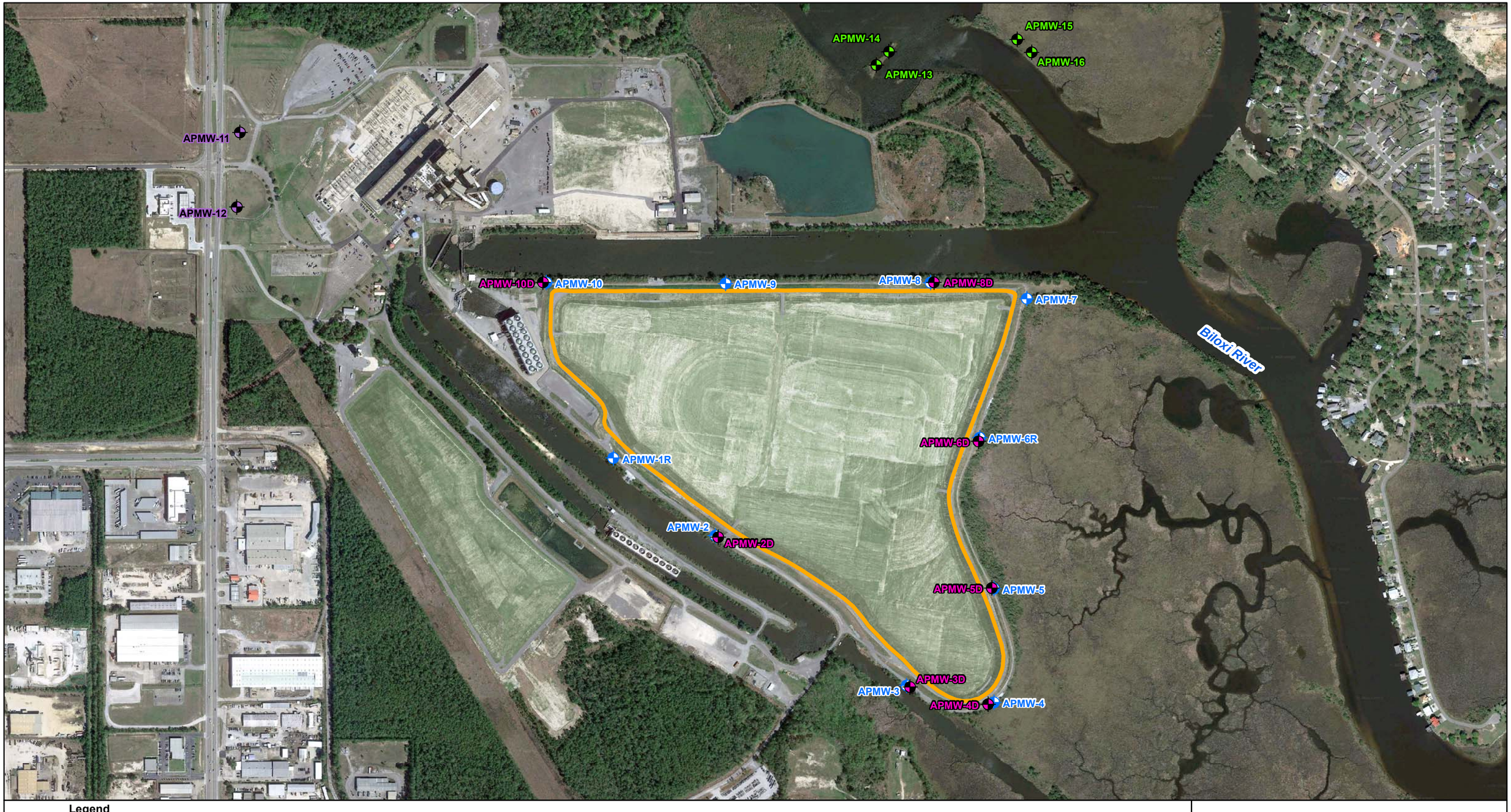
Figure 3

ARO-01:N:\Mississippi Power\Plant Watson\03_GIS\MXD\07_Semi_Annual_Progress_Report_2020\Rev2\Fig3_DPT_Locs_Alt_Source_Demo.mxd 7/23/2020 3:35:59 PM



Legend

- APMW-1 — CCR Monitoring Well
- APMW-13 — New Background CCR Monitoring Well
- APMW-11 — Existing Background CCR Monitoring Well
- APMW-2D — Vertical CCR Delineation Monitoring Well
- Former CCR Unit Boundary

Notes:
1. Vertical CCR delineation monitoring well locations and new background CCR monitoring well locations were surveyed July 2020.
2. CCR - Coal Combustion Residuals
3. Aerial Source: Google Earth Imagery 3/18/2019

N

0 600 Feet

Vertical Delineation Monitoring Well Locations

Plant Watson
Gulfport, Mississippi

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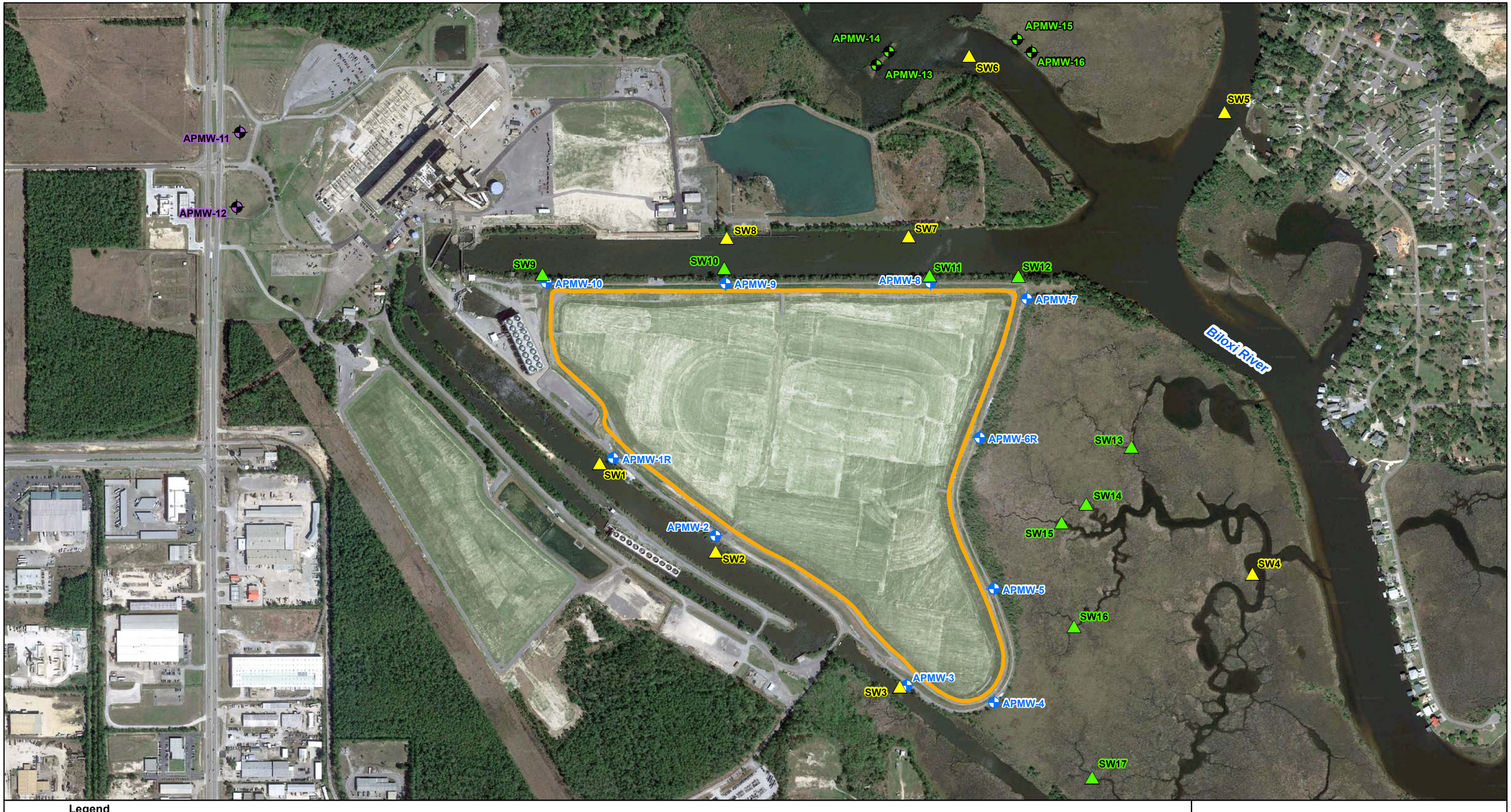
Figure 4

ARO-01:N:\Mississippi Power\Plant Watson\03_GIS\MXD\07_Semi_Annual_Progress_Report_2020\Rev2\Fig4_Vertical_Delineation_Monitoring_Well.mxd 7/23/2020 3:38:25 PM



Legend

- APMW-1 — CCR Monitoring Well
- APMW-13 — New Background CCR Monitoring Well
- APMW-11 — Existing Background CCR Monitoring Well
- SW1 — Existing Surface Water Location
- SW9 — Additional Surface Water Monitoring Location
- Former CCR Unit Boundary

Notes:
1. New background CCR monitoring well locations were surveyed July 2020.
2. With the exception of SW-16, the additional surface water monitoring location coordinates were collected with a handheld global positioning system unit. SW-16 is approximate.
3. CCR - Coal Combustion Residuals
4. Aerial Source: Google Earth Imagery 3/18/2019

N

0 600 Feet

Surface Water Sampling Locations for Horizontal Extent Assessment

Plant Watson
Gulfport, Mississippi

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Figure 5

ARO-01:N:\Mississippi Power\Plant Watson\03_GIS\MXD\07_Semi_Annual_Progress_Report_2020\Rev2\Fig5_Surface_Water_Loc_Horz_Extent.mxd 7/23/2020 8:46:39 PM

Legend

- APMW-1 — CCR Monitoring Well
- APMW-13 — New Background CCR Monitoring Well
- APMW-11 — Existing Background CCR Monitoring Well
- 1S-GS — Existing Piezometer
- TW-1 — APT Pumping Well Location
- SWT-1 — Temporary Staff Gauge
- Former CCR Unit Boundary

Notes:
1. New background CCR monitoring well locations were surveyed July 2020.
2. APT - Aquifer Performance Test
3. CCR - Coal Combustion Residuals
4. Aerial Source: Google Earth Imagery 3/18/2019

N

0 600 Feet

Aquifer Performance Test Locations

Plant Watson
Gulfport, Mississippi

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Figure 6

ARO-01:N:\Mississippi Power\Plant Watson\03_GIS\MXD\07_Semi_Annual_Progress_Report_2020\Rev2\Fig6_APT_Locs.mxd 7/23/2020 3:51:04 PM

APPENDIX A

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-105283-1
Client Project/Site: Plant Watson

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Cheyenne R Whitmire

Authorized for release by:
7/8/2020 5:13:31 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-105283-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-105283-1

Receipt
The samples were received on 5/5/2020 8:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 2.2º C, 2.7º C, 3.5º C, 7.3º C and 8.3º C. No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

RAD
Method 9310: Gross Alpha/Beta Prep Batch 160-473152. The gross alpha and gross beta detection goals were not met for the following samples due to a reduction of the sample size attributed to high residual mass. Analytical results are reported with the MDC achieved. DPT-11-SS RAU2 (SITE WATER) (180-105283-2) and APMW-5 (180-105283-26)

Method 9310: Gross Alpha/Beta Prep Batch 160-473152. The gross alpha detection goals were not met for the following samples due to a reduction of the sample size attributed to high residual mass. Analytical results are reported with the MDC achieved. (410-3210-S-1-E DU)

Method 9310: Gross Alpha-Beta Prep Batch 160-473152. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DPT-11-SS RAU2 (SITE WATER) (180-105283-2), APMW-5 (180-105283-26), (LCS 160-473152/2-A), (LCSB 160-473152/3-A), (MB 160-473152/1-A), (410-3210-S-1-A), (410-3210-S-1-E DU), (410-3210-S-1-B MS), (410-3210-S-1-C MSBT), (410-3210-S-1-D MSBTD) and (410-3210-O-1-B MSD)

Method 9315: Radium 226 Prep Batch:160-473104. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DPT-11-SS RAU2 (SITE WATER) (180-105283-2), APMW-5 (180-105283-26), (LCS 160-473104/1-A), (LCSD 160-473104/2-A), (MB 160-473104/25-A), (280-137307-A-6-A), (280-137307-A-6-B MS) and (280-137307-A-6-C MSD)

Method 9320: Radium-228 Prep Batch 160-473146. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DPT-11-SS RAU2 (SITE WATER) (180-105283-2), APMW-5 (180-105283-26), (LCS 160-473146/1-A), (LCSD 160-473146/2-A), (MB 160-473146/25-A), (280-137307-A-6-D), (280-137307-A-6-E MS) and (280-137307-A-6-F MSD)

Method PrecSep_0: Radium 228 Prep Batch 160-473146. Insufficient sample volume was available to perform a sample duplicate for the following samples: DPT-11-SS RAU2 (SITE WATER) (180-105283-2) and APMW-5 (180-105283-26). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-473104. Insufficient sample volume was available to perform a sample duplicate for the following samples: DPT-11-SS RAU2 (SITE WATER) (180-105283-2) and APMW-5 (180-105283-26). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Metals
Method 6020: Analytical batch 160-473606. The internal standard was outside QC limits in the CCV. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. (CCV 160-473606/51)

Method Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SL
EPA 9040C	pH	SW846	TAL PIT
9310	Gross Alpha / Beta (GFPC)	SW846	TAL SL
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
1316	Liquid-Solid Partitioning as a Function of Liquid-To-Solid Ratio via Parallel	SW846	TAL PIT
3010A	Preparation, Total Metals	SW846	TAL SL
Evaporation	Preparation, Evaporation	None	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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

Sample Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-105283-1	DPT-11-SS RAU2 (SITE WATER)	Solid	04/27/20 12:20	05/01/20 08:15	
180-105283-2	DPT-11-SS RAU2 (SITE WATER)	Water	04/27/20 12:20	05/01/20 08:15	
180-105283-25	APMW-5	Solid	04/21/20 11:37	05/05/20 08:40	
180-105283-26	APMW-5	Water	04/21/20 11:37	05/05/20 08:40	

Client Sample ID: DPT-11-SS RAU2 (SITE WATER)

Lab Sample ID: 180-105283-1
Matrix: Solid
Date Collected: 04/27/20 12:20
Date Received: 05/01/20 08:15

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.7		0.1	0.1	SU			06/05/20 16:07	1

Client Sample ID: DPT-11-SS RAU2 (SITE WATER)

Lab Sample ID: 180-105283-2
Matrix: Water
Date Collected: 04/27/20 12:20
Date Received: 05/01/20 08:15

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.000900	U	0.00200	0.000900	mg/L		06/12/20 10:13	06/15/20 18:20	2
Uranium	0.000400	U	0.00100	0.000400	mg/L		06/12/20 10:13	06/15/20 18:20	2

Method: 9310 - Gross Alpha / Beta (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	136	G	84.2	85.6	3.00	115	pCi/L	06/11/20 12:03	06/15/20 10:49	1
Gross Beta	49.0	U G	32.9	33.3	4.00	49.3	pCi/L	06/11/20 12:03	06/15/20 10:49	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.66		0.293	0.441	1.00	0.0724	pCi/L	06/11/20 08:16	07/07/20 16:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*06/11/20 08:16*	*07/07/20 16:01*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.44		0.380	0.441	1.00	0.383	pCi/L	06/11/20 09:02	06/25/20 13:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*06/11/20 09:02*	*06/25/20 13:05*	*1*
Y Carrier	*87.5*		*40 - 110*	*06/11/20 09:02*	*06/25/20 13:05*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.11		0.480	0.624	5.00	0.383	pCi/L		07/07/20 07:17	1

Client Sample ID: APMW-5

Lab Sample ID: 180-105283-25
Matrix: Solid
Date Collected: 04/21/20 11:37
Date Received: 05/05/20 08:40

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.7		0.1	0.1	SU			06/05/20 16:15	1

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Client Sample ID: APMW-5

Date Collected: 04/21/20 11:37
Date Received: 05/05/20 08:40

Lab Sample ID: 180-105283-26

Matrix: Water

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.000900	U	0.00200	0.000900	mg/L		06/12/20 10:13	06/15/20 19:15	2
Uranium	0.000400	U	0.00100	0.000400	mg/L		06/12/20 10:13	06/15/20 19:15	2

Method: 9310 - Gross Alpha / Beta (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	56.1	U G	66.0	66.3	3.00	107	pCi/L	06/11/20 12:03	06/15/20 12:11	1
Gross Beta	**55.8**	**G**	31.6	32.1	4.00	46.7	pCi/L	06/11/20 12:03	06/15/20 12:11	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.351**		0.0959	0.101	1.00	0.0665	pCi/L	06/11/20 08:16	07/07/20 16:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*107*		*40 - 110*	*06/11/20 08:16*	*07/07/20 16:01*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**3.02**		0.402	0.488	1.00	0.370	pCi/L	06/11/20 09:02	06/25/20 13:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*107*		*40 - 110*	*06/11/20 09:02*	*06/25/20 13:05*	*1*
Y Carrier	*86.0*		*40 - 110*	*06/11/20 09:02*	*06/25/20 13:05*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.37**		0.413	0.498	5.00	0.370	pCi/L		07/07/20 07:17	1

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Client Sample ID: DPT-11-SS RAU2 (SITE WATER)

Lab Sample ID: 180-105283-1
Matrix: Solid
Date Collected: 04/27/20 12:20
Date Received: 05/01/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1316			1000 g	3000 mL	318231	05/27/20 15:45	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			318232	06/05/20 16:07	LWM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DPT-11-SS RAU2 (SITE WATER)

Lab Sample ID: 180-105283-2
Matrix: Water
Date Collected: 04/27/20 12:20
Date Received: 05/01/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	473226	06/12/20 10:13	DAS	TAL SL
Total/NA	Analysis	6020		2			473606	06/15/20 18:20	LKP	TAL SL
	Instrument ID: ICPMS7700									
Total/NA	Prep	Evaporation			4.18 mL	1.0 g	473152	06/11/20 12:03	RJD	TAL SL
Total/NA	Analysis	9310		1			473284	06/15/20 10:49	KLS	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep-21			1000.77 mL	1.0 g	473104	06/11/20 08:16	RBR	TAL SL
Total/NA	Analysis	9315		1			475699	07/07/20 16:01	JLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.77 mL	1.0 g	473146	06/11/20 09:02	RBR	TAL SL
Total/NA	Analysis	9320		1			474543	06/25/20 13:05	KLS	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			475421	07/07/20 07:17	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-5

Lab Sample ID: 180-105283-25
Matrix: Solid
Date Collected: 04/21/20 11:37
Date Received: 05/05/20 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1316			1.0 g	3000 mL	318231	05/27/20 15:45	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			318232	06/05/20 16:15	LWM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APMW-5

Lab Sample ID: 180-105283-26
Matrix: Water
Date Collected: 04/21/20 11:37
Date Received: 05/05/20 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	473226	06/12/20 10:13	DAS	TAL SL
Total/NA	Analysis	6020		2			473606	06/15/20 19:15	LKP	TAL SL
	Instrument ID: ICPMS7700									
Total/NA	Prep	Evaporation			4.01 mL	1.0 g	473152	06/11/20 12:03	RJD	TAL SL
Total/NA	Analysis	9310		1			473284	06/15/20 12:11	KLS	TAL SL
	Instrument ID: GFPCRED									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Client Sample ID: APMW-5
Date Collected: 04/21/20 11:37
Date Received: 05/05/20 08:40

Lab Sample ID: 180-105283-26
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.17 mL	1.0 g	473104	06/11/20 08:16	RBR	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	475699	07/07/20 16:01	JLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	473146	06/11/20 09:02	RBR	TAL SL
Total/NA	Analysis	9320		1			474543	06/25/20 13:05	KLS	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			475421	07/07/20 07:17	SMP	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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

Analyst References:

Lab: TAL PIT

Batch Type: Leach

LWM = Larry Matko

Batch Type: Analysis

LWM = Larry Matko

Lab: TAL SL

Batch Type: Prep

DAS = Daniel Shinn

RBR = Rachael Ratcliff

RJD = Ryan Domalewski

Batch Type: Analysis

JLC = Jessica Chapman

KLS = Kody Saulters

LKP = Laura Pemberton

SMP = Siobhan Perry

QC Association Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Metals

Prep Batch: 473226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105283-2	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	3010A	
180-105283-26	APMW-5	Total/NA	Water	3010A	
MB 160-473226/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-473226/2-A	Lab Control Sample	Total/NA	Water	3010A	
180-105283-2 MS	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	3010A	
180-105283-2 MSD	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	3010A	

Analysis Batch: 473606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105283-2	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	6020	473226
180-105283-26	APMW-5	Total/NA	Water	6020	473226
MB 160-473226/1-A	Method Blank	Total/NA	Water	6020	473226
LCS 160-473226/2-A	Lab Control Sample	Total/NA	Water	6020	473226
180-105283-2 MS	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	6020	473226
180-105283-2 MSD	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	6020	473226

General Chemistry

Leach Batch: 318231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105283-1	DPT-11-SS RAU2 (SITE WATER)	Leach	Solid	1316	
180-105283-25	APMW-5	Leach	Solid	1316	

Analysis Batch: 318232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105283-1	DPT-11-SS RAU2 (SITE WATER)	Leach	Solid	EPA 9040C	318231
180-105283-25	APMW-5	Leach	Solid	EPA 9040C	318231
LCS 180-318232/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Rad

Prep Batch: 473104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105283-2	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	PrecSep-21	
180-105283-26	APMW-5	Total/NA	Water	PrecSep-21	
MB 160-473104/25-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-473104/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-473104/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
280-137307-A-6-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
280-137307-A-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 473146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105283-2	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	PrecSep_0	
180-105283-26	APMW-5	Total/NA	Water	PrecSep_0	
MB 160-473146/25-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-473146/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-473146/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
280-137307-A-6-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
280-137307-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

QC Association Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Rad

Prep Batch: 473152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105283-2	DPT-11-SS RAU2 (SITE WATER)	Total/NA	Water	Evaporation	
180-105283-26	APMW-5	Total/NA	Water	Evaporation	
MB 160-473152/1-A	Method Blank	Total/NA	Water	Evaporation	
LCS 160-473152/2-A	Lab Control Sample	Total/NA	Water	Evaporation	
LCSB 160-473152/3-A	Lab Control Sample	Total/NA	Water	Evaporation	
410-3210-O-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	Evaporation	
410-3210-S-1-B MS	Matrix Spike	Total/NA	Water	Evaporation	
410-3210-S-1-C MSBT	Matrix Spike	Total/NA	Water	Evaporation	
410-3210-S-1-D MSBTD	Matrix Spike Duplicate	Total/NA	Water	Evaporation	
410-3210-S-1-E DU	Duplicate	Total/NA	Water	Evaporation	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-473226/1-A
Matrix: Water
Analysis Batch: 473606

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473226

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.000900	U	0.00200	0.000900	mg/L		06/12/20 10:13	06/15/20 18:07	2
Uranium	0.000400	U	0.00100	0.000400	mg/L		06/12/20 10:13	06/15/20 18:07	2

Lab Sample ID: LCS 160-473226/2-A
Matrix: Water
Analysis Batch: 473606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473226

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	1.00	1.053		mg/L		105	80 - 120
Uranium	1.00	1.043		mg/L		104	80 - 120

Lab Sample ID: 180-105283-2 MS
Matrix: Water
Analysis Batch: 473606

Client Sample ID: DPT-11-SS RAU2 (SITE WATER)
Prep Type: Total/NA
Prep Batch: 473226

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	0.000900	U	1.00	1.080		mg/L		108	75 - 125
Uranium	0.000400	U	1.00	1.041		mg/L		104	75 - 125

Lab Sample ID: 180-105283-2 MSD
Matrix: Water
Analysis Batch: 473606

Client Sample ID: DPT-11-SS RAU2 (SITE WATER)
Prep Type: Total/NA
Prep Batch: 473226

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thorium	0.000900	U	1.00	1.044		mg/L		104	75 - 125	3	20
Uranium	0.000400	U	1.00	1.013		mg/L		101	75 - 125	3	20

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-318232/1
Matrix: Solid
Analysis Batch: 318232

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		100	99 - 101

Method: 9310 - Gross Alpha / Beta (GFPC)

Lab Sample ID: MB 160-473152/1-A
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473152

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	-0.08835	U	0.606	0.606	3.00	1.22	pCi/L	06/11/20 12:03	06/15/20 10:49	1
Gross Beta	-0.3352	U	0.456	0.457	4.00	0.885	pCi/L	06/11/20 12:03	06/15/20 10:49	1

Method: 9310 - Gross Alpha / Beta (GFPC) (Continued)

Lab Sample ID: LCS 160-473152/2-A
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473152

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Gross Alpha	49.5	49.97		7.42	3.00	1.93	pCi/L	101	75 - 125

Lab Sample ID: LCSB 160-473152/3-A
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473152

Analyte	Spike Added	LCSB Result	LCSB Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Gross Beta	84.2	80.84		8.61	4.00	0.890	pCi/L	96	75 - 125

Lab Sample ID: 410-3210-O-1-B MSD
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 473152

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Gross Alpha	-0.549	U	80.6	70.25		10.9	3.00	3.29	pCi/L	87	70 - 130	0	1

Lab Sample ID: 410-3210-S-1-B MS
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 473152

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Gross Alpha	-0.549	U	80.6	70.34		11.1	3.00	4.52	pCi/L	87	70 - 130

Lab Sample ID: 410-3210-S-1-C MSBT
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 473152

Analyte	Sample Result	Sample Qual	Spike Added	MSBT Result	MSBT Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Gross Beta	3.19		137	131.7		14.0	4.00	1.29	pCi/L	94	70 - 130

Lab Sample ID: 410-3210-S-1-D MSBTD
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 473152

Analyte	Sample Result	Sample Qual	Spike Added	MSBTD Result	MSBTD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Gross Beta	3.19		137	135.0		14.4	4.00	1.37	pCi/L	96	70 - 130	0.12	1

Lab Sample ID: 410-3210-S-1-E DU
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 473152

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Gross Alpha	-0.549	U	0.9677	U G	1.76	3.00	3.10	pCi/L	0.54	1

Method: 9310 - Gross Alpha / Beta (GFPC) (Continued)

Lab Sample ID: 410-3210-S-1-E DU
Matrix: Water
Analysis Batch: 473284

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 473152

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Gross Beta	3.19			1.583		1.02	4.00	1.52	pCi/L			0.72	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-473104/25-A
Matrix: Water
Analysis Batch: 475732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473104

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02746	U	0.0470	0.0470	1.00	0.0840	pCi/L	06/11/20 08:16	07/08/20 05:48	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*06/11/20 08:16*	*07/08/20 05:48*	*1*

Lab Sample ID: LCS 160-473104/1-A
Matrix: Water
Analysis Batch: 475699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473104

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	13.06		1.35	1.00	0.144	pCi/L	86	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*97.3*		*40 - 110*

Lab Sample ID: LCSD 160-473104/2-A
Matrix: Water
Analysis Batch: 475699

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473104

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			15.1	12.49		1.29	1.00	0.0868	pCi/L	83	75 - 125	NaN	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*103*		*40 - 110*

Lab Sample ID: 280-137307-A-6-B MS
Matrix: Water
Analysis Batch: 475732

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 473104

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.0296	U	15.1	12.70		1.32	1.00	0.130	pCi/L	84	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*96.4*		*40 - 110*

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: 280-137307-A-6-C MSD
Matrix: Water
Analysis Batch: 475732

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 473104

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.0296	U	15.1	12.66		1.31	1.00	0.108	pCi/L	83	75 - 138	0.02	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*96.1*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-473146/25-A
Matrix: Water
Analysis Batch: 474544

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473146

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3757	U	0.283	0.285	1.00	0.442	pCi/L	06/11/20 09:02	06/25/20 13:19	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*06/11/20 09:02*	*06/25/20 13:19*	*1*
Y Carrier	*87.5*		*40 - 110*	*06/11/20 09:02*	*06/25/20 13:19*	*1*

Lab Sample ID: LCS 160-473146/1-A
Matrix: Water
Analysis Batch: 474543

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473146

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			11.6	10.93		1.32	1.00	0.519	pCi/L	94	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*97.3*		*40 - 110*
Y Carrier	*86.4*		*40 - 110*

Lab Sample ID: LCSD 160-473146/2-A
Matrix: Water
Analysis Batch: 474543

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473146

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			11.6	10.46		1.27	1.00	0.513	pCi/L	90	75 - 125	0.18	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*103*		*40 - 110*
Y Carrier	*83.4*		*40 - 110*

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

Lab Sample ID: 280-137307-A-6-E MS
Matrix: Water
Analysis Batch: 474544

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 473146

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	-0.0524	U	11.6	10.50		1.30	1.00	0.610	pCi/L	90	45 - 150		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*96.4*		*40 - 110*
Y Carrier	*84.5*		*40 - 110*

Lab Sample ID: 280-137307-A-6-F MSD
Matrix: Water
Analysis Batch: 474544

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 473146

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	-0.0524	U	11.6	10.37		1.28	1.00	0.585	pCi/L	89	45 - 150	0.05	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*96.1*		*40 - 110*
Y Carrier	*83.7*		*40 - 110*

TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

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400-187407 COC

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5468	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested: Per quote			
City: Birmingham	TAT Requested (days): per quote			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606			
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site: Plant Watson	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Leach test	Total Number of containers	Special Instructions/Note:
				Preservation Code:			N	N	CB	N	N	N	N	D	D	D			
DPT-11-SS RaU2	4/27/20	1220	C	Solid	N	N				X	X	X	X				X		Baton Rouge 218
DPT-11-SS RaU3		1225	C	Solid						X	X	X	X				X		
DPT-12-SS RaU2		1505	C	Solid						X	X	X	X				X		
DPT-12-SS RaU3		1520	C	Solid						X	X	X	X				X		
DPT-13-SS RaU2	4/28/20	1015	C	Solid						X	X	X	X				X		
DPT-13-SS RaU3		1130	C	Solid						X	X	X	X				X		
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															

180-105283 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee ma... samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/29/20 12:35	Geosyntec		4/29/2020 12:35	FTL
2		4/29/2020	FTL		4/30/20 927	TAL Pan
3		4/30/20 1030	TAL Pan		5/1/20 815	Courier

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.0°C, 0.4°C IR 8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-105283-1

Login Number: 105283
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-105283-1

Login Number: 105283
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/10/20 02:57 PM

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-26-20
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	05-23-21
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-21
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-21
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 180-105283-1

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	07-01-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187053-1
Client Project/Site: Plant Watson

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Cheyenne Whitmire

Authorized for release by:
4/30/2020 4:11:38 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187053-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187053-1

General Chemistry
Method SM 4500 S2 D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-486751 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 4500 S2 D: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 400-486751 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Sulfide in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

Method SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: APMW-3 (400-187053-3), APMW-4 (400-187053-4), APMW-5 (400-187053-5), APMW-6R (400-187053-6), APMW-7 (400-187053-7), APMW-8 (400-187053-8), APMW-9 (400-187053-9), APMW-10 (400-187053-10), DUP-01 (400-187053-11), (400-187053-A-7 MS) and (400-187053-A-7 MSD). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: Due to the concentration of sulfates in the parent sample the MS/MSD was diluted after the spike. The spike amount was adjusted by the dilution factor. (400-187053-A-7 MS) and (400-187053-A-7 MSD)

Method Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187053-1

Method	Method Description	Protocol	Laboratory
SM 4500 S2 D	Sulfide, Total	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187053-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187053-1	APMW-1R	Water	04/21/20 14:42	04/22/20 09:10	
400-187053-2	APMW-2	Water	04/21/20 07:38	04/22/20 09:10	
400-187053-3	APMW-3	Water	04/21/20 08:51	04/22/20 09:10	
400-187053-4	APMW-4	Water	04/21/20 10:38	04/22/20 09:10	
400-187053-5	APMW-5	Water	04/21/20 11:37	04/22/20 09:10	
400-187053-6	APMW-6R	Water	04/21/20 13:36	04/22/20 09:10	
400-187053-7	APMW-7	Water	04/20/20 18:04	04/22/20 09:10	
400-187053-8	APMW-8	Water	04/20/20 16:00	04/22/20 09:10	
400-187053-9	APMW-9	Water	04/20/20 14:47	04/22/20 09:10	
400-187053-10	APMW-10	Water	04/20/20 13:43	04/22/20 09:10	
400-187053-11	DUP-01	Water	04/21/20 07:51	04/22/20 09:10	

Client Sample ID: APMW-1R
Lab Sample ID: 400-187053-1
Date Collected: 04/21/20 14:42
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**0.771**	**F1**	0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**2.40**	**J**	5.00	1.40	mg/L			04/29/20 13:07	1

Client Sample ID: APMW-2
Lab Sample ID: 400-187053-2
Date Collected: 04/21/20 07:38
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0570	U	0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**1.56**	**J**	5.00	1.40	mg/L			04/29/20 13:07	1

Client Sample ID: APMW-3
Lab Sample ID: 400-187053-3
Date Collected: 04/21/20 08:51
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0570	U	0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**1060**		150	42.0	mg/L			04/29/20 13:40	30

Client Sample ID: APMW-4
Lab Sample ID: 400-187053-4
Date Collected: 04/21/20 10:38
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**2.09**		0.500	0.285	mg/L			04/22/20 20:29	5
Sulfate	**302**		50.0	14.0	mg/L			04/29/20 13:40	10

Client Sample ID: APMW-5
Lab Sample ID: 400-187053-5
Date Collected: 04/21/20 11:37
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0570	U	0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**963**		150	42.0	mg/L			04/29/20 13:44	30

Client Sample ID: APMW-6R
Lab Sample ID: 400-187053-6
Date Collected: 04/21/20 13:36
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0570	U	0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**818**		150	42.0	mg/L			04/29/20 13:44	30

Client Sample ID: APMW-7
Lab Sample ID: 400-187053-7
Date Collected: 04/20/20 18:04
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**4.29**		0.500	0.285	mg/L			04/22/20 20:29	5
Sulfate	**72.4**		25.0	7.00	mg/L			04/29/20 13:44	5

Client Sample ID: APMW-8
Lab Sample ID: 400-187053-8
Date Collected: 04/20/20 16:00
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**0.620**		0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**615**		150	42.0	mg/L			04/29/20 13:48	30

Client Sample ID: APMW-9
Lab Sample ID: 400-187053-9
Date Collected: 04/20/20 14:47
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0570	U	0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**290**		50.0	14.0	mg/L			04/29/20 13:48	10

Client Sample ID: APMW-10
Lab Sample ID: 400-187053-10
Date Collected: 04/20/20 13:43
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**0.0671**	**J**	0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**88.9**		25.0	7.00	mg/L			04/29/20 13:48	5

Client Sample ID: DUP-01
Lab Sample ID: 400-187053-11
Date Collected: 04/21/20 07:51
Matrix: Water
Date Received: 04/22/20 09:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0570	U	0.100	0.0570	mg/L			04/22/20 20:29	1
Sulfate	**1070**		150	42.0	mg/L			04/29/20 13:52	30

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187053-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187053-1

Client Sample ID: APMW-1R
Lab Sample ID: 400-187053-1
Date Collected: 04/21/20 14:42
Matrix: Water
Date Received: 04/22/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	487436	04/29/20 13:07	HES	TAL PEN

Client Sample ID: APMW-2
Lab Sample ID: 400-187053-2
Date Collected: 04/21/20 07:38
Matrix: Water
Date Received: 04/22/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	487436	04/29/20 13:07	HES	TAL PEN

Client Sample ID: APMW-3
Lab Sample ID: 400-187053-3
Date Collected: 04/21/20 08:51
Matrix: Water
Date Received: 04/22/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	487436	04/29/20 13:40	HES	TAL PEN

Client Sample ID: APMW-4
Lab Sample ID: 400-187053-4
Date Collected: 04/21/20 10:38
Matrix: Water
Date Received: 04/22/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		5	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	487436	04/29/20 13:40	HES	TAL PEN

Client Sample ID: APMW-5
Lab Sample ID: 400-187053-5
Date Collected: 04/21/20 11:37
Matrix: Water
Date Received: 04/22/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	487436	04/29/20 13:44	HES	TAL PEN

Client Sample ID: APMW-6R
Lab Sample ID: 400-187053-6
Date Collected: 04/21/20 13:36
Matrix: Water
Date Received: 04/22/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	487436	04/29/20 13:44	HES	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187053-1

Client Sample ID: APMW-7
Date Collected: 04/20/20 18:04
Date Received: 04/22/20 09:10

Lab Sample ID: 400-187053-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		5	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	487436	04/29/20 13:44	HES	TAL PEN

Client Sample ID: APMW-8
Date Collected: 04/20/20 16:00
Date Received: 04/22/20 09:10

Lab Sample ID: 400-187053-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	487436	04/29/20 13:48	HES	TAL PEN

Client Sample ID: APMW-9
Date Collected: 04/20/20 14:47
Date Received: 04/22/20 09:10

Lab Sample ID: 400-187053-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	487436	04/29/20 13:48	HES	TAL PEN

Client Sample ID: APMW-10
Date Collected: 04/20/20 13:43
Date Received: 04/22/20 09:10

Lab Sample ID: 400-187053-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	487436	04/29/20 13:48	HES	TAL PEN

Client Sample ID: DUP-01
Date Collected: 04/21/20 07:51
Date Received: 04/22/20 09:10

Lab Sample ID: 400-187053-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 S2 D		1	486751	04/22/20 20:29	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	487436	04/29/20 13:52	HES	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187053-1

General Chemistry

Analysis Batch: 486751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187053-1	APMW-1R	Total/NA	Water	SM 4500 S2 D	
400-187053-2	APMW-2	Total/NA	Water	SM 4500 S2 D	
400-187053-3	APMW-3	Total/NA	Water	SM 4500 S2 D	
400-187053-4	APMW-4	Total/NA	Water	SM 4500 S2 D	
400-187053-5	APMW-5	Total/NA	Water	SM 4500 S2 D	
400-187053-6	APMW-6R	Total/NA	Water	SM 4500 S2 D	
400-187053-7	APMW-7	Total/NA	Water	SM 4500 S2 D	
400-187053-8	APMW-8	Total/NA	Water	SM 4500 S2 D	
400-187053-9	APMW-9	Total/NA	Water	SM 4500 S2 D	
400-187053-10	APMW-10	Total/NA	Water	SM 4500 S2 D	
400-187053-11	DUP-01	Total/NA	Water	SM 4500 S2 D	
MB 400-486751/3	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 400-486751/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
MRL 400-486751/1	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
400-187053-1 MS	APMW-1R	Total/NA	Water	SM 4500 S2 D	
400-187053-1 MSD	APMW-1R	Total/NA	Water	SM 4500 S2 D	
400-187053-11 MS	DUP-01	Total/NA	Water	SM 4500 S2 D	
400-187053-11 MSD	DUP-01	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 487436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187053-1	APMW-1R	Total/NA	Water	SM 4500 SO4 E	
400-187053-2	APMW-2	Total/NA	Water	SM 4500 SO4 E	
400-187053-3	APMW-3	Total/NA	Water	SM 4500 SO4 E	
400-187053-4	APMW-4	Total/NA	Water	SM 4500 SO4 E	
400-187053-5	APMW-5	Total/NA	Water	SM 4500 SO4 E	
400-187053-6	APMW-6R	Total/NA	Water	SM 4500 SO4 E	
400-187053-7	APMW-7	Total/NA	Water	SM 4500 SO4 E	
400-187053-8	APMW-8	Total/NA	Water	SM 4500 SO4 E	
400-187053-9	APMW-9	Total/NA	Water	SM 4500 SO4 E	
400-187053-10	APMW-10	Total/NA	Water	SM 4500 SO4 E	
400-187053-11	DUP-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-487436/5	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-487436/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-487436/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-187053-7 MS	APMW-7	Total/NA	Water	SM 4500 SO4 E	
400-187053-7 MSD	APMW-7	Total/NA	Water	SM 4500 SO4 E	

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 400-486751/3
Matrix: Water
Analysis Batch: 486751

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0570	U	0.100	0.0570	mg/L			04/22/20 20:29	1

Lab Sample ID: LCS 400-486751/4
Matrix: Water
Analysis Batch: 486751

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.499	0.4431		mg/L		89	80 - 120

Lab Sample ID: MRL 400-486751/1
Matrix: Water
Analysis Batch: 486751

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.101	0.08682	J	mg/L		86	50 - 150

Lab Sample ID: 400-187053-1 MS
Matrix: Water
Analysis Batch: 486751

Client Sample ID: APMW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.771	F1	0.503	0.9798	F1	mg/L		41	75 - 125

Lab Sample ID: 400-187053-1 MSD
Matrix: Water
Analysis Batch: 486751

Client Sample ID: APMW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	0.771	F1	0.503	0.9798	F1	mg/L		41	75 - 125	0	25

Lab Sample ID: 400-187053-11 MS
Matrix: Water
Analysis Batch: 486751

Client Sample ID: DUP-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.0570	U	0.503	0.4584		mg/L		91	75 - 125

Lab Sample ID: 400-187053-11 MSD
Matrix: Water
Analysis Batch: 486751

Client Sample ID: DUP-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	0.0570	U	0.503	0.4584		mg/L		91	75 - 125	0	25

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-487436/5
Matrix: Water
Analysis Batch: 487436

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.40	U	5.00	1.40	mg/L			04/29/20 13:00	1

Lab Sample ID: LCS 400-487436/17
Matrix: Water
Analysis Batch: 487436

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			15.0	14.84		mg/L		99	90 - 110		

Lab Sample ID: MRL 400-487436/3
Matrix: Water
Analysis Batch: 487436

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			5.00	5.561		mg/L		111	50 - 150		

Lab Sample ID: 400-187053-7 MS
Matrix: Water
Analysis Batch: 487436

Client Sample ID: APMW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	72.4		10.0	81.47	4	mg/L		90	77 - 128		

Lab Sample ID: 400-187053-7 MSD
Matrix: Water
Analysis Batch: 487436

Client Sample ID: APMW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	72.4		10.0	82.20	4	mg/L		98	77 - 128	1	5

Eurofins TestAmerica, Pensacola

3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Rick Hagendorfer	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.1
Client Contact: Lauren Parker	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606	400-187053 COC		
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	~~N~~ D	N	N	D	D	D		
APMW-1R	4-21-20	1442	G	Sediment				X	X								2	
APMW-2	4-21-20	0738	G	Sediment				X	X								2	
APMW-3	4-21-20	0851	G	Sediment				X	X								2	
APMW-4	4-21-20	1038	G	Sediment				X	X								2	
APMW-5	4-21-20	1137	G	Sediment				X	X	X	X			X	X	X	15	
APMW-6R	4-21-20	1336	G	Sediment				X	X								2	
APMW-7	4-20-20	1804	G	Sediment				X	X								2	
APMW-8	4-20-20	1600	G	Sediment				X	X								2	
APMW-9	4-20-20	1447	G	Sediment				X	X								2	
APMW-10	4-20-20	1343	G	Sediment				X	X								2	
Dup-01	4-21-20	0751	G	Sediment				X	X								2	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4-22-20 0910	RAH ENV	[signature]	4.22.20 910	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.5, 3.5, 1.9°C IR 8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187053-1

Login Number: 187053
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.5°C, 3.5°C, 1.9°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187053-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187320-1
Laboratory Sample Delivery Group: Plant Watson
Client Project/Site: Plant Watson

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Mark Swafford

Authorized for release by:
5/12/2020 1:53:56 PM
Mark Swafford, Project Manager II
(850)471-6207
mark.swafford@testamericainc.com

Designee for

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187320-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187320-1

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria of <6°C (16.6°C, 17.0°C, 17.1°C, 17.9°C) and without any cooling agent (ice or otherwise): DPT-1-SS BA V2 (22-24) (400-187320-1), DPT-1-SS BA V3 (38-40) (400-187320-2), DPT-2-SS BA V2 (26-27) (400-187320-3), DPT-2-SS BA V3 (37-38) (400-187320-4), DPT-3-SS BA V2 (24-25) (400-187320-5), DPT-3-SS BA V3 (29-30) (400-187320-6), DPT-4-SS BA V2 (15-16) (400-187320-7), DPT-4-SS BA V3 (28-29) (400-187320-8), DPT-5-SS BA V2 (17-18) (400-187320-9), DPT-5-SS BA V3 (23-24) (400-187320-10), DPT-6-SS BA V2 (400-187320-11), DPT-1-SS RA V2 (400-187320-12), DPT-1-SS RA V3 (400-187320-13), DPT-2-SS RA V2 (400-187320-14), DPT-2-SS RA V3 (400-187320-15), DPT-3-SS RA V2 (400-187320-16), DPT-3-SS RA V3 (400-187320-17), DPT-4-SS RA V2 (400-187320-18), DPT-4-SS RA V3 (400-187320-19), DPT-5-SS RA V2 (400-187320-20), DPT-5-SS RA V3 (400-187320-21), DPT-6-SS RA V2 (400-187320-22), DPT-6-SS BA V3 (23-24) (400-187320-23), DPT-7-SS BA V2 (18-19) (400-187320-24), DPT-7-SS BA V3 (27-28) (400-187320-25), DPT-8-SS BA V2 (25-26) (400-187320-26), DPT-8-SS BA V3 (39-40) (400-187320-27), DPT-9-SS BA V2 (27-28) (400-187320-28), DPT-9-SS BA V3 (32-33) (400-187320-29), DPT-10-SS BA V2 (22-23) (400-187320-30), DPT-10-SS BA V3 (25-26) (400-187320-31), DUP-01 (400-187320-32), DUP-02 (400-187320-33), DPT-6-SS RA V3 (400-187320-34), DPT-7-SS RA V2 (400-187320-35), DPT-7-SS RA V3 (400-187320-36), DPT-8-SS RA V2 (400-187320-37), DPT-8-SS RA V3 (400-187320-38), DPT-9-SS RA V2 (400-187320-39), DPT-9-SS RA V3 (400-187320-40), DPT-10-SS RA V2 (400-187320-41), DPT-10-SS RA V3 (400-187320-42), DUP-01 (400-187320-43) and DUP-02 (400-187320-44)

Department General Chemistry

Method 9034_Calc_AVS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-314515 and analytical batch 180-314525 were outside control limits, low. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limit

Method 9034_Calc_AVS: The matrix spike duplicate (MSD) recoveries for preparation batch 180-314620 and analytical batch 180-314627 were outside control limits (low recoveries). Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limit

Method Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SL
2540G	SM 2540G	SM22	TAL PIT
EPA 9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL PIT
Moisture	Percent Moisture	EPA	TAL SL
3050B	Preparation, Metals	SW846	TAL SL
AVSSEM	Preparation, Acid Volatile Sulfide (AVS) and Simultaneously Extracted Metals (SE	EPA	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

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

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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

Sample Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187320-1	DPT-1-SS BA V2 (22-24)	Sediment	04/20/20 15:55	04/28/20 08:49	
400-187320-2	DPT-1-SS BA V3 (38-40)	Sediment	04/20/20 16:00	04/28/20 08:49	
400-187320-3	DPT-2-SS BA V2 (26-27)	Sediment	04/21/20 11:00	04/28/20 08:49	
400-187320-4	DPT-2-SS BA V3 (37-38)	Sediment	04/21/20 11:05	04/28/20 08:49	
400-187320-5	DPT-3-SS BA V2 (24-25)	Sediment	04/21/20 14:20	04/28/20 08:49	
400-187320-6	DPT-3-SS BA V3 (29-30)	Sediment	04/21/20 14:25	04/28/20 08:49	
400-187320-7	DPT-4-SS BA V2 (15-16)	Sediment	04/21/20 17:55	04/28/20 08:49	
400-187320-8	DPT-4-SS BA V3 (28-29)	Sediment	04/21/20 17:45	04/28/20 08:49	
400-187320-9	DPT-5-SS BA V2 (17-18)	Sediment	04/22/20 11:25	04/28/20 08:49	
400-187320-10	DPT-5-SS BA V3 (23-24)	Sediment	04/22/20 11:30	04/28/20 08:49	
400-187320-11	DPT-6-SS BA V2	Sediment	04/22/20 15:00	04/28/20 08:49	
400-187320-12	DPT-1-SS RA V2	Solid	04/20/20 15:55	04/28/20 08:49	
400-187320-13	DPT-1-SS RA V3	Solid	04/20/20 16:00	04/28/20 08:49	
400-187320-14	DPT-2-SS RA V2	Solid	04/21/20 11:00	04/28/20 08:49	
400-187320-15	DPT-2-SS RA V3	Solid	04/21/20 11:05	04/28/20 08:49	
400-187320-16	DPT-3-SS RA V2	Solid	04/21/20 14:20	04/28/20 08:49	
400-187320-17	DPT-3-SS RA V3	Solid	04/21/20 14:25	04/28/20 08:49	
400-187320-18	DPT-4-SS RA V2	Solid	04/21/20 17:55	04/28/20 08:49	
400-187320-19	DPT-4-SS RA V3	Solid	04/21/20 17:45	04/28/20 08:49	
400-187320-20	DPT-5-SS RA V2	Solid	04/22/20 11:25	04/28/20 08:49	
400-187320-21	DPT-5-SS RA V3	Solid	04/22/20 11:30	04/28/20 08:49	
400-187320-22	DPT-6-SS RA V2	Solid	04/22/20 15:00	04/28/20 08:49	
400-187320-23	DPT-6-SS BA V3 (23-24)	Sediment	04/22/20 15:05	04/28/20 08:49	
400-187320-24	DPT-7-SS BA V2 (18-19)	Sediment	04/23/20 09:25	04/28/20 08:49	
400-187320-25	DPT-7-SS BA V3 (27-28)	Sediment	04/23/20 09:30	04/28/20 08:49	
400-187320-26	DPT-8-SS BA V2 (25-26)	Sediment	04/24/20 07:45	04/28/20 08:49	
400-187320-27	DPT-8-SS BA V3 (39-40)	Sediment	04/24/20 07:50	04/28/20 08:49	
400-187320-28	DPT-9-SS BA V2 (27-28)	Sediment	04/24/20 12:10	04/28/20 08:49	
400-187320-29	DPT-9-SS BA V3 (32-33)	Sediment	04/24/20 12:15	04/28/20 08:49	
400-187320-30	DPT-10-SS BA V2 (22-23)	Sediment	04/24/20 13:20	04/28/20 08:49	
400-187320-31	DPT-10-SS BA V3 (25-26)	Sediment	04/24/20 13:25	04/28/20 08:49	
400-187320-32	DUP-01	Sediment	04/21/20 00:00	04/28/20 08:49	
400-187320-33	DUP-02	Sediment	04/21/20 00:00	04/28/20 08:49	
400-187320-34	DPT-6-SS RA V3	Solid	04/22/20 15:05	04/28/20 08:49	
400-187320-35	DPT-7-SS RA V2	Solid	04/23/20 09:25	04/28/20 08:49	
400-187320-36	DPT-7-SS RA V3	Solid	04/23/20 09:30	04/28/20 08:49	
400-187320-37	DPT-8-SS RA V2	Solid	04/24/20 07:45	04/28/20 08:49	
400-187320-38	DPT-8-SS RA V3	Solid	04/24/20 07:50	04/28/20 08:49	
400-187320-39	DPT-9-SS RA V2	Solid	04/24/20 12:10	04/28/20 08:49	
400-187320-40	DPT-9-SS RA V3	Solid	04/24/20 12:15	04/28/20 08:49	
400-187320-41	DPT-10-SS RA V2	Solid	04/24/20 13:20	04/28/20 08:49	
400-187320-42	DPT-10-SS RA V3	Solid	04/24/20 13:25	04/28/20 08:49	
400-187320-43	DUP-01	Solid	04/21/20 00:00	04/28/20 08:49	
400-187320-44	DUP-02	Solid	04/21/20 00:00	04/28/20 08:49	

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-1-SS BA V2 (22-24)

Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-1

Matrix: Sediment
Percent Solids: 76.2

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.55	U F1	19.7	6.55	mg/Kg	☼	05/04/20 11:30	05/04/20 13:03	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-1-SS BA V3 (38-40)

Date Collected: 04/20/20 16:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-2

Matrix: Sediment
Percent Solids: 82.0

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.08	U	18.2	6.08	mg/Kg	☼	05/04/20 11:30	05/04/20 13:09	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-2-SS BA V2 (26-27)

Date Collected: 04/21/20 11:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-3

Matrix: Sediment
Percent Solids: 81.2

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.12	U	18.4	6.12	mg/Kg	☼	05/04/20 11:30	05/04/20 13:11	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-2-SS BA V3 (37-38)

Date Collected: 04/21/20 11:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-4

Matrix: Sediment
Percent Solids: 83.6

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.00	U	18.0	6.00	mg/Kg	☼	05/04/20 11:30	05/04/20 13:13	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-3-SS BA V2 (24-25)

Date Collected: 04/21/20 14:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-5

Matrix: Sediment
Percent Solids: 59.2

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	8.39	U	25.2	8.39	mg/Kg	☼	05/04/20 11:30	05/04/20 13:15	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-3-SS BA V3 (29-30)

Date Collected: 04/21/20 14:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-6

Matrix: Sediment
Percent Solids: 86.0

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	5.76	U	17.3	5.76	mg/Kg	☼	05/04/20 11:30	05/04/20 13:17	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-4-SS BA V2 (15-16)

Date Collected: 04/21/20 17:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-7

Matrix: Sediment
Percent Solids: 37.9

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	13.1	U	39.2	13.1	mg/Kg	☼	05/04/20 11:30	05/04/20 13:23	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-4-SS BA V3 (28-29)

Date Collected: 04/21/20 17:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-8

Matrix: Sediment
Percent Solids: 84.8

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	5.88	U	17.6	5.88	mg/Kg	☼	05/04/20 11:30	05/04/20 13:25	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-5-SS BA V2 (17-18)

Date Collected: 04/22/20 11:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-9

Matrix: Sediment
Percent Solids: 75.7

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.59	U F1	19.8	6.59	mg/Kg	☼	05/05/20 14:47	05/05/20 17:02	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-5-SS BA V3 (23-24)

Date Collected: 04/22/20 11:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-10

Matrix: Sediment
Percent Solids: 81.8

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.10	U	18.3	6.10	mg/Kg	☼	05/05/20 14:47	05/05/20 17:07	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-6-SS BA V2
Date Collected: 04/22/20 15:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-11
Matrix: Sediment
Percent Solids: 66.1

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	7.54	U	22.6	7.54	mg/Kg	☼	05/05/20 14:47	05/05/20 17:09	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-1-SS RA V2

Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-12

Matrix: Solid
Percent Solids: 78.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	3.20		0.226	0.102	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Uranium	0.564		0.113	0.0451	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-1-SS RA V3
Date Collected: 04/20/20 16:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-13
Matrix: Solid
Percent Solids: 74.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	1.24		0.256	0.115	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Uranium	0.347		0.128	0.0512	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-2-SS RA V2

Date Collected: 04/21/20 11:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-14

Matrix: Solid
Percent Solids: 70.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	4.91		0.279	0.125	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Uranium	0.743		0.139	0.0558	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-2-SS RA V3

Date Collected: 04/21/20 11:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-15

Matrix: Solid
Percent Solids: 77.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	**0.273**		0.257	0.116	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Uranium	0.0514	U	0.129	0.0514	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-3-SS RA V2
Date Collected: 04/21/20 14:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-16
Matrix: Solid
Percent Solids: 60.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	5.90		0.300	0.135	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Uranium	1.48		0.150	0.0601	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-3-SS RA V3

Date Collected: 04/21/20 14:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-17

Matrix: Solid
Percent Solids: 79.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.247		0.221	0.0997	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Uranium	0.142		0.111	0.0443	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-4-SS RA V2

Date Collected: 04/21/20 17:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-18

Matrix: Solid
Percent Solids: 39.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	1.44		0.478	0.215	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Uranium	1.10		0.239	0.0957	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-4-SS RA V3

Date Collected: 04/21/20 17:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-19

Matrix: Solid
Percent Solids: 86.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.108	J	0.213	0.0957	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Uranium	0.0523	J	0.106	0.0425	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-5-SS RA V2

Date Collected: 04/22/20 11:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-20

Matrix: Solid
Percent Solids: 71.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	4.06		0.233	0.105	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Uranium	0.384		0.117	0.0467	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-5-SS RA V3

Date Collected: 04/22/20 11:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-21

Matrix: Solid
Percent Solids: 78.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	**0.129**	**J**	0.218	0.0982	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Uranium	0.0437	U	0.109	0.0437	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-6-SS RA V2

Date Collected: 04/22/20 15:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-22

Matrix: Solid
Percent Solids: 65.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	4.58		0.293	0.132	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Uranium	0.689		0.147	0.0587	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-6-SS BA V3 (23-24)
Date Collected: 04/22/20 15:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-23
Matrix: Sediment
Percent Solids: 77.5

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.42	U	19.2	6.42	mg/Kg	☼	05/05/20 14:47	05/05/20 17:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-7-SS BA V2 (18-19)

Date Collected: 04/23/20 09:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-24

Matrix: Sediment
Percent Solids: 77.0

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.47	U	19.4	6.47	mg/Kg	☼	05/05/20 14:47	05/05/20 17:12	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-7-SS BA V3 (27-28)
Date Collected: 04/23/20 09:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-25
Matrix: Sediment
Percent Solids: 57.2

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	8.74	U	26.2	8.74	mg/Kg	☼	05/05/20 14:47	05/05/20 17:14	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-8-SS BA V2 (25-26)
Date Collected: 04/24/20 07:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-26
Matrix: Sediment
Percent Solids: 66.7

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	7.53	U	22.6	7.53	mg/Kg	☼	05/05/20 14:47	05/05/20 17:19	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-8-SS BA V3 (39-40)
Date Collected: 04/24/20 07:50
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-27
Matrix: Sediment
Percent Solids: 80.0

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.24	U	18.7	6.24	mg/Kg	☼	05/05/20 14:47	05/05/20 17:21	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-9-SS BA V2 (27-28)

Date Collected: 04/24/20 12:10
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-28

Matrix: Sediment
Percent Solids: 77.8

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.40	U	19.2	6.40	mg/Kg	☼	05/05/20 14:47	05/05/20 17:23	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-9-SS BA V3 (32-33)

Date Collected: 04/24/20 12:15
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-29

Matrix: Sediment
Percent Solids: 89.3

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	5.60	U	16.8	5.60	mg/Kg	☼	05/05/20 14:47	05/05/20 17:25	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-10-SS BA V2 (22-23)
Date Collected: 04/24/20 13:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-30
Matrix: Sediment
Percent Solids: 85.4

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	5.82	U	17.5	5.82	mg/Kg	☼	05/05/20 14:47	05/05/20 17:26	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-10-SS BA V3 (25-26)
Date Collected: 04/24/20 13:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-31
Matrix: Sediment
Percent Solids: 77.4

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.45	U	19.3	6.45	mg/Kg	☼	05/05/20 14:47	05/05/20 17:28	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DUP-01
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-32
Matrix: Sediment
Percent Solids: 87.6

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	5.68	U	17.0	5.68	mg/Kg	☼	05/04/20 11:30	05/04/20 13:27	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DUP-02
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-33
Matrix: Sediment
Percent Solids: 78.6

General Chemistry - SEM/AVS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	6.33	U	19.0	6.33	mg/Kg	☼	05/04/20 11:30	05/04/20 13:29	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-6-SS RA V3
Date Collected: 04/22/20 15:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-34
Matrix: Solid
Percent Solids: 79.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	**0.117**	**J**	0.220	0.0988	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Uranium	0.0439	U	0.110	0.0439	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-7-SS RA V2

Date Collected: 04/23/20 09:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-35

Matrix: Solid
Percent Solids: 76.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	4.11		0.233	0.105	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Uranium	0.418		0.117	0.0467	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-7-SS RA V3
Date Collected: 04/23/20 09:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-36
Matrix: Solid
Percent Solids: 77.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.300		0.231	0.104	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Uranium	0.0474	J	0.116	0.0463	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-8-SS RA V2
Date Collected: 04/24/20 07:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-37
Matrix: Solid
Percent Solids: 77.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	1.89		0.220	0.0992	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Uranium	0.365		0.110	0.0441	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-8-SS RA V3

Date Collected: 04/24/20 07:50
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-38

Matrix: Solid
Percent Solids: 78.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.818		0.234	0.105	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Uranium	0.108	J	0.117	0.0468	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-9-SS RA V2
Date Collected: 04/24/20 12:10
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-39
Matrix: Solid
Percent Solids: 79.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	3.76		0.219	0.0987	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Uranium	0.451		0.110	0.0439	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-9-SS RA V3

Date Collected: 04/24/20 12:15
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-40

Matrix: Solid
Percent Solids: 78.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.159	J	0.234	0.105	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Uranium	0.0491	J	0.117	0.0467	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-10-SS RA V2

Date Collected: 04/24/20 13:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-41

Matrix: Solid
Percent Solids: 78.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	2.37		0.218	0.0980	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Uranium	0.259		0.109	0.0435	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-10-SS RA V3

Date Collected: 04/24/20 13:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-42

Matrix: Solid
Percent Solids: 77.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	**0.171**	**J**	0.228	0.103	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Uranium	0.0456	U	0.114	0.0456	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DUP-01
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-43
Matrix: Solid
Percent Solids: 77.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	**0.203**	**J**	0.218	0.0982	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Uranium	0.0437	U	0.109	0.0437	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DUP-02

Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-44

Matrix: Solid
Percent Solids: 78.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	4.60		0.218	0.0980	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Uranium	1.07		0.109	0.0435	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-1-SS BA V2 (22-24)
Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-1
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	04/30/20 23:13	PMH	TAL PIT

Client Sample ID: DPT-1-SS BA V2 (22-24)
Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-1
Matrix: Sediment
Percent Solids: 76.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:03	CMR	TAL PIT

Client Sample ID: DPT-1-SS BA V3 (38-40)
Date Collected: 04/20/20 16:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-2
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 00:11	PMH	TAL PIT

Client Sample ID: DPT-1-SS BA V3 (38-40)
Date Collected: 04/20/20 16:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-2
Matrix: Sediment
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:09	CMR	TAL PIT

Client Sample ID: DPT-2-SS BA V2 (26-27)
Date Collected: 04/21/20 11:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-3
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 01:08	PMH	TAL PIT

Client Sample ID: DPT-2-SS BA V2 (26-27)
Date Collected: 04/21/20 11:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-3
Matrix: Sediment
Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:11	CMR	TAL PIT

Client Sample ID: DPT-2-SS BA V3 (37-38)
Date Collected: 04/21/20 11:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-4
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 02:05	PMH	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-2-SS BA V3 (37-38)
Lab Sample ID: 400-187320-4
Date Collected: 04/21/20 11:05
Matrix: Sediment
Date Received: 04/28/20 08:49
Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:13	CMR	TAL PIT

Client Sample ID: DPT-3-SS BA V2 (24-25)
Lab Sample ID: 400-187320-5
Date Collected: 04/21/20 14:20
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 03:02	PMH	TAL PIT

Client Sample ID: DPT-3-SS BA V2 (24-25)
Lab Sample ID: 400-187320-5
Date Collected: 04/21/20 14:20
Matrix: Sediment
Date Received: 04/28/20 08:49
Percent Solids: 59.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:15	CMR	TAL PIT

Client Sample ID: DPT-3-SS BA V3 (29-30)
Lab Sample ID: 400-187320-6
Date Collected: 04/21/20 14:25
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 04:00	PMH	TAL PIT

Client Sample ID: DPT-3-SS BA V3 (29-30)
Lab Sample ID: 400-187320-6
Date Collected: 04/21/20 14:25
Matrix: Sediment
Date Received: 04/28/20 08:49
Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:17	CMR	TAL PIT

Client Sample ID: DPT-4-SS BA V2 (15-16)
Lab Sample ID: 400-187320-7
Date Collected: 04/21/20 17:55
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 04:57	PMH	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-4-SS BA V2 (15-16)
Date Collected: 04/21/20 17:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-7
Matrix: Sediment
Percent Solids: 37.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:23	CMR	TAL PIT

Client Sample ID: DPT-4-SS BA V3 (28-29)
Date Collected: 04/21/20 17:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-8
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 07:48	PMH	TAL PIT

Client Sample ID: DPT-4-SS BA V3 (28-29)
Date Collected: 04/21/20 17:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-8
Matrix: Sediment
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:25	CMR	TAL PIT

Client Sample ID: DPT-5-SS BA V2 (17-18)
Date Collected: 04/22/20 11:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-9
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 08:46	PMH	TAL PIT

Client Sample ID: DPT-5-SS BA V2 (17-18)
Date Collected: 04/22/20 11:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-9
Matrix: Sediment
Percent Solids: 75.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:02	TAM	TAL PIT

Client Sample ID: DPT-5-SS BA V3 (23-24)
Date Collected: 04/22/20 11:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-10
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 09:43	PMH	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-5-SS BA V3 (23-24)
Date Collected: 04/22/20 11:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-10
Matrix: Sediment
Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:07	TAM	TAL PIT

Client Sample ID: DPT-6-SS BA V2
Date Collected: 04/22/20 15:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-11
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 10:40	PMH	TAL PIT

Client Sample ID: DPT-6-SS BA V2
Date Collected: 04/22/20 15:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-11
Matrix: Sediment
Percent Solids: 66.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:09	TAM	TAL PIT

Client Sample ID: DPT-1-SS RA V2
Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-1-SS RA V2
Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-12
Matrix: Solid
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 17:59	FLC	TAL SL

Client Sample ID: DPT-1-SS RA V3
Date Collected: 04/20/20 16:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-1-SS RA V3
Lab Sample ID: 400-187320-13
Date Collected: 04/20/20 16:00
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 74.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 18:33	FLC	TAL SL

Client Sample ID: DPT-2-SS RA V2
Lab Sample ID: 400-187320-14
Date Collected: 04/21/20 11:00
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-2-SS RA V2
Lab Sample ID: 400-187320-14
Date Collected: 04/21/20 11:00
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 70.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 18:39	FLC	TAL SL

Client Sample ID: DPT-2-SS RA V3
Lab Sample ID: 400-187320-15
Date Collected: 04/21/20 11:05
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-2-SS RA V3
Lab Sample ID: 400-187320-15
Date Collected: 04/21/20 11:05
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 19:06	FLC	TAL SL

Client Sample ID: DPT-3-SS RA V2
Lab Sample ID: 400-187320-16
Date Collected: 04/21/20 14:20
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-3-SS RA V2
Lab Sample ID: 400-187320-16
Date Collected: 04/21/20 14:20
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 60.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 19:13	FLC	TAL SL

Client Sample ID: DPT-3-SS RA V3
Lab Sample ID: 400-187320-17
Date Collected: 04/21/20 14:25
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-3-SS RA V3
Lab Sample ID: 400-187320-17
Date Collected: 04/21/20 14:25
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 19:20	FLC	TAL SL

Client Sample ID: DPT-4-SS RA V2
Lab Sample ID: 400-187320-18
Date Collected: 04/21/20 17:55
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-4-SS RA V2
Lab Sample ID: 400-187320-18
Date Collected: 04/21/20 17:55
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 39.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 19:26	FLC	TAL SL

Client Sample ID: DPT-4-SS RA V3
Lab Sample ID: 400-187320-19
Date Collected: 04/21/20 17:45
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-4-SS RA V3
Lab Sample ID: 400-187320-19
Date Collected: 04/21/20 17:45
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 19:33	FLC	TAL SL

Client Sample ID: DPT-5-SS RA V2
Lab Sample ID: 400-187320-20
Date Collected: 04/22/20 11:25
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-5-SS RA V2
Lab Sample ID: 400-187320-20
Date Collected: 04/22/20 11:25
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 71.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 19:40	FLC	TAL SL

Client Sample ID: DPT-5-SS RA V3
Lab Sample ID: 400-187320-21
Date Collected: 04/22/20 11:30
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-5-SS RA V3
Lab Sample ID: 400-187320-21
Date Collected: 04/22/20 11:30
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 19:46	FLC	TAL SL

Client Sample ID: DPT-6-SS RA V2
Lab Sample ID: 400-187320-22
Date Collected: 04/22/20 15:00
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-6-SS RA V2
Lab Sample ID: 400-187320-22
Date Collected: 04/22/20 15:00
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 65.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 19:53	FLC	TAL SL

Client Sample ID: DPT-6-SS BA V3 (23-24)
Lab Sample ID: 400-187320-23
Date Collected: 04/22/20 15:05
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 11:37	PMH	TAL PIT

Client Sample ID: DPT-6-SS BA V3 (23-24)
Lab Sample ID: 400-187320-23
Date Collected: 04/22/20 15:05
Matrix: Sediment
Date Received: 04/28/20 08:49
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:10	TAM	TAL PIT

Client Sample ID: DPT-7-SS BA V2 (18-19)
Lab Sample ID: 400-187320-24
Date Collected: 04/23/20 09:25
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 12:35	PMH	TAL PIT

Client Sample ID: DPT-7-SS BA V2 (18-19)
Lab Sample ID: 400-187320-24
Date Collected: 04/23/20 09:25
Matrix: Sediment
Date Received: 04/28/20 08:49
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:12	TAM	TAL PIT

Client Sample ID: DPT-7-SS BA V3 (27-28)
Lab Sample ID: 400-187320-25
Date Collected: 04/23/20 09:30
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 13:32	PMH	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-7-SS BA V3 (27-28)
Date Collected: 04/23/20 09:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-25
Matrix: Sediment
Percent Solids: 57.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:14	TAM	TAL PIT

Client Sample ID: DPT-8-SS BA V2 (25-26)
Date Collected: 04/24/20 07:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-26
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 14:29	PMH	TAL PIT

Client Sample ID: DPT-8-SS BA V2 (25-26)
Date Collected: 04/24/20 07:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-26
Matrix: Sediment
Percent Solids: 66.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:19	TAM	TAL PIT

Client Sample ID: DPT-8-SS BA V3 (39-40)
Date Collected: 04/24/20 07:50
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-27
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314330	05/01/20 15:26	PMH	TAL PIT

Client Sample ID: DPT-8-SS BA V3 (39-40)
Date Collected: 04/24/20 07:50
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-27
Matrix: Sediment
Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:21	TAM	TAL PIT

Client Sample ID: DPT-9-SS BA V2 (27-28)
Date Collected: 04/24/20 12:10
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-28
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314337	04/30/20 19:50	PMH	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-9-SS BA V2 (27-28)
Lab Sample ID: 400-187320-28
Date Collected: 04/24/20 12:10
Matrix: Sediment
Date Received: 04/28/20 08:49
Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:23	TAM	TAL PIT

Client Sample ID: DPT-9-SS BA V3 (32-33)
Lab Sample ID: 400-187320-29
Date Collected: 04/24/20 12:15
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314337	05/01/20 01:43	PMH	TAL PIT

Client Sample ID: DPT-9-SS BA V3 (32-33)
Lab Sample ID: 400-187320-29
Date Collected: 04/24/20 12:15
Matrix: Sediment
Date Received: 04/28/20 08:49
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:25	TAM	TAL PIT

Client Sample ID: DPT-10-SS BA V2 (22-23)
Lab Sample ID: 400-187320-30
Date Collected: 04/24/20 13:20
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314337	05/01/20 04:40	PMH	TAL PIT

Client Sample ID: DPT-10-SS BA V2 (22-23)
Lab Sample ID: 400-187320-30
Date Collected: 04/24/20 13:20
Matrix: Sediment
Date Received: 04/28/20 08:49
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:26	TAM	TAL PIT

Client Sample ID: DPT-10-SS BA V3 (25-26)
Lab Sample ID: 400-187320-31
Date Collected: 04/24/20 13:25
Matrix: Sediment
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314337	05/01/20 07:36	PMH	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-10-SS BA V3 (25-26)
Date Collected: 04/24/20 13:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-31
Matrix: Sediment
Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314620	05/05/20 14:47	TAM	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314627	05/05/20 17:28	TAM	TAL PIT

Client Sample ID: DUP-01
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-32
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314337	05/01/20 10:33	PMH	TAL PIT

Client Sample ID: DUP-01
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-32
Matrix: Sediment
Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:27	CMR	TAL PIT

Client Sample ID: DUP-02
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-33
Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	314337	05/01/20 13:30	PMH	TAL PIT

Client Sample ID: DUP-02
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-33
Matrix: Sediment
Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SEM/AVS	Prep	AVSSEM			314515	05/04/20 11:30	CMR	TAL PIT
SEM/AVS	Analysis	EPA 9034		1	314525	05/04/20 13:29	CMR	TAL PIT

Client Sample ID: DPT-6-SS RA V3
Date Collected: 04/22/20 15:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-34
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-6-SS RA V3
Lab Sample ID: 400-187320-34
Date Collected: 04/22/20 15:05
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 20:00	FLC	TAL SL

Client Sample ID: DPT-7-SS RA V2
Lab Sample ID: 400-187320-35
Date Collected: 04/23/20 09:25
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-7-SS RA V2
Lab Sample ID: 400-187320-35
Date Collected: 04/23/20 09:25
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 76.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 20:07	FLC	TAL SL

Client Sample ID: DPT-7-SS RA V3
Lab Sample ID: 400-187320-36
Date Collected: 04/23/20 09:30
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-7-SS RA V3
Lab Sample ID: 400-187320-36
Date Collected: 04/23/20 09:30
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 20:33	FLC	TAL SL

Client Sample ID: DPT-8-SS RA V2
Lab Sample ID: 400-187320-37
Date Collected: 04/24/20 07:45
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-8-SS RA V2

Lab Sample ID: 400-187320-37
Date Collected: 04/24/20 07:45
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 20:40	FLC	TAL SL

Client Sample ID: DPT-8-SS RA V3

Lab Sample ID: 400-187320-38
Date Collected: 04/24/20 07:50
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-8-SS RA V3

Lab Sample ID: 400-187320-38
Date Collected: 04/24/20 07:50
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 20:47	FLC	TAL SL

Client Sample ID: DPT-9-SS RA V2

Lab Sample ID: 400-187320-39
Date Collected: 04/24/20 12:10
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-9-SS RA V2

Lab Sample ID: 400-187320-39
Date Collected: 04/24/20 12:10
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 20:54	FLC	TAL SL

Client Sample ID: DPT-9-SS RA V3

Lab Sample ID: 400-187320-40
Date Collected: 04/24/20 12:15
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DPT-9-SS RA V3
Lab Sample ID: 400-187320-40
Date Collected: 04/24/20 12:15
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 21:00	FLC	TAL SL

Client Sample ID: DPT-10-SS RA V2
Lab Sample ID: 400-187320-41
Date Collected: 04/24/20 13:20
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469475	05/04/20 06:53	RJD	TAL SL

Client Sample ID: DPT-10-SS RA V2
Lab Sample ID: 400-187320-41
Date Collected: 04/24/20 13:20
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 21:07	FLC	TAL SL

Client Sample ID: DPT-10-SS RA V3
Lab Sample ID: 400-187320-42
Date Collected: 04/24/20 13:25
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Client Sample ID: DPT-10-SS RA V3
Lab Sample ID: 400-187320-42
Date Collected: 04/24/20 13:25
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469892	05/08/20 10:07	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 21:14	FLC	TAL SL

Client Sample ID: DUP-01
Lab Sample ID: 400-187320-43
Date Collected: 04/21/20 00:00
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Client Sample ID: DUP-01
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-43
Matrix: Solid
Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469893	05/08/20 10:12	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 22:01	FLC	TAL SL

Client Sample ID: DUP-02
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-44
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Client Sample ID: DUP-02
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-44
Matrix: Solid
Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469893	05/08/20 10:12	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 22:34	FLC	TAL SL

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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

Metals

Prep Batch: 469892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-12	DPT-1-SS RA V2	Total/NA	Solid	3050B	
400-187320-13	DPT-1-SS RA V3	Total/NA	Solid	3050B	
400-187320-14	DPT-2-SS RA V2	Total/NA	Solid	3050B	
400-187320-15	DPT-2-SS RA V3	Total/NA	Solid	3050B	
400-187320-16	DPT-3-SS RA V2	Total/NA	Solid	3050B	
400-187320-17	DPT-3-SS RA V3	Total/NA	Solid	3050B	
400-187320-18	DPT-4-SS RA V2	Total/NA	Solid	3050B	
400-187320-19	DPT-4-SS RA V3	Total/NA	Solid	3050B	
400-187320-20	DPT-5-SS RA V2	Total/NA	Solid	3050B	
400-187320-21	DPT-5-SS RA V3	Total/NA	Solid	3050B	
400-187320-22	DPT-6-SS RA V2	Total/NA	Solid	3050B	
400-187320-34	DPT-6-SS RA V3	Total/NA	Solid	3050B	
400-187320-35	DPT-7-SS RA V2	Total/NA	Solid	3050B	
400-187320-36	DPT-7-SS RA V3	Total/NA	Solid	3050B	
400-187320-37	DPT-8-SS RA V2	Total/NA	Solid	3050B	
400-187320-38	DPT-8-SS RA V3	Total/NA	Solid	3050B	
400-187320-39	DPT-9-SS RA V2	Total/NA	Solid	3050B	
400-187320-40	DPT-9-SS RA V3	Total/NA	Solid	3050B	
400-187320-41	DPT-10-SS RA V2	Total/NA	Solid	3050B	
400-187320-42	DPT-10-SS RA V3	Total/NA	Solid	3050B	
MB 160-469892/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 160-469892/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSSRM 160-469892/3-A	Lab Control Sample	Total/NA	Solid	3050B	
400-187320-12 MS	DPT-1-SS RA V2	Total/NA	Solid	3050B	
400-187320-12 MSD	DPT-1-SS RA V2	Total/NA	Solid	3050B	

Prep Batch: 469893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-43	DUP-01	Total/NA	Solid	3050B	
400-187320-44	DUP-02	Total/NA	Solid	3050B	
MB 160-469893/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 160-469893/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSSRM 160-469893/3-A	Lab Control Sample	Total/NA	Solid	3050B	
400-187320-43 MS	DUP-01	Total/NA	Solid	3050B	
400-187320-43 MSD	DUP-01	Total/NA	Solid	3050B	

Analysis Batch: 469984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-12	DPT-1-SS RA V2	Total/NA	Solid	6020	469892
400-187320-13	DPT-1-SS RA V3	Total/NA	Solid	6020	469892
400-187320-14	DPT-2-SS RA V2	Total/NA	Solid	6020	469892
400-187320-15	DPT-2-SS RA V3	Total/NA	Solid	6020	469892
400-187320-16	DPT-3-SS RA V2	Total/NA	Solid	6020	469892
400-187320-17	DPT-3-SS RA V3	Total/NA	Solid	6020	469892
400-187320-18	DPT-4-SS RA V2	Total/NA	Solid	6020	469892
400-187320-19	DPT-4-SS RA V3	Total/NA	Solid	6020	469892
400-187320-20	DPT-5-SS RA V2	Total/NA	Solid	6020	469892
400-187320-21	DPT-5-SS RA V3	Total/NA	Solid	6020	469892
400-187320-22	DPT-6-SS RA V2	Total/NA	Solid	6020	469892
400-187320-34	DPT-6-SS RA V3	Total/NA	Solid	6020	469892
400-187320-35	DPT-7-SS RA V2	Total/NA	Solid	6020	469892

Metals (Continued)

Analysis Batch: 469984 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-36	DPT-7-SS RA V3	Total/NA	Solid	6020	469892
400-187320-37	DPT-8-SS RA V2	Total/NA	Solid	6020	469892
400-187320-38	DPT-8-SS RA V3	Total/NA	Solid	6020	469892
400-187320-39	DPT-9-SS RA V2	Total/NA	Solid	6020	469892
400-187320-40	DPT-9-SS RA V3	Total/NA	Solid	6020	469892
400-187320-41	DPT-10-SS RA V2	Total/NA	Solid	6020	469892
400-187320-42	DPT-10-SS RA V3	Total/NA	Solid	6020	469892
400-187320-43	DUP-01	Total/NA	Solid	6020	469893
400-187320-44	DUP-02	Total/NA	Solid	6020	469893
MB 160-469892/1-A	Method Blank	Total/NA	Solid	6020	469892
MB 160-469893/1-A	Method Blank	Total/NA	Solid	6020	469893
LCS 160-469892/2-A	Lab Control Sample	Total/NA	Solid	6020	469892
LCS 160-469893/2-A	Lab Control Sample	Total/NA	Solid	6020	469893
LCSSRM 160-469892/3-A	Lab Control Sample	Total/NA	Solid	6020	469892
LCSSRM 160-469893/3-A	Lab Control Sample	Total/NA	Solid	6020	469893
400-187320-12 MS	DPT-1-SS RA V2	Total/NA	Solid	6020	469892
400-187320-12 MSD	DPT-1-SS RA V2	Total/NA	Solid	6020	469892
400-187320-43 MS	DUP-01	Total/NA	Solid	6020	469893
400-187320-43 MSD	DUP-01	Total/NA	Solid	6020	469893

General Chemistry

Analysis Batch: 314330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-1	DPT-1-SS BA V2 (22-24)	Total/NA	Sediment	2540G	
400-187320-2	DPT-1-SS BA V3 (38-40)	Total/NA	Sediment	2540G	
400-187320-3	DPT-2-SS BA V2 (26-27)	Total/NA	Sediment	2540G	
400-187320-4	DPT-2-SS BA V3 (37-38)	Total/NA	Sediment	2540G	
400-187320-5	DPT-3-SS BA V2 (24-25)	Total/NA	Sediment	2540G	
400-187320-6	DPT-3-SS BA V3 (29-30)	Total/NA	Sediment	2540G	
400-187320-7	DPT-4-SS BA V2 (15-16)	Total/NA	Sediment	2540G	
400-187320-8	DPT-4-SS BA V3 (28-29)	Total/NA	Sediment	2540G	
400-187320-9	DPT-5-SS BA V2 (17-18)	Total/NA	Sediment	2540G	
400-187320-10	DPT-5-SS BA V3 (23-24)	Total/NA	Sediment	2540G	
400-187320-11	DPT-6-SS BA V2	Total/NA	Sediment	2540G	
400-187320-23	DPT-6-SS BA V3 (23-24)	Total/NA	Sediment	2540G	
400-187320-24	DPT-7-SS BA V2 (18-19)	Total/NA	Sediment	2540G	
400-187320-25	DPT-7-SS BA V3 (27-28)	Total/NA	Sediment	2540G	
400-187320-26	DPT-8-SS BA V2 (25-26)	Total/NA	Sediment	2540G	
400-187320-27	DPT-8-SS BA V3 (39-40)	Total/NA	Sediment	2540G	
180-105133-A-1 DU	Duplicate	Total/NA	Sediment	2540G	
180-105133-A-2 DU	Duplicate	Total/NA	Sediment	2540G	

Analysis Batch: 314337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-28	DPT-9-SS BA V2 (27-28)	Total/NA	Sediment	2540G	
400-187320-29	DPT-9-SS BA V3 (32-33)	Total/NA	Sediment	2540G	
400-187320-30	DPT-10-SS BA V2 (22-23)	Total/NA	Sediment	2540G	
400-187320-31	DPT-10-SS BA V3 (25-26)	Total/NA	Sediment	2540G	
400-187320-32	DUP-01	Total/NA	Sediment	2540G	
400-187320-33	DUP-02	Total/NA	Sediment	2540G	

General Chemistry (Continued)

Analysis Batch: 314337 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-28 DU	DPT-9-SS BA V2 (27-28)	Total/NA	Sediment	2540G	

Prep Batch: 314515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-1	DPT-1-SS BA V2 (22-24)	SEM/AVS	Sediment	AVSSEM	
400-187320-2	DPT-1-SS BA V3 (38-40)	SEM/AVS	Sediment	AVSSEM	
400-187320-3	DPT-2-SS BA V2 (26-27)	SEM/AVS	Sediment	AVSSEM	
400-187320-4	DPT-2-SS BA V3 (37-38)	SEM/AVS	Sediment	AVSSEM	
400-187320-5	DPT-3-SS BA V2 (24-25)	SEM/AVS	Sediment	AVSSEM	
400-187320-6	DPT-3-SS BA V3 (29-30)	SEM/AVS	Sediment	AVSSEM	
400-187320-7	DPT-4-SS BA V2 (15-16)	SEM/AVS	Sediment	AVSSEM	
400-187320-8	DPT-4-SS BA V3 (28-29)	SEM/AVS	Sediment	AVSSEM	
400-187320-32	DUP-01	SEM/AVS	Sediment	AVSSEM	
400-187320-33	DUP-02	SEM/AVS	Sediment	AVSSEM	
MB 180-314515/1-A	Method Blank	SEM/AVS	Sediment	AVSSEM	
LCS 180-314515/2-A	Lab Control Sample	SEM/AVS	Sediment	AVSSEM	
400-187320-1 MS	DPT-1-SS BA V2 (22-24)	SEM/AVS	Sediment	AVSSEM	
400-187320-1 MSD	DPT-1-SS BA V2 (22-24)	SEM/AVS	Sediment	AVSSEM	

Analysis Batch: 314525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-1	DPT-1-SS BA V2 (22-24)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-2	DPT-1-SS BA V3 (38-40)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-3	DPT-2-SS BA V2 (26-27)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-4	DPT-2-SS BA V3 (37-38)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-5	DPT-3-SS BA V2 (24-25)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-6	DPT-3-SS BA V3 (29-30)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-7	DPT-4-SS BA V2 (15-16)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-8	DPT-4-SS BA V3 (28-29)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-32	DUP-01	SEM/AVS	Sediment	EPA 9034	314515
400-187320-33	DUP-02	SEM/AVS	Sediment	EPA 9034	314515
MB 180-314515/1-A	Method Blank	SEM/AVS	Sediment	EPA 9034	314515
LCS 180-314515/2-A	Lab Control Sample	SEM/AVS	Sediment	EPA 9034	314515
400-187320-1 MS	DPT-1-SS BA V2 (22-24)	SEM/AVS	Sediment	EPA 9034	314515
400-187320-1 MSD	DPT-1-SS BA V2 (22-24)	SEM/AVS	Sediment	EPA 9034	314515

Prep Batch: 314620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-9	DPT-5-SS BA V2 (17-18)	SEM/AVS	Sediment	AVSSEM	
400-187320-10	DPT-5-SS BA V3 (23-24)	SEM/AVS	Sediment	AVSSEM	
400-187320-11	DPT-6-SS BA V2	SEM/AVS	Sediment	AVSSEM	
400-187320-23	DPT-6-SS BA V3 (23-24)	SEM/AVS	Sediment	AVSSEM	
400-187320-24	DPT-7-SS BA V2 (18-19)	SEM/AVS	Sediment	AVSSEM	
400-187320-25	DPT-7-SS BA V3 (27-28)	SEM/AVS	Sediment	AVSSEM	
400-187320-26	DPT-8-SS BA V2 (25-26)	SEM/AVS	Sediment	AVSSEM	
400-187320-27	DPT-8-SS BA V3 (39-40)	SEM/AVS	Sediment	AVSSEM	
400-187320-28	DPT-9-SS BA V2 (27-28)	SEM/AVS	Sediment	AVSSEM	
400-187320-29	DPT-9-SS BA V3 (32-33)	SEM/AVS	Sediment	AVSSEM	
400-187320-30	DPT-10-SS BA V2 (22-23)	SEM/AVS	Sediment	AVSSEM	
400-187320-31	DPT-10-SS BA V3 (25-26)	SEM/AVS	Sediment	AVSSEM	
MB 180-314620/1-A	Method Blank	SEM/AVS	Sediment	AVSSEM	

General Chemistry (Continued)

Prep Batch: 314620 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-314620/2-A	Lab Control Sample	SEM/AVS	Sediment	AVSSEM	
400-187320-9 MS	DPT-5-SS BA V2 (17-18)	SEM/AVS	Sediment	AVSSEM	
400-187320-9 MSD	DPT-5-SS BA V2 (17-18)	SEM/AVS	Sediment	AVSSEM	

Analysis Batch: 314627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-9	DPT-5-SS BA V2 (17-18)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-10	DPT-5-SS BA V3 (23-24)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-11	DPT-6-SS BA V2	SEM/AVS	Sediment	EPA 9034	314620
400-187320-23	DPT-6-SS BA V3 (23-24)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-24	DPT-7-SS BA V2 (18-19)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-25	DPT-7-SS BA V3 (27-28)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-26	DPT-8-SS BA V2 (25-26)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-27	DPT-8-SS BA V3 (39-40)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-28	DPT-9-SS BA V2 (27-28)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-29	DPT-9-SS BA V3 (32-33)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-30	DPT-10-SS BA V2 (22-23)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-31	DPT-10-SS BA V3 (25-26)	SEM/AVS	Sediment	EPA 9034	314620
MB 180-314620/1-A	Method Blank	SEM/AVS	Sediment	EPA 9034	314620
LCS 180-314620/2-A	Lab Control Sample	SEM/AVS	Sediment	EPA 9034	314620
400-187320-9 MS	DPT-5-SS BA V2 (17-18)	SEM/AVS	Sediment	EPA 9034	314620
400-187320-9 MSD	DPT-5-SS BA V2 (17-18)	SEM/AVS	Sediment	EPA 9034	314620

Analysis Batch: 469475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-12	DPT-1-SS RA V2	Total/NA	Solid	Moisture	
400-187320-13	DPT-1-SS RA V3	Total/NA	Solid	Moisture	
400-187320-14	DPT-2-SS RA V2	Total/NA	Solid	Moisture	
400-187320-15	DPT-2-SS RA V3	Total/NA	Solid	Moisture	
400-187320-16	DPT-3-SS RA V2	Total/NA	Solid	Moisture	
400-187320-17	DPT-3-SS RA V3	Total/NA	Solid	Moisture	
400-187320-18	DPT-4-SS RA V2	Total/NA	Solid	Moisture	
400-187320-19	DPT-4-SS RA V3	Total/NA	Solid	Moisture	
400-187320-20	DPT-5-SS RA V2	Total/NA	Solid	Moisture	
400-187320-21	DPT-5-SS RA V3	Total/NA	Solid	Moisture	
400-187320-22	DPT-6-SS RA V2	Total/NA	Solid	Moisture	
400-187320-34	DPT-6-SS RA V3	Total/NA	Solid	Moisture	
400-187320-35	DPT-7-SS RA V2	Total/NA	Solid	Moisture	
400-187320-36	DPT-7-SS RA V3	Total/NA	Solid	Moisture	
400-187320-37	DPT-8-SS RA V2	Total/NA	Solid	Moisture	
400-187320-38	DPT-8-SS RA V3	Total/NA	Solid	Moisture	
400-187320-39	DPT-9-SS RA V2	Total/NA	Solid	Moisture	
400-187320-40	DPT-9-SS RA V3	Total/NA	Solid	Moisture	
400-187320-41	DPT-10-SS RA V2	Total/NA	Solid	Moisture	
160-37907-D-1 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 469480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-42	DPT-10-SS RA V3	Total/NA	Solid	Moisture	
400-187320-43	DUP-01	Total/NA	Solid	Moisture	
400-187320-44	DUP-02	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 469480 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-42 DU	DPT-10-SS RA V3	Total/NA	Solid	Moisture	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-469892/1-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.0893	U	0.198	0.0893	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Uranium	0.0397	U	0.0992	0.0397	mg/Kg		05/08/20 10:07	05/08/20 17:39	2

Lab Sample ID: LCS 160-469892/2-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	98.0	105.7		mg/Kg		108	80 - 120

Lab Sample ID: LCSSRM 160-469892/3-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469892

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Uranium	22.5	24.90		mg/Kg		110.7	68.0 - 132.4

Lab Sample ID: 400-187320-12 MS
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: DPT-1-SS RA V2
Prep Type: Total/NA
Prep Batch: 469892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	3.20		111	120.6		mg/Kg	☼	106	75 - 125
Uranium	0.564		111	115.6		mg/Kg	☼	104	75 - 125

Lab Sample ID: 400-187320-12 MSD
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: DPT-1-SS RA V2
Prep Type: Total/NA
Prep Batch: 469892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thorium	3.20		127	134.2		mg/Kg	☼	103	75 - 125	11	30
Uranium	0.564		127	131.9		mg/Kg	☼	103	75 - 125	13	30

Lab Sample ID: MB 160-469893/1-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469893

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.0894	U	0.199	0.0894	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Uranium	0.0397	U	0.0993	0.0397	mg/Kg		05/08/20 10:12	05/08/20 21:20	2

Lab Sample ID: LCS 160-469893/2-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469893

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	95.5	99.53		mg/Kg		104	80 - 120

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

Lab Sample ID: LCSSRM 160-469893/3-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469893

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Uranium			22.5	24.79		mg/Kg		110.2	68.0 - 132.4		

Lab Sample ID: 400-187320-43 MS
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: DUP-01
Prep Type: Total/NA
Prep Batch: 469893

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Thorium	0.203	J	126	131.1		mg/Kg	☼	104	75 - 125		
Uranium	0.0437	U	126	131.7		mg/Kg	☼	104	75 - 125		

Lab Sample ID: 400-187320-43 MSD
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: DUP-01
Prep Type: Total/NA
Prep Batch: 469893

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thorium	0.203	J	119	118.0		mg/Kg	☼	99	75 - 125	11	30
Uranium	0.0437	U	119	118.2		mg/Kg	☼	100	75 - 125	11	30

Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 180-314515/1-A
Matrix: Sediment
Analysis Batch: 314525

Client Sample ID: Method Blank
Prep Type: SEM/AVS
Prep Batch: 314515

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	5.00	U	15.0	5.00	mg/Kg		05/04/20 11:30	05/04/20 12:59	1

Lab Sample ID: LCS 180-314515/2-A
Matrix: Sediment
Analysis Batch: 314525

Client Sample ID: Lab Control Sample
Prep Type: SEM/AVS
Prep Batch: 314515

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acid Volatile Sulfides (AVS)			62.9	57.35		mg/Kg		91	85 - 115		

Lab Sample ID: 400-187320-1 MS
Matrix: Sediment
Analysis Batch: 314525

Client Sample ID: DPT-1-SS BA V2 (22-24)
Prep Type: SEM/AVS
Prep Batch: 314515

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acid Volatile Sulfides (AVS)	6.55	U F1	82.7	55.20	F1	mg/Kg	☼	67	75 - 125		

Lab Sample ID: 400-187320-1 MSD
Matrix: Sediment
Analysis Batch: 314525

Client Sample ID: DPT-1-SS BA V2 (22-24)
Prep Type: SEM/AVS
Prep Batch: 314515

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acid Volatile Sulfides (AVS)	6.55	U F1	82.3	59.11	F1	mg/Kg	☼	72	75 - 125	7	20

Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: MB 180-314620/1-A
Matrix: Sediment
Analysis Batch: 314627

Client Sample ID: Method Blank
Prep Type: SEM/AVS
Prep Batch: 314620

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acid Volatile Sulfides (AVS)	5.00	U	15.0	5.00	mg/Kg		05/05/20 14:47	05/05/20 16:58	1

Lab Sample ID: LCS 180-314620/2-A
Matrix: Sediment
Analysis Batch: 314627

Client Sample ID: Lab Control Sample
Prep Type: SEM/AVS
Prep Batch: 314620

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acid Volatile Sulfides (AVS)			50.8	45.81		mg/Kg		90	85 - 115		

Lab Sample ID: 400-187320-9 MS
Matrix: Sediment
Analysis Batch: 314627

Client Sample ID: DPT-5-SS BA V2 (17-18)
Prep Type: SEM/AVS
Prep Batch: 314620

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acid Volatile Sulfides (AVS)	6.59	U F1	67.1	51.16		mg/Kg	☼	76	75 - 125		

Lab Sample ID: 400-187320-9 MSD
Matrix: Sediment
Analysis Batch: 314627

Client Sample ID: DPT-5-SS BA V2 (17-18)
Prep Type: SEM/AVS
Prep Batch: 314620

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acid Volatile Sulfides (AVS)	6.59	U F1	66.7	44.96	F1	mg/Kg	☼	67	75 - 125	13	20

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5468	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested: per quote			
City: Birmingham	TAT Requested (days): per quote			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606			
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site: Plant Watson	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D		
DPT-1-55 Ba U2 (22-24)	4/20/20	1555	G	Solid			X	X										
DPT-1-55 Ba U3 (38-40)	↓	1600		Solid			X	X										
DPT-2-55 Ba U2 (26-27)	4/21/20	1100		Solid			X	X										
DPT-2-55 Ba U3 (37-38)		1105		Solid			X	X										
DPT-3-55 Ba U2 (24-25)		1420		Solid			X	X										
DPT-3-55 Ba U3 (29-30)		1425		Solid			X	X										
DPT-4-55 Ba U2 (15-16)		1755		Solid			X	X										
DPT-4-55 Ba U3 (28-29)	↓	1745		Solid			X	X										
DPT-5-55 Ba U2 (17-18)	4/22/20	1125		Solid			X	X										
DPT-5-55 Ba U3 (23-24)		1130		Solid			X	X										
DPT-6-55 Ba U2	↓	1500	↓	Solid			X	X										

400-187320 COC

Baton Rouge 218

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-27-20 0600	Geosyntec		04-27-20 0600	GS
2		4-27-20 1145			4/27/2020 1145	FETA
3		4/27/2020	FETA		4/28/20 849	TAL

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.6C, 2.8C IR9

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5468	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606			
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D		
DPT-1-55 Ra V2	4/20/20	1555	C	Solid						X	X	X	X					
DPT-1-55 Ra V3	↓	1600		Solid														
DPT-2-55 Ra V2	4/21/20	1100		Solid														
DPT-2-55 Ra V3		1105		Solid														
DPT-3-55 Ra V2		1420		Solid														
DPT-3-55 Ra V3		1425		Solid														
DPT-4-55 Ra V2		1755		Solid														
DPT-4-55-Ra V3	↓	1745		Solid														
DPT-5-55 Ra V2	4/22/20	1125		Solid														
DPT-5-55 Ra V3	↓	1130	↓	Solid														
DPT-4-55 Ra V2	↓	1500	C	Solid						X	X	X	X					

Baton Rouge 218

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-27-20 0600			4-27-20 0600	
2		4-27-20 1145			4/27/2020 1145	
3		4/27/2020 3p	ETA		4/28/20 849	

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5468	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:

Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested: Per Quote
City: Birmingham	TAT Requested (days): Per Quote
State, Zip: AL, 35243	
Phone: 205-992-6283(Tel)	PO #: SCS10382606
Email: laparker@southernco.com	WO #:
Project Name: Plant Watson	Project #: 40001674
Site: Plant Watson	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	CB	N	N	N	N	D	D	D	X	
DPT-6-SS Ba U3 (23-24)	4/22/20	1505	G	Solid	N	N	X											Baton Rouge 218
DPT-7-SS Ba U2 (18-19)	4/23/20	0925		Solid			X											
DPT-7-SS Ba U3 (27-28)	↓	0930		Solid			X											
DPT-8-SS Ba U2 (25-26)	4/24/20	0745		Solid			X											
DPT-8-SS Ba U3 (39-40)		0750		Solid			X											
DPT-9-SS Ba U2 (27-28)		1210		Solid			X											
DPT-9-SS Ba U3 (32-33)		1215		Solid			X											
DPT-10-SS Ba U2 (22-23)		1320		Solid			X											
DPT-10-SS Ba U3 (25-26)	↓	1325		Solid			X											
Dup-01	4/21/20	0000	↓	Solid	↓	↓	X											
Dup-02	↓	0000	G	Solid	N	N	X											

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-27-20 (600)	Designee		4-27-2020 (600)	
2		4-27-20 1145	GS		4/27/2020 1145	ETA
3		4/27/2020 3p	ETA		4/28/20 849	PG

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Nathan Quirk	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5168	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606			
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site: Plant Watson	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D		
DPT-6-55 Ra U3	4/22/20	1505	C	Solid		MN				X	X	X	X					
DPT-7-55 Ra U2	4/23/20	0928		Solid														
DPT-7-55 Ra U3	↓	0930		Solid														
DPT-8-55 Ra U2	4/24/20	0745		Solid														
DPT-8-55 Ra U3		0750		Solid														
DPT-9-55 Ra U2		1210		Solid														
DPT-9-55 Ra U3		1215		Solid														
DPT-10-55 Ra U2		1320		Solid														
DPT-10-55 Ra U3	↓	1325		Solid														
Dup-01	4/21/20	0000	↓	Solid		↓												
Dup-02	↓	0000	C	Solid		MN				X	X	X	X					

Baton Rouge 218

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-27-20 0600	SCS		4-27-20 0600	CR
2		4-27-20 1145	CR		4/27/2000 1145	ETA
3		4/27/2000	ETA		4/28/20 849	TRP

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

eurofins | Environment Testing TestAmerica

Part # 159469-434 Rit 10/14 **

ORIGIN ID:PNSA (850) 474-1001
SAMPLE RECEIVING
TEST AMERICA PENSACOLA
3355 MCLEMORE DR

PENSACOLA, FL 32514
UNITED STATES US

SHIP DATE: 28APR20
ACTWGT: 45.90 LB
CAD: 0823943/CAFE3311

BILL SENDER

565C1/C603/05A2

TO SAMPLE CONTROL
TESTAMERICA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF:
INV: DEPT:
PO:

FedEx Express

J191219062001UA

TRK# 0201 1482 3804 4201

WED - 29 APR 10:30A
PRIORITY OVERNIGHT

XH AGCA

15238
PA-US PIT

Uncorrected temp 4.8 °C
Thermometer ID 17

CF 0 Initials TB

PT-WI-SR-001 effective 7/26/13

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-242230.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Mississippi	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 400-187320-1
Address: 13715 Rider Trail North,	Due Date Requested: 4/30/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site:	SSOW#:			

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA
M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Moisture/ Percent Moisture	6020/3050B_2% Uranium & Thorium	Total Number of containers	Special Instructions/Note:
				Preservation Code:						
DPT-1-SS RA V2 (400-187320-12)	4/20/20	15:55 Central		Solid			X	X	2	
DPT-1-SS RA V3 (400-187320-13)	4/20/20	16:00 Central		Solid			X	X	2	
DPT-2-SS RA V2 (400-187320-14)	4/21/20	11:00 Central		Solid			X	X	2	
DPT-2-SS RA V3 (400-187320-15)	4/21/20	11:05 Central		Solid			X	X	2	
DPT-3-SS RA V2 (400-187320-16)	4/21/20	14:20 Central		Solid			X	X	2	
DPT-3-SS RA V3 (400-187320-17)	4/21/20	14:25 Central		Solid			X	X	2	
DPT-4-SS RA V2 (400-187320-18)	4/21/20	17:55 Central		Solid			X	X	2	
DPT-4-SS RA V3 (400-187320-19)	4/21/20	17:45 Central		Solid			X	X	2	
DPT-5-SS RA V2 (400-187320-20)	4/22/20	11:25 Central		Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ________ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Kathy R Carr	Date/Time: 4-28-20 1620	Company: ETA	Received by: FE	Date/Time:	Company
Relinquished by: FE	Date/Time:	Company	Received by: Michala Koninkrijk	Date/Time: 4/29/2020 09:03	Company: ETA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

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

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-242230.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Mississippi	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 400-187320-1
Address: 13715 Rider Trail North,	Due Date Requested: 4/30/2020	**Analysis Requested**		**Preservation Codes:**
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site:	SSOW#:			Other:

Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Moisture/ Percent Moisture	6020/3050B_2% Uranium & Thorium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DPT-5-SS RA V3 (400-187320-21)	4/22/20	11:30 Central		Solid			X	X	2	
DPT-6-SS RA V2 (400-187320-22)	4/22/20	15:00 Central		Solid			X	X	2	
DPT-6-SS RA V3 (400-187320-34)	4/22/20	15:05 Central		Solid			X	X	2	
DPT-7-SS RA V2 (400-187320-35)	4/23/20	09:25 Central		Solid			X	X	2	
DPT-7-SS RA V3 (400-187320-36)	4/23/20	09:30 Central		Solid			X	X	2	
DPT-8-SS RA V2 (400-187320-37)	4/24/20	07:45 Central		Solid			X	X	2	
DPT-8-SS RA V3 (400-187320-38)	4/24/20	07:50 Central		Solid			X	X	2	
DPT-9-SS RA V2 (400-187320-39)	4/24/20	12:10 Central		Solid			X	X	2	
DPT-9-SS RA V3 (400-187320-40)	4/24/20	12:15 Central		Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Katy R Carey	4-28-20 1620	ETA	FE		
FE			Michael Koninkiny	4/29/2020 09:03	ETA STL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-242230.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Mississippi	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 400-187320-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/30/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Moisture/ Percent Moisture	6020/3050B_2% Uranium & Thorium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DPT-10-SS RA V2 (400-187320-41)	4/24/20	13:20 Central		Solid			X	X	2	
DPT-10-SS RA V3 (400-187320-42)	4/24/20	13:25 Central		Solid			X	X	2	
DUP-01 (400-187320-43)	4/21/20	Central		Solid			X	X	1	
DUP-02 (400-187320-44)	4/21/20	Central		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Kristy R Clancy	4-24-20 1620	ETA	FE		
2	FE			Michaela Leininger	4/29/2020 09:05	ETA STL
3						

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

8 DD

Chain of Custody Record

urofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Whitmire, Cheyenne R	lo: 42229.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cheyenne.whitmire@test...	Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):	Job #: 400-187320-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 4/29/2020		
City: Pittsburgh	TAT Requested (days):		
State, Zip: PA, 15238			
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:		
Email:	WO #:		
Project Name: Plant Watson	Project #: 40001674		
Site:	SSOW#:		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS/AVSSEM_Prep AVS	Moisture/ Percent Moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DPT-1-SS BA V2 (22-24) (400-187320-1)	4/20/20	15:55 Central		Sediment			X	X	1	
DPT-1-SS BA V3 (38-40) (400-187320-2)	4/20/20	16:00 Central		Sediment			X	X	1	
DPT-2-SS BA V2 (26-27) (400-187320-3)	4/21/20	11:00 Central		Sediment			X	X	1	
DPT-2-SS BA V3 (37-38) (400-187320-4)	4/21/20	11:05 Central		Sediment			X	X	1	
DPT-3-SS BA V2 (24-25) (400-187320-5)	4/21/20	14:20 Central		Sediment			X	X	1	
DPT-3-SS BA V3 (29-30) (400-187320-6)	4/21/20	14:25 Central		Sediment			X	X	1	
DPT-4-SS BA V2 (15-16) (400-187320-7)	4/21/20	17:55 Central		Sediment			X	X	1	
DPT-4-SS BA V3 (28-29) (400-187320-8)	4/21/20	17:45 Central		Sediment			X	X	1	
DPT-5-SS BA V2 (17-18) (400-187320-9)	4/22/20	11:25 Central		Sediment			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Kathy Owens	4-28-20 1600	ETA	DW Watson	4-29-20	ETA PHH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8:45	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-242229.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Mississippi	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 400-187320-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 4/29/2020			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS/AVSSEM_Prep AVS	Moisture/ Percent Moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DPT-5-SS BA V3 (23-24) (400-187320-10)	4/22/20	11:30 Central		Sediment			X	X	1	
DPT-6-SS BA V2 (400-187320-11)	4/22/20	15:00 Central		Sediment			X	X	1	
DPT-6-SS BA V3 (23-24) (400-187320-23)	4/22/20	15:05 Central		Sediment			X	X	1	
DPT-7-SS BA V2 (18-19) (400-187320-24)	4/23/20	09:25 Central		Sediment			X	X	1	
DPT-7-SS BA V3 (27-28) (400-187320-25)	4/23/20	09:30 Central		Sediment			X	X	1	
DPT-8-SS BA V2 (25-26) (400-187320-26)	4/24/20	07:45 Central		Sediment			X	X	1	
DPT-8-SS BA V3 (39-40) (400-187320-27)	4/24/20	07:50 Central		Sediment			X	X	1	
DPT-9-SS BA V2 (27-28) (400-187320-28)	4/24/20	12:10 Central		Sediment			X	X	1	
DPT-9-SS BA V3 (32-33) (400-187320-29)	4/24/20	12:15 Central		Sediment			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kathy R Owen	4-28-20 1600	ETA	P Watson	4-29-20	ETAPitt
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8:45	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-242229.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Mississippi	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 400-187320-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 4/29/2020			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS/AVSSEM_Prep AVS	Moisture/ Percent Moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DPT-10-SS BA V2 (22-23) (400-187320-30)	4/24/20	13:20 Central		Sediment			X	X	1	
DPT-10-SS BA V3 (25-26) (400-187320-31)	4/24/20	13:25 Central		Sediment			X	X	1	
DUP-01 (400-187320-32)	4/21/20	Central		Sediment			X	X	1	
DUP-02 (400-187320-33)	4/21/20	Central		Sediment			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kathy R Queen	4-28-20 1600	ETA	DWatson	4-29-20	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8:45	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187320-1
SDG Number: Plant Watson

Login Number: 187320
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.6°C, 2.8°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187320-1
SDG Number: Plant Watson

Login Number: 187320
List Number: 2
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh
List Creation: 04/29/20 04:42 PM

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187320-1
SDG Number: Plant Watson

Login Number: 187320
List Number: 3
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 04/29/20 09:51 PM

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20 *
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20 *
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-20 *
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20 *
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20 *
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-1
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187320-2
Laboratory Sample Delivery Group: Plant Watson
Client Project/Site: Plant Watson

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Cheyenne R Whitmire

Authorized for release by:
6/19/2020 1:13:34 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187320-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187320-2

RAD

Method 9315: Radium-226 Prep Batch 160-469589. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DPT-1-SS RA V2 (400-187320-12), DPT-1-SS RA V3 (400-187320-13), DPT-2-SS RA V2 (400-187320-14), DPT-2-SS RA V3 (400-187320-15), DPT-3-SS RA V2 (400-187320-16), DPT-3-SS RA V3 (400-187320-17), DPT-4-SS RA V2 (400-187320-18), DPT-4-SS RA V3 (400-187320-19), DPT-5-SS RA V2 (400-187320-20), DPT-5-SS RA V3 (400-187320-21), DPT-6-SS RA V2 (400-187320-22), DPT-6-SS RA V3 (400-187320-34), DPT-7-SS RA V2 (400-187320-35), DPT-7-SS RA V3 (400-187320-36), DPT-8-SS RA V2 (400-187320-37), DPT-8-SS RA V3 (400-187320-38), DPT-9-SS RA V2 (400-187320-39), DPT-9-SS RA V3 (400-187320-40), DPT-10-SS RA V2 (400-187320-41), DPT-10-SS RA V3 (400-187320-42), (LCS 160-469589/1-A), (MB 160-469589/23-A) and (400-187320-A-12-B DU)

Method 9315: Ra-226 Prep Batch 160-469806. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-01 (400-187320-43), DUP-02 (400-187320-44), (LCS 160-469806/1-A), (MB 160-469806/11-A) and (400-187320-A-43-G DU)

Method 9320: Ra-228 Prep Batch 160-469648. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DPT-1-SS RA V2 (400-187320-12), DPT-1-SS RA V3 (400-187320-13), DPT-2-SS RA V2 (400-187320-14), DPT-2-SS RA V3 (400-187320-15), DPT-3-SS RA V2 (400-187320-16), DPT-3-SS RA V3 (400-187320-17), DPT-4-SS RA V2 (400-187320-18), DPT-4-SS RA V3 (400-187320-19), DPT-5-SS RA V2 (400-187320-20), DPT-5-SS RA V3 (400-187320-21), DPT-6-SS RA V2 (400-187320-22), DPT-6-SS RA V3 (400-187320-34), DPT-7-SS RA V2 (400-187320-35), DPT-7-SS RA V3 (400-187320-36), DPT-8-SS RA V2 (400-187320-37), DPT-8-SS RA V3 (400-187320-38), DPT-9-SS RA V2 (400-187320-39), DPT-9-SS RA V3 (400-187320-40), DPT-10-SS RA V2 (400-187320-41), DPT-10-SS RA V3 (400-187320-42), (LCS 160-469648/1-A), (MB 160-469648/23-A) and (400-187320-A-12-D DU)

Method 9320: Radium-228 Prep Batch: 160-469808. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-01 (400-187320-43), DUP-02 (400-187320-44), (LCS 160-469808/1-A), (MB 160-469808/11-A) and (400-187320-A-43-I DU)

Method DPS-0: 400-187320-43 precipitated a very small pellet during into ingrowth. All samples will be re-prepped. DUP-01 (400-187320-43), DUP-02 (400-187320-44) and (400-187320-A-43 DU)

Method DPS-21: 400-187320-43 precipitated a very small pellet during into ingrowth. All samples will be re-prepped. DUP-01 (400-187320-43) and DUP-02 (400-187320-44)

Method Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
DPS-0	Preparation, Digestion/ Precipitate	None	TAL SL
DPS-21	Preparation, Digestion/Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187320-12	DPT-1-SS RA V2	Solid	04/20/20 15:55	04/28/20 08:49	
400-187320-13	DPT-1-SS RA V3	Solid	04/20/20 16:00	04/28/20 08:49	
400-187320-14	DPT-2-SS RA V2	Solid	04/21/20 11:00	04/28/20 08:49	
400-187320-15	DPT-2-SS RA V3	Solid	04/21/20 11:05	04/28/20 08:49	
400-187320-16	DPT-3-SS RA V2	Solid	04/21/20 14:20	04/28/20 08:49	
400-187320-17	DPT-3-SS RA V3	Solid	04/21/20 14:25	04/28/20 08:49	
400-187320-18	DPT-4-SS RA V2	Solid	04/21/20 17:55	04/28/20 08:49	
400-187320-19	DPT-4-SS RA V3	Solid	04/21/20 17:45	04/28/20 08:49	
400-187320-20	DPT-5-SS RA V2	Solid	04/22/20 11:25	04/28/20 08:49	
400-187320-21	DPT-5-SS RA V3	Solid	04/22/20 11:30	04/28/20 08:49	
400-187320-22	DPT-6-SS RA V2	Solid	04/22/20 15:00	04/28/20 08:49	
400-187320-34	DPT-6-SS RA V3	Solid	04/22/20 15:05	04/28/20 08:49	
400-187320-35	DPT-7-SS RA V2	Solid	04/23/20 09:25	04/28/20 08:49	
400-187320-36	DPT-7-SS RA V3	Solid	04/23/20 09:30	04/28/20 08:49	
400-187320-37	DPT-8-SS RA V2	Solid	04/24/20 07:45	04/28/20 08:49	
400-187320-38	DPT-8-SS RA V3	Solid	04/24/20 07:50	04/28/20 08:49	
400-187320-39	DPT-9-SS RA V2	Solid	04/24/20 12:10	04/28/20 08:49	
400-187320-40	DPT-9-SS RA V3	Solid	04/24/20 12:15	04/28/20 08:49	
400-187320-41	DPT-10-SS RA V2	Solid	04/24/20 13:20	04/28/20 08:49	
400-187320-42	DPT-10-SS RA V3	Solid	04/24/20 13:25	04/28/20 08:49	
400-187320-43	DUP-01	Solid	04/21/20 00:00	04/28/20 08:49	
400-187320-44	DUP-02	Solid	04/21/20 00:00	04/28/20 08:49	

Client Sample ID: DPT-1-SS RA V2

Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-12

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.315		0.106	0.110	1.00	0.0887	pCi/g	05/05/20 12:32	05/28/20 04:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.608		0.275	0.280	1.00	0.397	pCi/g	05/05/20 13:22	05/20/20 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:37*	*1*
Y Carrier	*84.1*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:37*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.923		0.29	0.30	5.00	0.397	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-1-SS RA V3

Date Collected: 04/20/20 16:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-13

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.272		0.101	0.104	1.00	0.0883	pCi/g	05/05/20 12:32	05/28/20 04:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.0*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.515		0.288	0.292	1.00	0.434	pCi/g	05/05/20 13:22	05/20/20 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.0*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:37*	*1*
Y Carrier	*82.2*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:37*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.786		0.305	0.310	5.00	0.434	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-2-SS RA V2

Date Collected: 04/21/20 11:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-14

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.706		0.177	0.188	1.00	0.149	pCi/g	05/05/20 12:32	05/28/20 04:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.5*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.840		0.309	0.318	1.00	0.412	pCi/g	05/05/20 13:22	05/20/20 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.5*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:37*	*1*
Y Carrier	*84.1*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:37*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.55		0.356	0.369	5.00	0.412	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-2-SS RA V3

Date Collected: 04/21/20 11:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-15

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00380	U	0.0477	0.0477	1.00	0.0991	pCi/g	05/05/20 12:32	05/28/20 04:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.7*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.158	U	0.221	0.222	1.00	0.370	pCi/g	05/05/20 13:22	05/20/20 15:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.7*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*
Y Carrier	*87.5*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.162	U	0.226	0.227	5.00	0.370	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-3-SS RA V2

Date Collected: 04/21/20 14:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-16

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.510		0.130	0.138	1.00	0.0879	pCi/g	05/05/20 12:32	05/28/20 04:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.760		0.274	0.283	1.00	0.368	pCi/g	05/05/20 13:22	05/20/20 15:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*
Y Carrier	*79.6*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.27		0.303	0.315	5.00	0.368	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-3-SS RA V3

Date Collected: 04/21/20 14:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-17

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0467	U	0.0724	0.0726	1.00	0.124	pCi/g	05/05/20 12:32	05/28/20 04:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.144	U	0.204	0.204	1.00	0.341	pCi/g	05/05/20 13:22	05/20/20 15:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*
Y Carrier	*86.4*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.191	U	0.216	0.217	5.00	0.341	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-4-SS RA V2

Date Collected: 04/21/20 17:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-18

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.292		0.0995	0.103	1.00	0.0829	pCi/g	05/05/20 12:32	05/28/20 04:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.2*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.428		0.208	0.212	1.00	0.297	pCi/g	05/05/20 13:22	05/20/20 15:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.2*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*
Y Carrier	*87.5*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.721		0.231	0.236	5.00	0.297	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-4-SS RA V3

Date Collected: 04/21/20 17:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-19

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0385	U	0.0547	0.0548	1.00	0.0931	pCi/g	05/05/20 12:32	05/28/20 04:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.123	U	0.257	0.257	1.00	0.438	pCi/g	05/05/20 13:22	05/20/20 15:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*
Y Carrier	*86.0*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:38*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.162	U	0.263	0.263	5.00	0.438	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-5-SS RA V2

Date Collected: 04/22/20 11:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-20

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.307**		0.104	0.107	1.00	0.0849	pCi/g	05/05/20 12:32	05/28/20 04:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.354	U	0.259	0.261	1.00	0.405	pCi/g	05/05/20 13:22	05/20/20 15:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*
Y Carrier	*84.1*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.661**		0.279	0.282	5.00	0.405	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-5-SS RA V3

Date Collected: 04/22/20 11:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-21

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.133		0.0779	0.0788	1.00	0.0875	pCi/g	05/05/20 12:32	05/28/20 04:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.9*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.238	U	0.252	0.253	1.00	0.410	pCi/g	05/05/20 13:22	05/20/20 15:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.9*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*
Y Carrier	*83.0*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.370	U	0.264	0.265	5.00	0.410	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-6-SS RA V2

Date Collected: 04/22/20 15:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-22

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.475		0.127	0.134	1.00	0.0858	pCi/g	05/05/20 12:32	05/28/20 04:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.767		0.295	0.303	1.00	0.403	pCi/g	05/05/20 13:22	05/20/20 15:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*
Y Carrier	*78.5*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.24		0.321	0.331	5.00	0.403	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-6-SS RA V3

Date Collected: 04/22/20 15:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-34

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0201	U	0.0452	0.0452	1.00	0.0852	pCi/g	05/05/20 12:32	05/28/20 04:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.00443	U	0.218	0.218	1.00	0.392	pCi/g	05/05/20 13:22	05/20/20 15:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*
Y Carrier	*84.5*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0245	U	0.223	0.223	5.00	0.392	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-7-SS RA V2

Date Collected: 04/23/20 09:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-35

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.433		0.123	0.129	1.00	0.0873	pCi/g	05/05/20 12:32	05/28/20 04:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.547		0.294	0.298	1.00	0.444	pCi/g	05/05/20 13:22	05/20/20 15:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*
Y Carrier	*86.4*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.980		0.319	0.325	5.00	0.444	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-7-SS RA V3

Date Collected: 04/23/20 09:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-36

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.333		0.108	0.112	1.00	0.0904	pCi/g	05/05/20 12:32	05/28/20 04:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.4*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.406		0.260	0.263	1.00	0.400	pCi/g	05/05/20 13:22	05/20/20 15:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.4*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*
Y Carrier	*84.9*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:39*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.739		0.282	0.286	5.00	0.400	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-8-SS RA V2

Date Collected: 04/24/20 07:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-37

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.311		0.109	0.112	1.00	0.0993	pCi/g	05/05/20 12:32	05/28/20 04:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.439		0.235	0.238	1.00	0.347	pCi/g	05/05/20 13:22	05/20/20 15:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:40*	*1*
Y Carrier	*86.7*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.751		0.259	0.263	5.00	0.347	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-8-SS RA V3

Date Collected: 04/24/20 07:50
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-38

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.364		0.116	0.121	1.00	0.0994	pCi/g	05/05/20 12:32	05/28/20 04:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.480		0.260	0.264	1.00	0.387	pCi/g	05/05/20 13:22	05/20/20 15:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:40*	*1*
Y Carrier	*83.0*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.844		0.285	0.290	5.00	0.387	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-9-SS RA V2

Date Collected: 04/24/20 12:10
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-39

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.459		0.126	0.133	1.00	0.0973	pCi/g	05/05/20 12:32	05/28/20 04:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.497		0.265	0.269	1.00	0.397	pCi/g	05/05/20 13:22	05/20/20 15:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:41*	*1*
Y Carrier	*83.4*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:41*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.956		0.293	0.300	5.00	0.397	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-9-SS RA V3

Date Collected: 04/24/20 12:15
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-40

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0899	U	0.0778	0.0783	1.00	0.117	pCi/g	05/05/20 12:32	05/28/20 04:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.2*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.302	U	0.253	0.255	1.00	0.404	pCi/g	05/05/20 13:22	05/20/20 15:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.2*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:41*	*1*
Y Carrier	*83.4*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:41*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.392	U	0.265	0.267	5.00	0.404	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-10-SS RA V2

Date Collected: 04/24/20 13:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-41

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.428		0.124	0.130	1.00	0.0985	pCi/g	05/05/20 12:32	05/28/20 04:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.5*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.618		0.267	0.273	1.00	0.385	pCi/g	05/05/20 13:22	05/20/20 15:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.5*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:42*	*1*
Y Carrier	*88.6*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:42*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.05		0.29	0.30	5.00	0.385	pCi/g		05/29/20 09:58	1

Client Sample ID: DPT-10-SS RA V3

Date Collected: 04/24/20 13:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-42

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0708	U	0.0768	0.0770	1.00	0.123	pCi/g	05/05/20 12:32	05/28/20 04:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.2*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.125	U	0.218	0.219	1.00	0.370	pCi/g	05/05/20 13:22	05/20/20 15:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.2*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:42*	*1*
Y Carrier	*87.9*		*40 - 110*	*05/05/20 13:22*	*05/20/20 15:42*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.196	U	0.231	0.232	5.00	0.370	pCi/g		05/29/20 09:58	1

Client Sample ID: DUP-01
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-43
Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0447	U	0.0642	0.0643	1.00	0.109	pCi/g	05/07/20 11:59	06/01/20 04:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:48*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.179	U	0.296	0.297	1.00	0.500	pCi/g	05/07/20 12:23	05/19/20 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:39*	*1*
Y Carrier	*87.1*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:39*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.224	U	0.303	0.304	5.00	0.500	pCi/g		06/01/20 08:25	1

Client Sample ID: DUP-02
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-44
Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.716		0.145	0.159	1.00	0.0978	pCi/g	05/07/20 11:59	06/01/20 04:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.5*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:48*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.673		0.282	0.289	1.00	0.397	pCi/g	05/07/20 12:23	05/19/20 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.5*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:39*	*1*
Y Carrier	*87.9*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:39*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.39		0.317	0.330	5.00	0.397	pCi/g		06/01/20 08:25	1

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Qualifiers

Rad

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Client Sample ID: DPT-1-SS RA V2

Lab Sample ID: 400-187320-12

Date Collected: 04/20/20 15:55
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:34	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:37	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-1-SS RA V3

Lab Sample ID: 400-187320-13

Date Collected: 04/20/20 16:00
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:34	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:37	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-2-SS RA V2

Lab Sample ID: 400-187320-14

Date Collected: 04/21/20 11:00
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:34	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:37	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-2-SS RA V3

Lab Sample ID: 400-187320-15

Date Collected: 04/21/20 11:05
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:34	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:38	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Client Sample ID: DPT-3-SS RA V2

Lab Sample ID: 400-187320-16
Matrix: Solid
Date Collected: 04/21/20 14:20
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:34	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:38	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-3-SS RA V3

Lab Sample ID: 400-187320-17
Matrix: Solid
Date Collected: 04/21/20 14:25
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:34	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:38	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-4-SS RA V2

Lab Sample ID: 400-187320-18
Matrix: Solid
Date Collected: 04/21/20 17:55
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:35	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:38	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-4-SS RA V3

Lab Sample ID: 400-187320-19
Matrix: Solid
Date Collected: 04/21/20 17:45
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:35	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:38	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Client Sample ID: DPT-5-SS RA V2

Lab Sample ID: 400-187320-20

Date Collected: 04/22/20 11:25
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:35	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-5-SS RA V3

Lab Sample ID: 400-187320-21

Date Collected: 04/22/20 11:30
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:35	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-6-SS RA V2

Lab Sample ID: 400-187320-22

Date Collected: 04/22/20 15:00
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:35	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-6-SS RA V3

Lab Sample ID: 400-187320-34

Date Collected: 04/22/20 15:05
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:35	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Client Sample ID: DPT-7-SS RA V2

Lab Sample ID: 400-187320-35

Date Collected: 04/23/20 09:25
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:35	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-7-SS RA V3

Lab Sample ID: 400-187320-36

Date Collected: 04/23/20 09:30
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:35	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-8-SS RA V2

Lab Sample ID: 400-187320-37

Date Collected: 04/24/20 07:45
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:36	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:40	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-8-SS RA V3

Lab Sample ID: 400-187320-38

Date Collected: 04/24/20 07:50
Matrix: Solid
Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:36	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470938	05/20/20 15:40	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Client Sample ID: DPT-9-SS RA V2

Lab Sample ID: 400-187320-39

Date Collected: 04/24/20 12:10

Matrix: Solid

Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:36	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470958	05/20/20 15:41	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-9-SS RA V3

Lab Sample ID: 400-187320-40

Date Collected: 04/24/20 12:15

Matrix: Solid

Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:36	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470958	05/20/20 15:41	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-10-SS RA V2

Lab Sample ID: 400-187320-41

Date Collected: 04/24/20 13:20

Matrix: Solid

Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471356	05/28/20 04:36	AJD	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470958	05/20/20 15:42	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Client Sample ID: DPT-10-SS RA V3

Lab Sample ID: 400-187320-42

Date Collected: 04/24/20 13:25

Matrix: Solid

Date Received: 04/28/20 08:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469589	05/05/20 12:32	MNH	TAL SL
Total/NA	Analysis	9315		1	471357	05/28/20 04:41	CJQ	TAL SL
Total/NA	Prep	DPS-0			469648	05/05/20 13:22	MNH	TAL SL
Total/NA	Analysis	9320		1	470958	05/20/20 15:42	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471518	05/29/20 09:58	SMP	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Client Sample ID: DUP-01
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-43
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469806	05/07/20 11:59	RBR	TAL SL
Total/NA	Analysis	9315		1	471607	06/01/20 04:48	KLS	TAL SL
Total/NA	Prep	DPS-0			469808	05/07/20 12:23	RBR	TAL SL
Total/NA	Analysis	9320		1	470884	05/19/20 14:39	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471613	06/01/20 08:25	SMP	TAL SL

Client Sample ID: DUP-02
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-44
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469806	05/07/20 11:59	RBR	TAL SL
Total/NA	Analysis	9315		1	471607	06/01/20 04:48	KLS	TAL SL
Total/NA	Prep	DPS-0			469808	05/07/20 12:23	RBR	TAL SL
Total/NA	Analysis	9320		1	470884	05/19/20 14:39	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471613	06/01/20 08:25	SMP	TAL SL

Laboratory References:

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

Rad

Prep Batch: 469589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-12	DPT-1-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-13	DPT-1-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-14	DPT-2-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-15	DPT-2-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-16	DPT-3-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-17	DPT-3-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-18	DPT-4-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-19	DPT-4-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-20	DPT-5-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-21	DPT-5-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-22	DPT-6-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-34	DPT-6-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-35	DPT-7-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-36	DPT-7-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-37	DPT-8-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-38	DPT-8-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-39	DPT-9-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-40	DPT-9-SS RA V3	Total/NA	Solid	DPS-21	
400-187320-41	DPT-10-SS RA V2	Total/NA	Solid	DPS-21	
400-187320-42	DPT-10-SS RA V3	Total/NA	Solid	DPS-21	
MB 160-469589/23-A	Method Blank	Total/NA	Solid	DPS-21	
LCS 160-469589/1-A	Lab Control Sample	Total/NA	Solid	DPS-21	
400-187320-12 DU	DPT-1-SS RA V2	Total/NA	Solid	DPS-21	

Prep Batch: 469648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-12	DPT-1-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-13	DPT-1-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-14	DPT-2-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-15	DPT-2-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-16	DPT-3-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-17	DPT-3-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-18	DPT-4-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-19	DPT-4-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-20	DPT-5-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-21	DPT-5-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-22	DPT-6-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-34	DPT-6-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-35	DPT-7-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-36	DPT-7-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-37	DPT-8-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-38	DPT-8-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-39	DPT-9-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-40	DPT-9-SS RA V3	Total/NA	Solid	DPS-0	
400-187320-41	DPT-10-SS RA V2	Total/NA	Solid	DPS-0	
400-187320-42	DPT-10-SS RA V3	Total/NA	Solid	DPS-0	
MB 160-469648/23-A	Method Blank	Total/NA	Solid	DPS-0	
LCS 160-469648/1-A	Lab Control Sample	Total/NA	Solid	DPS-0	
400-187320-12 DU	DPT-1-SS RA V2	Total/NA	Solid	DPS-0	

QC Association Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Rad

Prep Batch: 469806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-43	DUP-01	Total/NA	Solid	DPS-21	
400-187320-44	DUP-02	Total/NA	Solid	DPS-21	
MB 160-469806/11-A	Method Blank	Total/NA	Solid	DPS-21	
LCS 160-469806/1-A	Lab Control Sample	Total/NA	Solid	DPS-21	
400-187320-43 DU	DUP-01	Total/NA	Solid	DPS-21	

Prep Batch: 469808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-43	DUP-01	Total/NA	Solid	DPS-0	
400-187320-44	DUP-02	Total/NA	Solid	DPS-0	
MB 160-469808/11-A	Method Blank	Total/NA	Solid	DPS-0	
LCS 160-469808/1-A	Lab Control Sample	Total/NA	Solid	DPS-0	
400-187320-43 DU	DUP-01	Total/NA	Solid	DPS-0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-469589/23-A
Matrix: Solid
Analysis Batch: 471357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469589

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.008726	U	0.0598	0.0598	1.00	0.118	pCi/g	05/05/20 12:32	05/28/20 04:41	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*05/05/20 12:32*	*05/28/20 04:41*	*1*

Lab Sample ID: LCS 160-469589/1-A
Matrix: Solid
Analysis Batch: 471356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469589

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	9.397		1.01	1.00	0.0867	pCi/g	83	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*81.0*		*40 - 110*

Lab Sample ID: 400-187320-12 DU
Matrix: Solid
Analysis Batch: 471356

Client Sample ID: DPT-1-SS RA V2
Prep Type: Total/NA
Prep Batch: 469589

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.315			0.4285		0.127	1.00	0.0803	pCi/g			0.48	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*87.9*		*40 - 110*

Lab Sample ID: MB 160-469806/11-A
Matrix: Solid
Analysis Batch: 471607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469806

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.008328	U	0.0616	0.0616	1.00	0.119	pCi/g	05/07/20 11:59	06/01/20 04:49	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:49*	*1*

Lab Sample ID: LCS 160-469806/1-A
Matrix: Solid
Analysis Batch: 471607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469806

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.26		1.06	1.00	0.105	pCi/g	90	75 - 125		

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-469806/1-A
Matrix: Solid
Analysis Batch: 471607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469806

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	91.3		40 - 110

Lab Sample ID: 400-187320-43 DU
Matrix: Solid
Analysis Batch: 471607

Client Sample ID: DUP-01
Prep Type: Total/NA
Prep Batch: 469806

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.0447	U		0.09564	U	0.0783	1.00	0.116	pCi/g			0.36	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	85.8		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-469648/23-A
Matrix: Solid
Analysis Batch: 470958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469648

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2970	U	0.233	0.235	1.00	0.368	pCi/g	05/05/20 13:22	05/20/20 15:42	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110	05/05/20 13:22	05/20/20 15:42	1
Y Carrier	89.3		40 - 110	05/05/20 13:22	05/20/20 15:42	1

Lab Sample ID: LCS 160-469648/1-A
Matrix: Solid
Analysis Batch: 470938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469648

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.82	7.682		0.967	1.00	0.407	pCi/g	87	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	81.0		40 - 110
Y Carrier	81.5		40 - 110

Lab Sample ID: 400-187320-12 DU
Matrix: Solid
Analysis Batch: 470938

Client Sample ID: DPT-1-SS RA V2
Prep Type: Total/NA
Prep Batch: 469648

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.608			0.2447	U	0.248	1.00	0.401	pCi/g			0.69	1

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

Lab Sample ID: 400-187320-12 DU
Matrix: Solid
Analysis Batch: 470938

Client Sample ID: DPT-1-SS RA V2
Prep Type: Total/NA
Prep Batch: 469648

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*87.9*		*40 - 110*
Y Carrier	*85.2*		*40 - 110*

Lab Sample ID: MB 160-469808/11-A
Matrix: Solid
Analysis Batch: 470898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469808

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.01823	U	0.221	0.221	1.00	0.398	pCi/g	05/07/20 12:23	05/19/20 14:41	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:41*	*1*
Y Carrier	*84.5*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:41*	*1*

Lab Sample ID: LCS 160-469808/1-A
Matrix: Solid
Analysis Batch: 470884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469808

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.83	6.592		0.864	1.00	0.437	pCi/g	75	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.3*		*40 - 110*
Y Carrier	*88.6*		*40 - 110*

Lab Sample ID: 400-187320-43 DU
Matrix: Solid
Analysis Batch: 470884

Client Sample ID: DUP-01
Prep Type: Total/NA
Prep Batch: 469808

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.179	U		0.3086	U	0.283	1.00	0.453	pCi/g			0.22	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*85.8*		*40 - 110*
Y Carrier	*87.1*		*40 - 110*

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5468	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested: per quote			
City: Birmingham	TAT Requested (days): per quote			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606			
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site: Plant Watson	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D		
DPT-1-55 Ba U2 (22-24)	4/20/20	1555	G	Solid			X	X		X	X	X	X	X	X	X		
DPT-1-55 Ba U3 (38-40)	↓	1600		Solid			X	X		X	X	X	X	X	X	X		
DPT-2-55 Ba U2 (26-27)	4/21/20	1100		Solid			X	X		X	X	X	X	X	X	X		
DPT-2-55 Ba U3 (37-38)		1105		Solid			X	X		X	X	X	X	X	X	X		
DPT-3-55 Ba U2 (24-25)		1420		Solid			X	X		X	X	X	X	X	X	X		
DPT-3-55 Ba U3 (29-30)		1425		Solid			X	X		X	X	X	X	X	X	X		
DPT-4-55 Ba U2 (15-16)		1755		Solid			X	X		X	X	X	X	X	X	X		
DPT-4-55 Ba U3 (28-29)	↓	1745		Solid			X	X		X	X	X	X	X	X	X		
DPT-5-55 Ba U2 (17-18)	4/22/20	1125		Solid			X	X		X	X	X	X	X	X	X		
DPT-5-55 Ba U3 (23-24)		1130		Solid			X	X		X	X	X	X	X	X	X		
DPT-6-55 Ba U2	↓	1500	↓	Solid			X	X		X	X	X	X	X	X	X		

400-187320 COC

Baton Rouge 218

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-27-20 0600	Geosyntec		04-27-20 0600	GS
2		4-27-20 1145			4/27/2020 1145	FETA
3		4/27/2020	FETA		4/28/20 849	TAL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.6C, 2.8C IR9

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5468	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:

Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Birmingham	TAT Requested (days):		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: AL, 35243			
Phone: 205-992-6283(Tel)	PO #: SCS10382606		Other:
Email: laparker@southernco.com	WO #:		
Project Name: Plant Watson	Project #: 40001674		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D		
DPT-1-55 Ra V2	4/20/20	1555	C	Solid						X	X	X	X					
DPT-1-55 Ra V3	↓	1600		Solid														
DPT-2-55 Ra V2	4/21/20	1100		Solid														
DPT-2-55 Ra V3		1105		Solid														
DPT-3-55 Ra V2		1420		Solid														
DPT-3-55 Ra V3		1425		Solid														
DPT-4-55 Ra V2		1755		Solid														
DPT-4-55-Ra V3	↓	1745		Solid														
DPT-5-55 Ra V2	4/22/20	1125		Solid														
DPT-5-55 Ra V3	↓	1130	↓	Solid						↓	↓	↓	↓					
DPT-4-55 Ra V2	↓	1500	C	Solid						X	X	X	X					

Baton Rouge 218

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4-27-20 0600			4-27-20 0600	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4-27-20 1145			4/27/2020 1145	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/27/2020 3p	FTA		4/28/20 849	

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5468	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:

Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested: Per Quote
City: Birmingham	TAT Requested (days): Per Quote
State, Zip: AL, 35243	
Phone: 205-992-6283(Tel)	PO #: SCS10382606
Email: laparker@southernco.com	WO #:
Project Name: Plant Watson	Project #: 40001674
Site: Plant Watson	SSOW#:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D		
DPT-6-SS Ba U3 (23-24)	4/22/20	1505	G	Solid	N	N	X											Baton Rouge 218
DPT-7-SS Ba U2 (18-19)	4/23/20	0925		Solid			X											
DPT-7-SS Ba U3 (27-28)	↓	0930		Solid			X											
DPT-8-SS Ba U2 (25-26)	4/24/20	0745		Solid			X											
DPT-8-SS Ba U3 (39-40)		0750		Solid			X											
DPT-9-SS Ba U2 (27-28)		1210		Solid			X											
DPT-9-SS Ba U3 (32-33)		1215		Solid			X											
DPT-10-SS Ba U2 (22-23)		1320		Solid			X											
DPT-10-SS Ba U3 (25-26)	↓	1325		Solid			X											
Dup-01	4/21/20	0100	↓	Solid	↓	↓	X											
Dup-02	↓	0000	G	Solid	N	N	X											

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-27-20 (600)	Designee		4-27-2020 (600)	
2		4-27-20 1145	GS		4/27/2020 1145	ETA
3		4/27/2020 3pm	ETA		4/28/20 849	TAL PG

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5468	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606			
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site: Plant Watson	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	CB	N	N	N	N	D	D	D	X	
DPT-6-SS Ra V3	4/22/20	1505	C	Solid	N	N				X	X	X	X					
DPT-7-SS Ra V2	4/23/20	0925		Solid														
DPT-7-SS Ra V3	↓	0930		Solid														
DPT-8-SS Ra V2	4/24/20	0745		Solid														
DPT-8-SS Ra V3		0750		Solid														
DPT-9-SS Ra V2		1210		Solid														
DPT-9-SS Ra V3		1245		Solid														
DPT-10-SS Ra V2		1320		Solid														
DPT-10-SS Ra V3	↓	1325		Solid														
Dup-01	4/21/20	0000	✓	Solid														
Dup-02	↓	2000	C	Solid	N	N				X	X	X	X					

Baton Rouge 218

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Nathan Quick	Date/Time: 4-27-20 0600	Company: Geosyntec	Received by: [signature]	Date/Time: 4-27-20 0600	Company: GS
Relinquished by: [signature]	Date/Time: 4-27-20 1145	Company: GS	Received by: [signature]	Date/Time: 4/27/2020 1145	Company: ETA
Relinquished by: [signature]	Date/Time: 4/27/2020 ??	Company: ETA	Received by: [signature]	Date/Time: 4/28/20 849	Company: TA-BR
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187320-2
SDG Number: Plant Watson

Login Number: 187320
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.6°C, 2.8°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187320-2
SDG Number: Plant Watson

Login Number: 187320
List Number: 3
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 04/29/20 09:51 PM

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

Tracer/Carrier Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

Method: 9315 - Radium-226 (GFPC)

Matrix: Solid | **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits) Ba Carrier (40-110)
400-187320-12	DPT-1-SS RA V2	89.1
400-187320-12 DU	DPT-1-SS RA V2	87.9
400-187320-13	DPT-1-SS RA V3	84.0
400-187320-14	DPT-2-SS RA V2	74.5
400-187320-15	DPT-2-SS RA V3	90.7
400-187320-16	DPT-3-SS RA V2	91.8
400-187320-17	DPT-3-SS RA V3	93.0
400-187320-18	DPT-4-SS RA V2	94.2
400-187320-19	DPT-4-SS RA V3	81.3
400-187320-20	DPT-5-SS RA V2	87.3
400-187320-21	DPT-5-SS RA V3	75.9
400-187320-22	DPT-6-SS RA V2	87.3
400-187320-34	DPT-6-SS RA V3	87.6
400-187320-35	DPT-7-SS RA V2	87.3
400-187320-36	DPT-7-SS RA V3	89.4
400-187320-37	DPT-8-SS RA V2	91.8
400-187320-38	DPT-8-SS RA V3	88.5
400-187320-39	DPT-9-SS RA V2	93.0
400-187320-40	DPT-9-SS RA V3	89.2
400-187320-41	DPT-10-SS RA V2	91.5
400-187320-42	DPT-10-SS RA V3	88.2
400-187320-43	DUP-01	82.5
400-187320-43 DU	DUP-01	85.8
400-187320-44	DUP-02	96.5
LCS 160-469589/1-A	Lab Control Sample	81.0
LCS 160-469806/1-A	Lab Control Sample	91.3
MB 160-469589/23-A	Method Blank	87.7
MB 160-469806/11-A	Method Blank	88.6

Tracer/Carrier Legend

Ba Carrier = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Solid | **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits) Ba Carrier (40-110)	Y Carrier (40-110)
400-187320-12	DPT-1-SS RA V2	89.1	84.1
400-187320-12 DU	DPT-1-SS RA V2	87.9	85.2
400-187320-13	DPT-1-SS RA V3	84.0	82.2
400-187320-14	DPT-2-SS RA V2	74.5	84.1
400-187320-15	DPT-2-SS RA V3	90.7	87.5
400-187320-16	DPT-3-SS RA V2	91.8	79.6
400-187320-17	DPT-3-SS RA V3	93.0	86.4
400-187320-18	DPT-4-SS RA V2	94.2	87.5
400-187320-19	DPT-4-SS RA V3	81.3	86.0
400-187320-20	DPT-5-SS RA V2	87.3	84.1
400-187320-21	DPT-5-SS RA V3	75.9	83.0
400-187320-22	DPT-6-SS RA V2	87.3	78.5

Tracer/Carrier Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-2
SDG: Plant Watson

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits) Ba Carrier (40-110)	Y Carrier (40-110)
400-187320-34	DPT-6-SS RA V3	87.6	84.5
400-187320-35	DPT-7-SS RA V2	87.3	86.4
400-187320-36	DPT-7-SS RA V3	89.4	84.9
400-187320-37	DPT-8-SS RA V2	91.8	86.7
400-187320-38	DPT-8-SS RA V3	88.5	83.0
400-187320-39	DPT-9-SS RA V2	93.0	83.4
400-187320-40	DPT-9-SS RA V3	89.2	83.4
400-187320-41	DPT-10-SS RA V2	91.5	88.6
400-187320-42	DPT-10-SS RA V3	88.2	87.9
400-187320-43	DUP-01	82.5	87.1
400-187320-43 DU	DUP-01	85.8	87.1
400-187320-44	DUP-02	96.5	87.9
LCS 160-469648/1-A	Lab Control Sample	81.0	81.5
LCS 160-469808/1-A	Lab Control Sample	91.3	88.6
MB 160-469648/23-A	Method Blank	87.7	89.3
MB 160-469808/11-A	Method Blank	88.6	84.5

Tracer/Carrier Legend

Ba Carrier = Ba Carrier
Y Carrier = Y Carrier

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187320-3
Laboratory Sample Delivery Group: Plant Watson
Client Project/Site: Plant Watson

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Cheyenne R Whitmire

Authorized for release by:
6/19/2020 1:14:04 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187320-3

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187320-3

Metals

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-471675 and analytical batch 160-471679 were outside control limits for lithium. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (400-187320-B-12-E MS) and (400-187320-B-12-F MSD)

Method 6020: preparation batch 160-471675 and analytical batch 160-471679 The MS (MSD) recovery and precision for antimony is outside the established QC limits. The MS/MSD is a multiple element spiking solution. All other elements in the spiking solution are either within acceptable criteria or have acceptable precision. This indicates potential matrix interference in the sample. Method performance is demonstrated by acceptable LCS recovery. No further action is required. (400-187320-B-12-E MS) and (400-187320-B-12-F MSD)

Method 6020: preparation batch 160-471675 and 160-471676 and analytical batch 160-471679 Due to linear range check (LRC) failures, the linear range for arsenic (200ppb) and molybdenum (100ppb) has been lowered to the concentration of the highest calibration standard. The LCS and MS/MSD were above the linear range, but were within acceptable recovery limits. (LCSSRM 160-471676/3-A), (400-187320-B-12-E MS), (400-187320-B-12-F MSD), (400-187320-A-43-O MS) and (400-187320-A-43-P MSD)

Client requested App III metals list added.

Method Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SL
3050B	Preparation, Metals	SW846	TAL SL

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187320-12	DPT-1-SS RA V2	Solid	04/20/20 15:55	04/28/20 08:49	
400-187320-13	DPT-1-SS RA V3	Solid	04/20/20 16:00	04/28/20 08:49	
400-187320-14	DPT-2-SS RA V2	Solid	04/21/20 11:00	04/28/20 08:49	
400-187320-15	DPT-2-SS RA V3	Solid	04/21/20 11:05	04/28/20 08:49	
400-187320-16	DPT-3-SS RA V2	Solid	04/21/20 14:20	04/28/20 08:49	
400-187320-17	DPT-3-SS RA V3	Solid	04/21/20 14:25	04/28/20 08:49	
400-187320-18	DPT-4-SS RA V2	Solid	04/21/20 17:55	04/28/20 08:49	
400-187320-19	DPT-4-SS RA V3	Solid	04/21/20 17:45	04/28/20 08:49	
400-187320-20	DPT-5-SS RA V2	Solid	04/22/20 11:25	04/28/20 08:49	
400-187320-21	DPT-5-SS RA V3	Solid	04/22/20 11:30	04/28/20 08:49	
400-187320-22	DPT-6-SS RA V2	Solid	04/22/20 15:00	04/28/20 08:49	
400-187320-34	DPT-6-SS RA V3	Solid	04/22/20 15:05	04/28/20 08:49	
400-187320-35	DPT-7-SS RA V2	Solid	04/23/20 09:25	04/28/20 08:49	
400-187320-36	DPT-7-SS RA V3	Solid	04/23/20 09:30	04/28/20 08:49	
400-187320-37	DPT-8-SS RA V2	Solid	04/24/20 07:45	04/28/20 08:49	
400-187320-38	DPT-8-SS RA V3	Solid	04/24/20 07:50	04/28/20 08:49	
400-187320-39	DPT-9-SS RA V2	Solid	04/24/20 12:10	04/28/20 08:49	
400-187320-40	DPT-9-SS RA V3	Solid	04/24/20 12:15	04/28/20 08:49	
400-187320-41	DPT-10-SS RA V2	Solid	04/24/20 13:20	04/28/20 08:49	
400-187320-42	DPT-10-SS RA V3	Solid	04/24/20 13:25	04/28/20 08:49	
400-187320-43	DUP-01	Solid	04/21/20 00:00	04/28/20 08:49	
400-187320-44	DUP-02	Solid	04/21/20 00:00	04/28/20 08:49	

Client Sample ID: DPT-1-SS RA V2

Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-12

Matrix: Solid
Percent Solids: 78.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.226	U F1 F2	0.564	0.226	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Arsenic	**4.17**		1.13	0.451	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Barium	**10.6**		2.26	0.564	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Beryllium	**0.149**		0.113	0.0451	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Cadmium	0.0271	U	0.0564	0.0271	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Chromium	**7.51**		1.13	0.508	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Cobalt	**0.285**		0.226	0.0846	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Lead	**4.09**		0.338	0.141	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Lithium	**2.85**	**F1**	1.13	0.451	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Molybdenum	**0.721**		0.564	0.226	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Selenium	**0.566**		0.564	0.361	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2
Thallium	0.226	U	0.564	0.226	mg/Kg	☼	05/08/20 10:07	05/08/20 17:59	2

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-1-SS RA V3
Date Collected: 04/20/20 16:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-13
Matrix: Solid
Percent Solids: 74.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.256	U	0.640	0.256	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Arsenic	0.512	U	1.28	0.512	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Barium	**8.07**		2.56	0.640	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Beryllium	**0.217**		0.128	0.0512	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Cadmium	0.0307	U	0.0640	0.0307	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Chromium	**2.30**		1.28	0.576	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Cobalt	**0.936**		0.256	0.0960	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Lead	**3.29**		0.384	0.160	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Lithium	**1.26**	**J**	1.28	0.512	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Molybdenum	**0.471**	**J**	0.640	0.256	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Selenium	0.410	U	0.640	0.410	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2
Thallium	0.256	U	0.640	0.256	mg/Kg	☼	05/08/20 10:07	05/08/20 18:33	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-2-SS RA V2

Date Collected: 04/21/20 11:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-14

Matrix: Solid
Percent Solids: 70.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.279	U	0.697	0.279	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Arsenic	**0.735**	**J**	1.39	0.558	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Barium	**83.7**		2.79	0.697	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Beryllium	**0.617**		0.139	0.0558	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Cadmium	0.0335	U	0.0697	0.0335	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Chromium	**3.24**		1.39	0.627	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Cobalt	**0.110**	**J**	0.279	0.105	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Lead	**13.1**		0.418	0.174	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Lithium	**2.42**		1.39	0.558	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Molybdenum	0.279	U	0.697	0.279	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Selenium	**1.31**		0.697	0.446	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2
Thallium	0.279	U	0.697	0.279	mg/Kg	☼	05/08/20 10:07	05/08/20 18:39	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-2-SS RA V3

Date Collected: 04/21/20 11:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-15

Matrix: Solid
Percent Solids: 77.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.257	U	0.643	0.257	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Arsenic	0.514	U	1.29	0.514	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Barium	**2.23**	**J**	2.57	0.643	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Beryllium	0.0514	U	0.129	0.0514	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Cadmium	0.0309	U	0.0643	0.0309	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Chromium	**1.29**		1.29	0.579	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Cobalt	**0.215**	**J**	0.257	0.0964	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Lead	**0.629**		0.386	0.161	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Lithium	0.514	U	1.29	0.514	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Molybdenum	0.257	U	0.643	0.257	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Selenium	0.411	U	0.643	0.411	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2
Thallium	0.257	U	0.643	0.257	mg/Kg	☼	05/08/20 10:07	05/08/20 19:06	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-3-SS RA V2

Date Collected: 04/21/20 14:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-16

Matrix: Solid
Percent Solids: 60.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.300	U	0.751	0.300	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Arsenic	**5.10**		1.50	0.601	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Barium	**65.8**		3.00	0.751	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Beryllium	**0.853**		0.150	0.0601	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Cadmium	**0.222**		0.0751	0.0361	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Chromium	**9.84**		1.50	0.676	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Cobalt	**13.5**		0.300	0.113	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Lead	**9.68**		0.451	0.188	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Lithium	**3.28**		1.50	0.601	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Molybdenum	**0.813**		0.751	0.300	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Selenium	**1.45**		0.751	0.481	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2
Thallium	0.300	U	0.751	0.300	mg/Kg	☼	05/08/20 10:07	05/08/20 19:13	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-3-SS RA V3

Date Collected: 04/21/20 14:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-17

Matrix: Solid
Percent Solids: 79.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.221	U	0.554	0.221	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Arsenic	**4.52**		1.11	0.443	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Barium	**2.42**		2.21	0.554	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Beryllium	**0.0483**	**J**	0.111	0.0443	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Cadmium	**0.0332**	**J**	0.0554	0.0266	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Chromium	**1.09**	**J**	1.11	0.498	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Cobalt	**6.64**		0.221	0.0830	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Lead	**0.925**		0.332	0.138	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Lithium	**0.875**	**J**	1.11	0.443	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Molybdenum	**0.553**	**J**	0.554	0.221	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Selenium	0.354	U	0.554	0.354	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2
Thallium	0.221	U	0.554	0.221	mg/Kg	☼	05/08/20 10:07	05/08/20 19:20	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-4-SS RA V2

Date Collected: 04/21/20 17:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-18

Matrix: Solid
Percent Solids: 39.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.478	U	1.20	0.478	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Arsenic	**6.93**		2.39	0.957	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Barium	**176**		4.78	1.20	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Beryllium	**0.197**	**J**	0.239	0.0957	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Cadmium	0.0574	U	0.120	0.0574	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Chromium	**8.01**		2.39	1.08	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Cobalt	**1.70**		0.478	0.179	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Lead	**3.23**		0.718	0.299	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Lithium	**3.73**		2.39	0.957	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Molybdenum	**3.53**		1.20	0.478	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Selenium	**1.15**	**J**	1.20	0.766	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2
Thallium	0.478	U	1.20	0.478	mg/Kg	☼	05/08/20 10:07	05/08/20 19:26	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-4-SS RA V3

Date Collected: 04/21/20 17:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-19

Matrix: Solid
Percent Solids: 86.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.213	U	0.532	0.213	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Arsenic	0.425	U	1.06	0.425	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Barium	**4.19**		2.13	0.532	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Beryllium	0.0425	U	0.106	0.0425	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Cadmium	0.0255	U	0.0532	0.0255	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Chromium	0.479	U	1.06	0.479	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Cobalt	**0.150**	**J**	0.213	0.0798	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Lead	**0.512**		0.319	0.133	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Lithium	**0.530**	**J**	1.06	0.425	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Molybdenum	0.213	U	0.532	0.213	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Selenium	0.340	U	0.532	0.340	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2
Thallium	0.213	U	0.532	0.213	mg/Kg	☼	05/08/20 10:07	05/08/20 19:33	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-5-SS RA V2

Date Collected: 04/22/20 11:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-20

Matrix: Solid
Percent Solids: 71.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.233	U	0.583	0.233	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Arsenic	**1.28**		1.17	0.467	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Barium	**60.3**		2.33	0.583	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Beryllium	**0.331**		0.117	0.0467	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Cadmium	0.0280	U	0.0583	0.0280	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Chromium	**5.96**		1.17	0.525	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Cobalt	**0.743**		0.233	0.0875	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Lead	**7.82**		0.350	0.146	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Lithium	**2.40**		1.17	0.467	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Molybdenum	0.233	U	0.583	0.233	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Selenium	**0.744**		0.583	0.373	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2
Thallium	0.233	U	0.583	0.233	mg/Kg	☼	05/08/20 10:07	05/08/20 19:40	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-5-SS RA V3

Date Collected: 04/22/20 11:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-21

Matrix: Solid
Percent Solids: 78.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.218	U	0.546	0.218	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Arsenic	0.437	U	1.09	0.437	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Barium	**6.64**		2.18	0.546	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Beryllium	0.0437	U	0.109	0.0437	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Cadmium	0.0262	U	0.0546	0.0262	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Chromium	**0.629**	**J**	1.09	0.491	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Cobalt	0.0819	U	0.218	0.0819	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Lead	**0.436**		0.327	0.136	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Lithium	0.437	U	1.09	0.437	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Molybdenum	**0.263**	**J**	0.546	0.218	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Selenium	0.349	U	0.546	0.349	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2
Thallium	0.218	U	0.546	0.218	mg/Kg	☼	05/08/20 10:07	05/08/20 19:46	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-6-SS RA V2

Date Collected: 04/22/20 15:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-22

Matrix: Solid
Percent Solids: 65.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.293	U	0.733	0.293	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Arsenic	**1.75**		1.47	0.587	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Barium	**20.5**		2.93	0.733	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Beryllium	**0.192**		0.147	0.0587	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Cadmium	0.0352	U	0.0733	0.0352	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Chromium	**7.74**		1.47	0.660	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Cobalt	**1.08**		0.293	0.110	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Lead	**10.1**		0.440	0.183	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Lithium	**2.79**		1.47	0.587	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Molybdenum	**0.536**	**J**	0.733	0.293	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Selenium	**0.848**		0.733	0.469	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2
Thallium	0.293	U	0.733	0.293	mg/Kg	☼	05/08/20 10:07	05/08/20 19:53	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-6-SS RA V3

Date Collected: 04/22/20 15:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-34

Matrix: Solid
Percent Solids: 79.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.220	U	0.549	0.220	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Arsenic	**0.963**	**J**	1.10	0.439	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Barium	**2.22**		2.20	0.549	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Beryllium	**0.0472**	**J**	0.110	0.0439	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Cadmium	0.0263	U	0.0549	0.0263	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Chromium	**0.642**	**J**	1.10	0.494	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Cobalt	**0.0979**	**J**	0.220	0.0823	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Lead	**0.405**		0.329	0.137	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Lithium	**0.462**	**J**	1.10	0.439	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Molybdenum	**3.14**		0.549	0.220	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Selenium	0.351	U	0.549	0.351	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2
Thallium	0.220	U	0.549	0.220	mg/Kg	☼	05/08/20 10:07	05/08/20 20:00	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-7-SS RA V2

Date Collected: 04/23/20 09:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-35

Matrix: Solid
Percent Solids: 76.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.233	U	0.583	0.233	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Arsenic	**2.00**		1.17	0.467	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Barium	**20.4**		2.33	0.583	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Beryllium	**0.248**		0.117	0.0467	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Cadmium	0.0280	U	0.0583	0.0280	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Chromium	**6.02**		1.17	0.525	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Cobalt	**1.33**		0.233	0.0875	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Lead	**9.95**		0.350	0.146	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Lithium	**3.23**		1.17	0.467	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Molybdenum	0.233	U	0.583	0.233	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Selenium	**0.893**		0.583	0.373	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2
Thallium	0.233	U	0.583	0.233	mg/Kg	☼	05/08/20 10:07	05/08/20 20:07	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-7-SS RA V3

Date Collected: 04/23/20 09:30
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-36

Matrix: Solid
Percent Solids: 77.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.231	U	0.578	0.231	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Arsenic	0.463	U	1.16	0.463	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Barium	**2.69**		2.31	0.578	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Beryllium	0.0463	U	0.116	0.0463	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Cadmium	0.0278	U	0.0578	0.0278	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Chromium	**0.705**	**J**	1.16	0.520	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Cobalt	**0.320**		0.231	0.0867	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Lead	**0.802**		0.347	0.145	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Lithium	0.463	U	1.16	0.463	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Molybdenum	0.231	U	0.578	0.231	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Selenium	0.370	U	0.578	0.370	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2
Thallium	0.231	U	0.578	0.231	mg/Kg	☼	05/08/20 10:07	05/08/20 20:33	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-8-SS RA V2

Date Collected: 04/24/20 07:45
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-37

Matrix: Solid
Percent Solids: 77.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.220	U	0.551	0.220	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Arsenic	**1.55**		1.10	0.441	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Barium	**17.5**		2.20	0.551	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Beryllium	**0.0663**	**J**	0.110	0.0441	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Cadmium	0.0264	U	0.0551	0.0264	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Chromium	**3.81**		1.10	0.496	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Cobalt	**0.568**		0.220	0.0826	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Lead	**3.32**		0.331	0.138	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Lithium	**1.81**		1.10	0.441	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Molybdenum	**0.273**	**J**	0.551	0.220	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Selenium	0.353	U	0.551	0.353	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2
Thallium	0.220	U	0.551	0.220	mg/Kg	☼	05/08/20 10:07	05/08/20 20:40	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-8-SS RA V3

Date Collected: 04/24/20 07:50
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-38

Matrix: Solid
Percent Solids: 78.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.234	U	0.585	0.234	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Arsenic	0.468	U	1.17	0.468	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Barium	**2.37**		2.34	0.585	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Beryllium	0.0468	U	0.117	0.0468	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Cadmium	0.0281	U	0.0585	0.0281	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Chromium	**0.865**	**J**	1.17	0.527	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Cobalt	0.0878	U	0.234	0.0878	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Lead	**1.63**		0.351	0.146	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Lithium	0.468	U	1.17	0.468	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Molybdenum	**2.60**		0.585	0.234	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Selenium	0.374	U	0.585	0.374	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2
Thallium	0.234	U	0.585	0.234	mg/Kg	☼	05/08/20 10:07	05/08/20 20:47	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-9-SS RA V2

Date Collected: 04/24/20 12:10
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-39

Matrix: Solid
Percent Solids: 79.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.219	U	0.549	0.219	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Arsenic	**1.40**		1.10	0.439	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Barium	**25.3**		2.19	0.549	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Beryllium	**0.231**		0.110	0.0439	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Cadmium	0.0263	U	0.0549	0.0263	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Chromium	**4.86**		1.10	0.494	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Cobalt	**0.280**		0.219	0.0823	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Lead	**6.39**		0.329	0.137	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Lithium	**1.97**		1.10	0.439	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Molybdenum	0.219	U	0.549	0.219	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Selenium	**0.914**		0.549	0.351	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2
Thallium	0.219	U	0.549	0.219	mg/Kg	☼	05/08/20 10:07	05/08/20 20:54	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-9-SS RA V3

Date Collected: 04/24/20 12:15
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-40

Matrix: Solid
Percent Solids: 78.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.234	U	0.584	0.234	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Arsenic	0.467	U	1.17	0.467	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Barium	**1.03**	**J**	2.34	0.584	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Beryllium	0.0467	U	0.117	0.0467	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Cadmium	0.0280	U	0.0584	0.0280	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Chromium	**0.734**	**J**	1.17	0.526	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Cobalt	0.0876	U	0.234	0.0876	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Lead	**0.322**	**J**	0.350	0.146	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Lithium	0.467	U	1.17	0.467	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Molybdenum	0.234	U	0.584	0.234	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Selenium	0.374	U	0.584	0.374	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2
Thallium	0.234	U	0.584	0.234	mg/Kg	☼	05/08/20 10:07	05/08/20 21:00	2

Client Sample ID: DPT-10-SS RA V2

Date Collected: 04/24/20 13:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-41

Matrix: Solid
Percent Solids: 78.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.218	U	0.544	0.218	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Arsenic	**1.03**	**J**	1.09	0.435	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Barium	**26.0**		2.18	0.544	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Beryllium	**0.0740**	**J**	0.109	0.0435	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Cadmium	0.0261	U	0.0544	0.0261	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Chromium	**3.95**		1.09	0.490	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Cobalt	**0.255**		0.218	0.0816	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Lead	**4.91**		0.327	0.136	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Lithium	**2.94**		1.09	0.435	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Molybdenum	0.218	U	0.544	0.218	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Selenium	**0.481**	**J**	0.544	0.348	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2
Thallium	0.218	U	0.544	0.218	mg/Kg	☼	05/08/20 10:07	05/08/20 21:07	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-10-SS RA V3

Date Collected: 04/24/20 13:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-42

Matrix: Solid
Percent Solids: 77.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.228	U	0.570	0.228	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Arsenic	0.456	U	1.14	0.456	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Barium	**1.37**	**J**	2.28	0.570	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Beryllium	0.0456	U	0.114	0.0456	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Cadmium	0.0274	U	0.0570	0.0274	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Chromium	**0.880**	**J**	1.14	0.513	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Cobalt	0.0855	U	0.228	0.0855	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Lead	**0.526**		0.342	0.142	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Lithium	**0.834**	**J**	1.14	0.456	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Molybdenum	**0.339**	**J**	0.570	0.228	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Selenium	0.365	U	0.570	0.365	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2
Thallium	0.228	U	0.570	0.228	mg/Kg	☼	05/08/20 10:07	05/08/20 21:14	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DUP-01
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-43
Matrix: Solid
Percent Solids: 77.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.218	U	0.546	0.218	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Arsenic	0.437	U	1.09	0.437	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Barium	**1.65**	**J**	2.18	0.546	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Beryllium	0.0437	U	0.109	0.0437	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Cadmium	0.0262	U	0.0546	0.0262	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Chromium	**0.671**	**J**	1.09	0.491	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Cobalt	**0.168**	**J**	0.218	0.0819	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Lead	**0.536**		0.327	0.136	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Lithium	0.437	U	1.09	0.437	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Molybdenum	0.218	U	0.546	0.218	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Selenium	0.349	U	0.546	0.349	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2
Thallium	0.218	U	0.546	0.218	mg/Kg	☼	05/08/20 10:12	05/08/20 22:01	2

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DUP-02
Date Collected: 04/21/20 00:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-44
Matrix: Solid
Percent Solids: 78.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.218	U	0.544	0.218	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Arsenic	**0.655**	**J**	1.09	0.435	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Barium	**91.7**		2.18	0.544	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Beryllium	**0.697**		0.109	0.0435	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Cadmium	0.0261	U	0.0544	0.0261	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Chromium	**3.57**		1.09	0.490	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Cobalt	**0.115**	**J**	0.218	0.0817	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Lead	**7.64**		0.327	0.136	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Lithium	**2.74**		1.09	0.435	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Molybdenum	0.218	U	0.544	0.218	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Selenium	**1.48**		0.544	0.348	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2
Thallium	0.218	U	0.544	0.218	mg/Kg	☼	05/08/20 10:12	05/08/20 22:34	2

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-1-SS RA V2
Date Collected: 04/20/20 15:55
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-12
Matrix: Solid
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 17:59	CB	TAL SL

Client Sample ID: DPT-1-SS RA V3
Date Collected: 04/20/20 16:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-13
Matrix: Solid
Percent Solids: 74.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 18:33	CB	TAL SL

Client Sample ID: DPT-2-SS RA V2
Date Collected: 04/21/20 11:00
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-14
Matrix: Solid
Percent Solids: 70.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 18:39	CB	TAL SL

Client Sample ID: DPT-2-SS RA V3
Date Collected: 04/21/20 11:05
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-15
Matrix: Solid
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 19:06	CB	TAL SL

Client Sample ID: DPT-3-SS RA V2
Date Collected: 04/21/20 14:20
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-16
Matrix: Solid
Percent Solids: 60.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 19:13	CB	TAL SL

Client Sample ID: DPT-3-SS RA V3
Date Collected: 04/21/20 14:25
Date Received: 04/28/20 08:49

Lab Sample ID: 400-187320-17
Matrix: Solid
Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 19:20	CB	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-4-SS RA V2
Lab Sample ID: 400-187320-18
Date Collected: 04/21/20 17:55
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 39.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 19:26	CB	TAL SL

Client Sample ID: DPT-4-SS RA V3
Lab Sample ID: 400-187320-19
Date Collected: 04/21/20 17:45
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 19:33	CB	TAL SL

Client Sample ID: DPT-5-SS RA V2
Lab Sample ID: 400-187320-20
Date Collected: 04/22/20 11:25
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 71.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 19:40	CB	TAL SL

Client Sample ID: DPT-5-SS RA V3
Lab Sample ID: 400-187320-21
Date Collected: 04/22/20 11:30
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 19:46	CB	TAL SL

Client Sample ID: DPT-6-SS RA V2
Lab Sample ID: 400-187320-22
Date Collected: 04/22/20 15:00
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 65.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 19:53	CB	TAL SL

Client Sample ID: DPT-6-SS RA V3
Lab Sample ID: 400-187320-34
Date Collected: 04/22/20 15:05
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 20:00	CB	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-7-SS RA V2
Lab Sample ID: 400-187320-35
Date Collected: 04/23/20 09:25
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 76.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 20:07	CB	TAL SL

Client Sample ID: DPT-7-SS RA V3
Lab Sample ID: 400-187320-36
Date Collected: 04/23/20 09:30
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 20:33	CB	TAL SL

Client Sample ID: DPT-8-SS RA V2
Lab Sample ID: 400-187320-37
Date Collected: 04/24/20 07:45
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 20:40	CB	TAL SL

Client Sample ID: DPT-8-SS RA V3
Lab Sample ID: 400-187320-38
Date Collected: 04/24/20 07:50
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 20:47	CB	TAL SL

Client Sample ID: DPT-9-SS RA V2
Lab Sample ID: 400-187320-39
Date Collected: 04/24/20 12:10
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 20:54	CB	TAL SL

Client Sample ID: DPT-9-SS RA V3
Lab Sample ID: 400-187320-40
Date Collected: 04/24/20 12:15
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 21:00	CB	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Client Sample ID: DPT-10-SS RA V2

Lab Sample ID: 400-187320-41

Date Collected: 04/24/20 13:20
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 21:07	CB	TAL SL

Client Sample ID: DPT-10-SS RA V3

Lab Sample ID: 400-187320-42

Date Collected: 04/24/20 13:25
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471675	05/08/20 10:07	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 21:14	CB	TAL SL

Client Sample ID: DUP-01

Lab Sample ID: 400-187320-43

Date Collected: 04/21/20 00:00
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471676	05/08/20 10:12	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 22:01	CB	TAL SL

Client Sample ID: DUP-02

Lab Sample ID: 400-187320-44

Date Collected: 04/21/20 00:00
Matrix: Solid
Date Received: 04/28/20 08:49
Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471676	05/08/20 10:12	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 22:34	CB	TAL SL

Laboratory References:

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

Metals

Prep Batch: 471675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-12	DPT-1-SS RA V2	Total/NA	Solid	3050B	
400-187320-13	DPT-1-SS RA V3	Total/NA	Solid	3050B	
400-187320-14	DPT-2-SS RA V2	Total/NA	Solid	3050B	
400-187320-15	DPT-2-SS RA V3	Total/NA	Solid	3050B	
400-187320-16	DPT-3-SS RA V2	Total/NA	Solid	3050B	
400-187320-17	DPT-3-SS RA V3	Total/NA	Solid	3050B	
400-187320-18	DPT-4-SS RA V2	Total/NA	Solid	3050B	
400-187320-19	DPT-4-SS RA V3	Total/NA	Solid	3050B	
400-187320-20	DPT-5-SS RA V2	Total/NA	Solid	3050B	
400-187320-21	DPT-5-SS RA V3	Total/NA	Solid	3050B	
400-187320-22	DPT-6-SS RA V2	Total/NA	Solid	3050B	
400-187320-34	DPT-6-SS RA V3	Total/NA	Solid	3050B	
400-187320-35	DPT-7-SS RA V2	Total/NA	Solid	3050B	
400-187320-36	DPT-7-SS RA V3	Total/NA	Solid	3050B	
400-187320-37	DPT-8-SS RA V2	Total/NA	Solid	3050B	
400-187320-38	DPT-8-SS RA V3	Total/NA	Solid	3050B	
400-187320-39	DPT-9-SS RA V2	Total/NA	Solid	3050B	
400-187320-40	DPT-9-SS RA V3	Total/NA	Solid	3050B	
400-187320-41	DPT-10-SS RA V2	Total/NA	Solid	3050B	
400-187320-42	DPT-10-SS RA V3	Total/NA	Solid	3050B	
MB 160-471675/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 160-471675/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSSRM 160-471675/3-A	Lab Control Sample	Total/NA	Solid	3050B	
400-187320-12 MS	DPT-1-SS RA V2	Total/NA	Solid	3050B	
400-187320-12 MSD	DPT-1-SS RA V2	Total/NA	Solid	3050B	

Prep Batch: 471676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-43	DUP-01	Total/NA	Solid	3050B	
400-187320-44	DUP-02	Total/NA	Solid	3050B	
MB 160-471676/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 160-471676/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSSRM 160-471676/3-A	Lab Control Sample	Total/NA	Solid	3050B	
400-187320-43 MS	DUP-01	Total/NA	Solid	3050B	
400-187320-43 MSD	DUP-01	Total/NA	Solid	3050B	

Analysis Batch: 471679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-12	DPT-1-SS RA V2	Total/NA	Solid	6020	471675
400-187320-13	DPT-1-SS RA V3	Total/NA	Solid	6020	471675
400-187320-14	DPT-2-SS RA V2	Total/NA	Solid	6020	471675
400-187320-15	DPT-2-SS RA V3	Total/NA	Solid	6020	471675
400-187320-16	DPT-3-SS RA V2	Total/NA	Solid	6020	471675
400-187320-17	DPT-3-SS RA V3	Total/NA	Solid	6020	471675
400-187320-18	DPT-4-SS RA V2	Total/NA	Solid	6020	471675
400-187320-19	DPT-4-SS RA V3	Total/NA	Solid	6020	471675
400-187320-20	DPT-5-SS RA V2	Total/NA	Solid	6020	471675
400-187320-21	DPT-5-SS RA V3	Total/NA	Solid	6020	471675
400-187320-22	DPT-6-SS RA V2	Total/NA	Solid	6020	471675
400-187320-34	DPT-6-SS RA V3	Total/NA	Solid	6020	471675
400-187320-35	DPT-7-SS RA V2	Total/NA	Solid	6020	471675

Metals (Continued)

Analysis Batch: 471679 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187320-36	DPT-7-SS RA V3	Total/NA	Solid	6020	471675
400-187320-37	DPT-8-SS RA V2	Total/NA	Solid	6020	471675
400-187320-38	DPT-8-SS RA V3	Total/NA	Solid	6020	471675
400-187320-39	DPT-9-SS RA V2	Total/NA	Solid	6020	471675
400-187320-40	DPT-9-SS RA V3	Total/NA	Solid	6020	471675
400-187320-41	DPT-10-SS RA V2	Total/NA	Solid	6020	471675
400-187320-42	DPT-10-SS RA V3	Total/NA	Solid	6020	471675
400-187320-43	DUP-01	Total/NA	Solid	6020	471676
400-187320-44	DUP-02	Total/NA	Solid	6020	471676
MB 160-471675/1-A	Method Blank	Total/NA	Solid	6020	471675
MB 160-471676/1-A	Method Blank	Total/NA	Solid	6020	471676
LCS 160-471675/2-A	Lab Control Sample	Total/NA	Solid	6020	471675
LCS 160-471676/2-A	Lab Control Sample	Total/NA	Solid	6020	471676
LCSSRM 160-471675/3-A	Lab Control Sample	Total/NA	Solid	6020	471675
LCSSRM 160-471676/3-A	Lab Control Sample	Total/NA	Solid	6020	471676
400-187320-12 MS	DPT-1-SS RA V2	Total/NA	Solid	6020	471675
400-187320-12 MSD	DPT-1-SS RA V2	Total/NA	Solid	6020	471675
400-187320-43 MS	DUP-01	Total/NA	Solid	6020	471676
400-187320-43 MSD	DUP-01	Total/NA	Solid	6020	471676

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-471675/1-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471675

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.198	U	0.496	0.198	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Arsenic	0.397	U	0.992	0.397	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Barium	0.496	U	1.98	0.496	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Beryllium	0.0397	U	0.0992	0.0397	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Cadmium	0.0238	U	0.0496	0.0238	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Chromium	0.446	U	0.992	0.446	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Cobalt	0.0744	U	0.198	0.0744	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Lead	0.124	U	0.298	0.124	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Lithium	0.397	U	0.992	0.397	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Molybdenum	0.198	U	0.496	0.198	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Selenium	0.317	U	0.496	0.317	mg/Kg		05/08/20 10:07	05/08/20 17:39	2
Thallium	0.198	U	0.496	0.198	mg/Kg		05/08/20 10:07	05/08/20 17:39	2

Lab Sample ID: LCS 160-471675/2-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471675

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	9.80	10.57		mg/Kg		108	80 - 120

Lab Sample ID: LCSSRM 160-471675/3-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471675

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	99.4	70.58		mg/Kg		71.0	20.7 - 256.5
Arsenic	97.6	101.9		mg/Kg		104.4	70.0 - 130.1
Barium	320	348.8		mg/Kg		109.0	75.0 - 125.0
Beryllium	41.4	45.95		mg/Kg		111.0	75.1 - 125.1
Cadmium	114	120.8		mg/Kg		105.9	75.0 - 125.4
Chromium	147	141.0		mg/Kg		95.9	70.1 - 129.9
Cobalt	46.7	45.87		mg/Kg		98.2	75.2 - 125.1
Lead	105	120.9		mg/Kg		115.2	70.5 - 128.6
Molybdenum	78.8	90.06		mg/Kg		114.3	69.5 - 130.7
Selenium	93.1	99.35		mg/Kg		106.7	64.6 - 135.3
Thallium	104	118.5		mg/Kg		113.9	67.3 - 131.7

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

Lab Sample ID: 400-187320-12 MS
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: DPT-1-SS RA V2
Prep Type: Total/NA
Prep Batch: 471675

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.226	U F1 F2	55.3	22.01	F1	mg/Kg	☼	40	75 - 125
Arsenic	4.17		111	111.7		mg/Kg	☼	97	75 - 125
Barium	10.6		111	137.9		mg/Kg	☼	115	75 - 125
Beryllium	0.149		11.1	12.48		mg/Kg	☼	111	75 - 125
Cadmium	0.0271	U	111	116.7		mg/Kg	☼	106	75 - 125
Chromium	7.51		111	107.1		mg/Kg	☼	90	75 - 125
Cobalt	0.285		111	111.1		mg/Kg	☼	100	75 - 125
Lead	4.09		111	121.8		mg/Kg	☼	106	75 - 125
Lithium	2.85	F1	11.1	26.27	F1	mg/Kg	☼	212	75 - 125
Molybdenum	0.721		55.3	60.79		mg/Kg	☼	109	75 - 125
Selenium	0.566		55.3	51.52		mg/Kg	☼	92	75 - 125
Thallium	0.226	U	22.1	23.05		mg/Kg	☼	104	75 - 125

Lab Sample ID: 400-187320-12 MSD
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: DPT-1-SS RA V2
Prep Type: Total/NA
Prep Batch: 471675

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.226	U F1 F2	63.6	31.58	F1 F2	mg/Kg	☼	50	75 - 125	36	30
Arsenic	4.17		127	130.5		mg/Kg	☼	99	75 - 125	15	30
Barium	10.6		127	146.9		mg/Kg	☼	107	75 - 125	6	30
Beryllium	0.149		12.7	13.84		mg/Kg	☼	108	75 - 125	10	30
Cadmium	0.0271	U	127	131.9		mg/Kg	☼	104	75 - 125	12	30
Chromium	7.51		127	128.0		mg/Kg	☼	95	75 - 125	18	30
Cobalt	0.285		127	131.0		mg/Kg	☼	103	75 - 125	16	30
Lead	4.09		127	136.8		mg/Kg	☼	104	75 - 125	12	30
Lithium	2.85	F1	12.7	24.20	F1	mg/Kg	☼	168	75 - 125	8	30
Molybdenum	0.721		63.6	70.24		mg/Kg	☼	109	75 - 125	14	30
Selenium	0.566		63.6	59.79		mg/Kg	☼	93	75 - 125	15	30
Thallium	0.226	U	25.4	26.50		mg/Kg	☼	104	75 - 125	14	30

Lab Sample ID: MB 160-471676/1-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.199	U	0.497	0.199	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Arsenic	0.397	U	0.993	0.397	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Barium	0.497	U	1.99	0.497	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Beryllium	0.0397	U	0.0993	0.0397	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Cadmium	0.0238	U	0.0497	0.0238	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Chromium	0.447	U	0.993	0.447	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Cobalt	0.0745	U	0.199	0.0745	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Lead	0.124	U	0.298	0.124	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Lithium	0.397	U	0.993	0.397	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Molybdenum	0.199	U	0.497	0.199	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Selenium	0.318	U	0.497	0.318	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Thallium	0.199	U	0.497	0.199	mg/Kg		05/08/20 10:12	05/08/20 21:20	2

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

Lab Sample ID: LCS 160-471676/2-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	9.55	10.11		mg/Kg		106	80 - 120

Lab Sample ID: LCSSRM 160-471676/3-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471676

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	99.4	75.25		mg/Kg		75.7	20.7 - 256.5
Arsenic	97.6	108.4		mg/Kg		111.1	70.0 - 130.1
Barium	320	351.3		mg/Kg		109.8	75.0 - 125.0
Beryllium	41.4	45.52		mg/Kg		110.0	75.1 - 125.1
Cadmium	114	119.6		mg/Kg		104.9	75.0 - 125.4
Chromium	147	149.3		mg/Kg		101.6	70.1 - 129.9
Cobalt	46.7	48.41		mg/Kg		103.7	75.2 - 125.1
Lead	105	118.8		mg/Kg		113.1	70.5 - 128.6
Molybdenum	78.8	93.08		mg/Kg		118.1	69.5 - 130.7
Selenium	93.1	102.4		mg/Kg		110.0	64.6 - 135.3
Thallium	104	116.8		mg/Kg		112.3	67.3 - 131.7

Lab Sample ID: 400-187320-43 MS
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: DUP-01
Prep Type: Total/NA
Prep Batch: 471676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.218	U	63.1	64.78		mg/Kg	☼	103	75 - 125
Arsenic	0.437	U	126	119.8		mg/Kg	☼	95	75 - 125
Barium	1.65	J	126	135.1		mg/Kg	☼	106	75 - 125
Beryllium	0.0437	U	12.6	13.23		mg/Kg	☼	105	75 - 125
Cadmium	0.0262	U	126	132.6		mg/Kg	☼	105	75 - 125
Chromium	0.671	J	126	120.7		mg/Kg	☼	95	75 - 125
Cobalt	0.168	J	126	122.3		mg/Kg	☼	97	75 - 125
Lead	0.536		126	133.2		mg/Kg	☼	105	75 - 125
Lithium	0.437	U	12.6	14.11		mg/Kg	☼	112	75 - 125
Molybdenum	0.218	U	63.1	70.44		mg/Kg	☼	112	75 - 125
Selenium	0.349	U	63.1	56.57		mg/Kg	☼	90	75 - 125
Thallium	0.218	U	25.2	26.38		mg/Kg	☼	105	75 - 125

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

Lab Sample ID: 400-187320-43 MSD
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: DUP-01
Prep Type: Total/NA
Prep Batch: 471676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.218	U	59.3	57.80		mg/Kg	☼	98	75 - 125	11	30
Arsenic	0.437	U	119	111.4		mg/Kg	☼	94	75 - 125	7	30
Barium	1.65	J	119	118.4		mg/Kg	☼	98	75 - 125	13	30
Beryllium	0.0437	U	11.9	11.61		mg/Kg	☼	98	75 - 125	13	30
Cadmium	0.0262	U	119	119.8		mg/Kg	☼	101	75 - 125	10	30
Chromium	0.671	J	119	111.5		mg/Kg	☼	94	75 - 125	8	30
Cobalt	0.168	J	119	115.1		mg/Kg	☼	97	75 - 125	6	30
Lead	0.536		119	118.8		mg/Kg	☼	100	75 - 125	11	30
Lithium	0.437	U	11.9	12.29		mg/Kg	☼	104	75 - 125	14	30
Molybdenum	0.218	U	59.3	62.69		mg/Kg	☼	106	75 - 125	12	30
Selenium	0.349	U	59.3	53.16		mg/Kg	☼	90	75 - 125	6	30
Thallium	0.218	U	23.7	23.96		mg/Kg	☼	101	75 - 125	10	30

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187320-3
SDG Number: Plant Watson

Login Number: 187320
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.6°C, 2.8°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187320-3
SDG Number: Plant Watson

Login Number: 187320
List Number: 3
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 04/29/20 09:51 PM

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187320-3
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	05-14-20
ANAB	Dept. of Energy	L2305.01	05-14-20
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187407-1
Laboratory Sample Delivery Group: Plant Watson
Client Project/Site: Plant Watson

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Mark Swafford

Authorized for release by:
5/12/2020 1:59:24 PM
Mark Swafford, Project Manager II
(850)471-6207
mark.swafford@testamericainc.com

Designee for

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187407-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187407-1

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria of <6°C (16.2°C), with no cooling agent present: DPT-11-SS RA V2 (400-187407-1), DPT-11-SS RA V3 (400-187407-2), DPT-12-SS RA V2 (400-187407-3), DPT-12-SS RA V3 (400-187407-4), DPT-13-SS RA V2 (400-187407-5) and DPT-13-SS RA V3 (400-187407-6).

A solid 4oz jar container for the following sample was received broken: DPT-12-SS RA V3 (400-187407-4). The sample was transferred to a new container with minimal loss; sufficient sample is remaining for analysis.

Method Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SL
Moisture	Percent Moisture	EPA	TAL SL
3050B	Preparation, Metals	SW846	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187407-1	DPT-11-SS RA V2	Solid	04/27/20 12:20	04/30/20 09:27	
400-187407-2	DPT-11-SS RA V3	Solid	04/27/20 12:25	04/30/20 09:27	
400-187407-3	DPT-12-SS RA V2	Solid	04/27/20 15:05	04/30/20 09:27	
400-187407-4	DPT-12-SS RA V3	Solid	04/27/20 15:20	04/30/20 09:27	
400-187407-5	DPT-13-SS RA V2	Solid	04/28/20 10:15	04/30/20 09:27	
400-187407-6	DPT-13-SS RA V3	Solid	04/28/20 11:30	04/30/20 09:27	

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Client Sample ID: DPT-11-SS RA V2

Date Collected: 04/27/20 12:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-1

Matrix: Solid
Percent Solids: 61.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	6.12		0.274	0.123	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Uranium	2.27		0.137	0.0547	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Client Sample ID: DPT-11-SS RA V3

Date Collected: 04/27/20 12:25
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-2

Matrix: Solid
Percent Solids: 81.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.988		0.230	0.103	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Uranium	0.817		0.115	0.0460	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Client Sample ID: DPT-12-SS RA V2

Date Collected: 04/27/20 15:05
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-3

Matrix: Solid
Percent Solids: 77.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	4.47		0.229	0.103	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Uranium	0.984		0.115	0.0458	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Client Sample ID: DPT-12-SS RA V3

Date Collected: 04/27/20 15:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-4

Matrix: Solid
Percent Solids: 82.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.118	J	0.221	0.0993	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Uranium	0.0441	U	0.110	0.0441	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Client Sample ID: DPT-13-SS RA V2

Date Collected: 04/28/20 10:15
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-5

Matrix: Solid
Percent Solids: 75.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	6.37		0.235	0.106	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Uranium	1.06		0.118	0.0470	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Client Sample ID: DPT-13-SS RA V3
Date Collected: 04/28/20 11:30
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-6
Matrix: Solid
Percent Solids: 77.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	**0.110**	**J**	0.232	0.104	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Uranium	0.0464	U	0.116	0.0464	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Client Sample ID: DPT-11-SS RA V2
Date Collected: 04/27/20 12:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Client Sample ID: DPT-11-SS RA V2
Date Collected: 04/27/20 12:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-1
Matrix: Solid
Percent Solids: 61.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469893	05/08/20 10:12	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 23:02	FLC	TAL SL

Client Sample ID: DPT-11-SS RA V3
Date Collected: 04/27/20 12:25
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Client Sample ID: DPT-11-SS RA V3
Date Collected: 04/27/20 12:25
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-2
Matrix: Solid
Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469893	05/08/20 10:12	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 23:28	FLC	TAL SL

Client Sample ID: DPT-12-SS RA V2
Date Collected: 04/27/20 15:05
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Client Sample ID: DPT-12-SS RA V2
Date Collected: 04/27/20 15:05
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-3
Matrix: Solid
Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469893	05/08/20 10:12	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 23:35	FLC	TAL SL

Client Sample ID: DPT-12-SS RA V3
Date Collected: 04/27/20 15:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Client Sample ID: DPT-12-SS RA V3
Date Collected: 04/27/20 15:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-4
Matrix: Solid
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469893	05/08/20 10:12	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 23:42	FLC	TAL SL

Client Sample ID: DPT-13-SS RA V2
Date Collected: 04/28/20 10:15
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Client Sample ID: DPT-13-SS RA V2
Date Collected: 04/28/20 10:15
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-5
Matrix: Solid
Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469893	05/08/20 10:12	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 23:49	FLC	TAL SL

Client Sample ID: DPT-13-SS RA V3
Date Collected: 04/28/20 11:30
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	469480	05/04/20 07:47	RJD	TAL SL

Client Sample ID: DPT-13-SS RA V3
Date Collected: 04/28/20 11:30
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-6
Matrix: Solid
Percent Solids: 77.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			469893	05/08/20 10:12	LKP	TAL SL
Total/NA	Analysis	6020		2	469984	05/08/20 23:55	FLC	TAL SL

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Metals

Prep Batch: 469893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187407-1	DPT-11-SS RA V2	Total/NA	Solid	3050B	
400-187407-2	DPT-11-SS RA V3	Total/NA	Solid	3050B	
400-187407-3	DPT-12-SS RA V2	Total/NA	Solid	3050B	
400-187407-4	DPT-12-SS RA V3	Total/NA	Solid	3050B	
400-187407-5	DPT-13-SS RA V2	Total/NA	Solid	3050B	
400-187407-6	DPT-13-SS RA V3	Total/NA	Solid	3050B	
MB 160-469893/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 160-469893/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSSRM 160-469893/3-A	Lab Control Sample	Total/NA	Solid	3050B	
400-187320-A-43-K MS	Matrix Spike	Total/NA	Solid	3050B	
400-187320-A-43-L MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 469984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187407-1	DPT-11-SS RA V2	Total/NA	Solid	6020	469893
400-187407-2	DPT-11-SS RA V3	Total/NA	Solid	6020	469893
400-187407-3	DPT-12-SS RA V2	Total/NA	Solid	6020	469893
400-187407-4	DPT-12-SS RA V3	Total/NA	Solid	6020	469893
400-187407-5	DPT-13-SS RA V2	Total/NA	Solid	6020	469893
400-187407-6	DPT-13-SS RA V3	Total/NA	Solid	6020	469893
MB 160-469893/1-A	Method Blank	Total/NA	Solid	6020	469893
LCS 160-469893/2-A	Lab Control Sample	Total/NA	Solid	6020	469893
LCSSRM 160-469893/3-A	Lab Control Sample	Total/NA	Solid	6020	469893
400-187320-A-43-K MS	Matrix Spike	Total/NA	Solid	6020	469893
400-187320-A-43-L MSD	Matrix Spike Duplicate	Total/NA	Solid	6020	469893

General Chemistry

Analysis Batch: 469480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187407-1	DPT-11-SS RA V2	Total/NA	Solid	Moisture	
400-187407-2	DPT-11-SS RA V3	Total/NA	Solid	Moisture	
400-187407-3	DPT-12-SS RA V2	Total/NA	Solid	Moisture	
400-187407-4	DPT-12-SS RA V3	Total/NA	Solid	Moisture	
400-187407-5	DPT-13-SS RA V2	Total/NA	Solid	Moisture	
400-187407-6	DPT-13-SS RA V3	Total/NA	Solid	Moisture	
400-187320-B-42 DU	Duplicate	Total/NA	Solid	Moisture	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-469893/1-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469893

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	0.0894	U	0.199	0.0894	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Uranium	0.0397	U	0.0993	0.0397	mg/Kg		05/08/20 10:12	05/08/20 21:20	2

Lab Sample ID: LCS 160-469893/2-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469893

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	95.5	99.53		mg/Kg		104	80 - 120

Lab Sample ID: LCSSRM 160-469893/3-A
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469893

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Uranium	22.5	24.79		mg/Kg		110.2	68.0 - 132.4

Lab Sample ID: 400-187320-A-43-K MS
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 469893

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	0.203	J	126	131.1		mg/Kg	☼	104	75 - 125
Uranium	0.0437	U	126	131.7		mg/Kg	☼	104	75 - 125

Lab Sample ID: 400-187320-A-43-L MSD
Matrix: Solid
Analysis Batch: 469984

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 469893

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thorium	0.203	J	119	118.0		mg/Kg	☼	99	75 - 125	11	30
Uranium	0.0437	U	119	118.2		mg/Kg	☼	100	75 - 125	11	30

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

400-187407 COC

Client Information

Client Contact: Lauren Parker	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):
Company: Southern Company	Phone: 985-264-5408	E-Mail: cheyenne.whitmire@testamericainc.com	COC No: 400-93871-34057.5
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested: Perquote		Page: Page 5 of 6
City: Birmingham	TAT Requested (days): perquote		Job #:
State, Zip: AL, 35243	PO #: SCS10382606		
Phone: 205-992-6283(Tel)	WO #:		
Email: laparker@southernco.com	Project #: 40001674		
Project Name: Plant Watson	SSOW#:		
Site: Plant Watson			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Leach test	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D			
DPT-11-55 Ra U2	4/27/20	1220	C	Solid	N	N				X	X	X	X				X		
DPT-11-55 Ra U3		1225	C	Solid						X	X	X	X				X		
DPT-12-55 Ra U2		1505	C	Solid						X	X	X	X				X		
DPT-12-55 Ra U3		1520	C	Solid						X	X	X	X				X		
DPT-13-55 Ra U2	4/28/20	1015	C	Solid						X	X	X	X				X		
DPT-13-55 Ra U3		1130	C	Solid	V	V				X	X	X	X				X		
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															

Baton Rouge 218

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	4/29/20 12:35	Geosyntec	Received by:	4/29/2020 12:35	ETA
Relinquished by:	4/29/2020	ETA	Received by:	4/30/20 927	TA Rou
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.0°C, 0.4°C IR 8

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-242389.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Mississippi	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 400-187407-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/12/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: GW Monitoring AL,MS,etc	Project #: 40001674			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Ra226Ra228_GFPC/ (MOD) Combined Radium-226 and Radium-228	9315_Ra226/DPS_21 Radium 226	9320_Ra228/DPS_0 (MOD) Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
DPT-11-SS RA V2 (400-187407-1)	4/27/20	12:20 Central		Solid			X	X	X	2	
DPT-11-SS RA V3 (400-187407-2)	4/27/20	12:25 Central		Solid			X	X	X	2	
DPT-12-SS RA V2 (400-187407-3)	4/27/20	15:05 Central		Solid			X	X	X	2	
DPT-12-SS RA V3 (400-187407-4)	4/27/20	15:20 Central		Solid			X	X	X	2	
DPT-13-SS RA V2 (400-187407-5)	4/28/20	10:15 Central		Solid			X	X	X	2	
DPT-13-SS RA V3 (400-187407-6)	4/28/20	11:30 Central		Solid			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kathy R Avery	4-30-20 1545	ETA			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-242389.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Mississippi	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 400-187407-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/4/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: GW Monitoring AL,MS,etc	Project #: 40001674			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Moisture/ Percent Moisture	6020/3050B_2% Uranium & Thorium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DPT-11-SS RA V2 (400-187407-1)	4/27/20	12:20 Central		Solid			X	X	2	
DPT-11-SS RA V3 (400-187407-2)	4/27/20	12:25 Central		Solid			X	X	2	
DPT-12-SS RA V2 (400-187407-3)	4/27/20	15:05 Central		Solid			X	X	2	
DPT-12-SS RA V3 (400-187407-4)	4/27/20	15:20 Central		Solid			X	X	2	
DPT-13-SS RA V2 (400-187407-5)	4/28/20	10:15 Central		Solid			X	X	2	
DPT-13-SS RA V3 (400-187407-6)	4/28/20	11:30 Central		Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kathy R Avery	4-30-20 1545	ETA			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187407-1
SDG Number: Plant Watson

Login Number: 187407
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.4°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187407-1
SDG Number: Plant Watson

Login Number: 187407
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/01/20 08:58 PM

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-1
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187407-2
Laboratory Sample Delivery Group: Plant Watson
Client Project/Site: Plant Watson

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Cheyenne R Whitmire

Authorized for release by:
6/19/2020 1:16:12 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Job ID: 400-187407-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187407-2

Receipt Exceptions
A solid 4oz jar container for the following sample was received broken: DPT-12-SS RA V3 (400-187407-4). The sample was transferred to a new container with minimal loss; sufficient sample is remaining for analysis.

Gas Flow Proportional Counter
Method 9315_Ra226: Ra-226 Prep Batch 160-469806Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DPT-11-SS RA V2 (400-187407-1), DPT-11-SS RA V3 (400-187407-2), DPT-12-SS RA V2 (400-187407-3), DPT-12-SS RA V3 (400-187407-4), DPT-13-SS RA V2 (400-187407-5), DPT-13-SS RA V3 (400-187407-6), (LCS 160-469806/1-A), (MB 160-469806/11-A), (400-187320-A-43-F) and (400-187320-A-43-G DU)

Method 9320_Ra228: Radium-228 Prep Batch: 160-469808Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DPT-11-SS RA V2 (400-187407-1), DPT-11-SS RA V3 (400-187407-2), DPT-12-SS RA V2 (400-187407-3), DPT-12-SS RA V3 (400-187407-4), DPT-13-SS RA V2 (400-187407-5), DPT-13-SS RA V3 (400-187407-6), (LCS 160-469808/1-A), (MB 160-469808/11-A), (400-187320-A-43-H) and (400-187320-A-43-I DU)

Method Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
DPS-0	Preparation, Digestion/ Precipitate	None	TAL SL
DPS-21	Preparation, Digestion/Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187407-1	DPT-11-SS RA V2	Solid	04/27/20 12:20	04/30/20 09:27	
400-187407-2	DPT-11-SS RA V3	Solid	04/27/20 12:25	04/30/20 09:27	
400-187407-3	DPT-12-SS RA V2	Solid	04/27/20 15:05	04/30/20 09:27	
400-187407-4	DPT-12-SS RA V3	Solid	04/27/20 15:20	04/30/20 09:27	
400-187407-5	DPT-13-SS RA V2	Solid	04/28/20 10:15	04/30/20 09:27	
400-187407-6	DPT-13-SS RA V3	Solid	04/28/20 11:30	04/30/20 09:27	

Client Sample ID: DPT-11-SS RA V2

Date Collected: 04/27/20 12:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-1

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.02		0.174	0.196	1.00	0.0958	pCi/g	05/07/20 11:59	06/01/20 04:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:48*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.02		0.332	0.345	1.00	0.441	pCi/g	05/07/20 12:23	05/19/20 14:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:40*	*1*
Y Carrier	*89.0*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.04		0.375	0.397	5.00	0.441	pCi/g		06/01/20 08:25	1

Client Sample ID: DPT-11-SS RA V3

Date Collected: 04/27/20 12:25
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-2

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.162		0.0755	0.0769	1.00	0.0817	pCi/g	05/07/20 11:59	06/01/20 04:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.8*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:48*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.112	U	0.225	0.225	1.00	0.386	pCi/g	05/07/20 12:23	05/19/20 14:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.8*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:40*	*1*
Y Carrier	*87.5*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.275	U	0.237	0.238	5.00	0.386	pCi/g		06/01/20 08:25	1

Client Sample ID: DPT-12-SS RA V2

Date Collected: 04/27/20 15:05
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-3

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.773		0.150	0.166	1.00	0.0830	pCi/g	05/07/20 11:59	06/01/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.502		0.299	0.302	1.00	0.453	pCi/g	05/07/20 12:23	05/19/20 14:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:40*	*1*
Y Carrier	*86.4*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.28		0.335	0.345	5.00	0.453	pCi/g		06/01/20 08:25	1

Client Sample ID: DPT-12-SS RA V3

Date Collected: 04/27/20 15:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-4

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0734	U	0.0565	0.0569	1.00	0.0776	pCi/g	05/07/20 11:59	06/01/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.179	U	0.264	0.265	1.00	0.443	pCi/g	05/07/20 12:23	05/19/20 14:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:40*	*1*
Y Carrier	*89.7*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.253	U	0.270	0.271	5.00	0.443	pCi/g		06/01/20 08:25	1

Client Sample ID: DPT-13-SS RA V2

Date Collected: 04/28/20 10:15
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-5

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.491**		0.121	0.128	1.00	0.0856	pCi/g	05/07/20 11:59	06/01/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.275	U	0.257	0.259	1.00	0.415	pCi/g	05/07/20 12:23	05/19/20 14:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:41*	*1*
Y Carrier	*89.3*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:41*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.767**		0.284	0.289	5.00	0.415	pCi/g		06/01/20 08:25	1

Client Sample ID: DPT-13-SS RA V3

Date Collected: 04/28/20 11:30
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-6

Matrix: Solid

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0634	U	0.0606	0.0608	1.00	0.0933	pCi/g	05/07/20 11:59	06/01/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.9*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.00751	U	0.203	0.203	1.00	0.370	pCi/g	05/07/20 12:23	05/19/20 14:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.6*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:41*	*1*
Y Carrier	*86.7*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:41*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0709	U	0.212	0.212	5.00	0.370	pCi/g		06/01/20 08:25	1

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Qualifiers

Rad

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Client Sample ID: DPT-11-SS RA V2
Date Collected: 04/27/20 12:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469806	05/07/20 11:59	RBR	TAL SL
Total/NA	Analysis	9315		1	471607	06/01/20 04:48	KLS	TAL SL
Total/NA	Prep	DPS-0			469808	05/07/20 12:23	RBR	TAL SL
Total/NA	Analysis	9320		1	470884	05/19/20 14:40	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471613	06/01/20 08:25	SMP	TAL SL

Client Sample ID: DPT-11-SS RA V3
Date Collected: 04/27/20 12:25
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469806	05/07/20 11:59	RBR	TAL SL
Total/NA	Analysis	9315		1	471607	06/01/20 04:48	KLS	TAL SL
Total/NA	Prep	DPS-0			469808	05/07/20 12:23	RBR	TAL SL
Total/NA	Analysis	9320		1	470884	05/19/20 14:40	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471613	06/01/20 08:25	SMP	TAL SL

Client Sample ID: DPT-12-SS RA V2
Date Collected: 04/27/20 15:05
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469806	05/07/20 11:59	RBR	TAL SL
Total/NA	Analysis	9315		1	471607	06/01/20 04:49	KLS	TAL SL
Total/NA	Prep	DPS-0			469808	05/07/20 12:23	RBR	TAL SL
Total/NA	Analysis	9320		1	470884	05/19/20 14:40	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471613	06/01/20 08:25	SMP	TAL SL

Client Sample ID: DPT-12-SS RA V3
Date Collected: 04/27/20 15:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469806	05/07/20 11:59	RBR	TAL SL
Total/NA	Analysis	9315		1	471607	06/01/20 04:49	KLS	TAL SL
Total/NA	Prep	DPS-0			469808	05/07/20 12:23	RBR	TAL SL
Total/NA	Analysis	9320		1	470884	05/19/20 14:40	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471613	06/01/20 08:25	SMP	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Client Sample ID: DPT-13-SS RA V2

Lab Sample ID: 400-187407-5

Date Collected: 04/28/20 10:15

Matrix: Solid

Date Received: 04/30/20 09:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469806	05/07/20 11:59	RBR	TAL SL
Total/NA	Analysis	9315		1	471607	06/01/20 04:49	KLS	TAL SL
Total/NA	Prep	DPS-0			469808	05/07/20 12:23	RBR	TAL SL
Total/NA	Analysis	9320		1	470898	05/19/20 14:41	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471613	06/01/20 08:25	SMP	TAL SL

Client Sample ID: DPT-13-SS RA V3

Lab Sample ID: 400-187407-6

Date Collected: 04/28/20 11:30

Matrix: Solid

Date Received: 04/30/20 09:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	DPS-21			469806	05/07/20 11:59	RBR	TAL SL
Total/NA	Analysis	9315		1	471607	06/01/20 04:49	KLS	TAL SL
Total/NA	Prep	DPS-0			469808	05/07/20 12:23	RBR	TAL SL
Total/NA	Analysis	9320		1	470898	05/19/20 14:41	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471613	06/01/20 08:25	SMP	TAL SL

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Rad

Prep Batch: 469806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187407-1	DPT-11-SS RA V2	Total/NA	Solid	DPS-21	
400-187407-2	DPT-11-SS RA V3	Total/NA	Solid	DPS-21	
400-187407-3	DPT-12-SS RA V2	Total/NA	Solid	DPS-21	
400-187407-4	DPT-12-SS RA V3	Total/NA	Solid	DPS-21	
400-187407-5	DPT-13-SS RA V2	Total/NA	Solid	DPS-21	
400-187407-6	DPT-13-SS RA V3	Total/NA	Solid	DPS-21	
MB 160-469806/11-A	Method Blank	Total/NA	Solid	DPS-21	
LCS 160-469806/1-A	Lab Control Sample	Total/NA	Solid	DPS-21	
400-187320-A-43-G DU	Duplicate	Total/NA	Solid	DPS-21	

Prep Batch: 469808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187407-1	DPT-11-SS RA V2	Total/NA	Solid	DPS-0	
400-187407-2	DPT-11-SS RA V3	Total/NA	Solid	DPS-0	
400-187407-3	DPT-12-SS RA V2	Total/NA	Solid	DPS-0	
400-187407-4	DPT-12-SS RA V3	Total/NA	Solid	DPS-0	
400-187407-5	DPT-13-SS RA V2	Total/NA	Solid	DPS-0	
400-187407-6	DPT-13-SS RA V3	Total/NA	Solid	DPS-0	
MB 160-469808/11-A	Method Blank	Total/NA	Solid	DPS-0	
LCS 160-469808/1-A	Lab Control Sample	Total/NA	Solid	DPS-0	
400-187320-A-43-I DU	Duplicate	Total/NA	Solid	DPS-0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-469806/11-A
Matrix: Solid
Analysis Batch: 471607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469806

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.008328	U	0.0616	0.0616	1.00	0.119	pCi/g	05/07/20 11:59	06/01/20 04:49	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*05/07/20 11:59*	*06/01/20 04:49*	*1*

Lab Sample ID: LCS 160-469806/1-A
Matrix: Solid
Analysis Batch: 471607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469806

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.26		1.06	1.00	0.105	pCi/g	90	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.3*		*40 - 110*

Lab Sample ID: 400-187320-A-43-G DU
Matrix: Solid
Analysis Batch: 471607

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 469806

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.0447	U		0.09564	U	0.0783	1.00	0.116	pCi/g			0.36	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*85.8*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-469808/11-A
Matrix: Solid
Analysis Batch: 470898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469808

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.01823	U	0.221	0.221	1.00	0.398	pCi/g	05/07/20 12:23	05/19/20 14:41	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:41*	*1*
Y Carrier	*84.5*		*40 - 110*	*05/07/20 12:23*	*05/19/20 14:41*	*1*

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

Lab Sample ID: LCS 160-469808/1-A
Matrix: Solid
Analysis Batch: 470884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469808

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.83	6.592		0.864	1.00	0.437	pCi/g	75	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.3*		*40 - 110*
Y Carrier	*88.6*		*40 - 110*

Lab Sample ID: 400-187320-A-43-I DU
Matrix: Solid
Analysis Batch: 470884

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 469808

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.179	U		0.3086	U	0.283	1.00	0.453	pCi/g			0.22	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*85.8*		*40 - 110*
Y Carrier	*87.1*		*40 - 110*

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

400-187407 COC

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5408	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested: Perquote			
City: Birmingham	TAT Requested (days): perquote			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606			
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site: Plant Watson	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Leach test	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D			
DPT-11-55 Ra U2	4/27/20	1220	C	Solid	N	N				X	X	X	X				X		Baton Rouge 218
DPT-11-55 Ra U3		1225	C	Solid						X	X	X	X				X		
DPT-12-55 Ra U2		1505	C	Solid						X	X	X	X				X		
DPT-12-55 Ra U3		1520	C	Solid						X	X	X	X				X		
DPT-13-55 Ra U2	4/28/20	1015	C	Solid						X	X	X	X				X		
DPT-13-55 Ra U3		1130	C	Solid						X	X	X	X				X		
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/29/20 12:35	Geosyntec		4/29/2020 12:35	ETA
2		4/29/2020	ETA		4/30/20 927	TA Knox
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C, 0.4°C IR 8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187407-2
SDG Number: Plant Watson

Login Number: 187407
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.4°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187407-2
SDG Number: Plant Watson

Login Number: 187407
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/01/20 08:58 PM

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

Tracer/Carrier Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-2
SDG: Plant Watson

Method: 9315 - Radium-226 (GFPC)

Matrix: Solid | **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba Carrier (40-110)
400-187320-A-43-G DU	Duplicate	85.8
400-187407-1	DPT-11-SS RA V2	90.0
400-187407-2	DPT-11-SS RA V3	95.8
400-187407-3	DPT-12-SS RA V2	88.5
400-187407-4	DPT-12-SS RA V3	91.3
400-187407-5	DPT-13-SS RA V2	89.1
400-187407-6	DPT-13-SS RA V3	91.9
LCS 160-469806/1-A	Lab Control Sample	91.3
MB 160-469806/11-A	Method Blank	88.6

Tracer/Carrier Legend

Ba Carrier = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Solid | **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba Carrier (40-110)	Y Carrier (40-110)
400-187320-A-43-I DU	Duplicate	85.8	87.1
400-187407-1	DPT-11-SS RA V2	90.0	89.0
400-187407-2	DPT-11-SS RA V3	95.8	87.5
400-187407-3	DPT-12-SS RA V2	88.5	86.4
400-187407-4	DPT-12-SS RA V3	91.3	89.7
400-187407-5	DPT-13-SS RA V2	89.1	89.3
400-187407-6	DPT-13-SS RA V3	89.6	86.7
LCS 160-469808/1-A	Lab Control Sample	91.3	88.6
MB 160-469808/11-A	Method Blank	88.6	84.5

Tracer/Carrier Legend

Ba Carrier = Ba Carrier
Y Carrier = Y Carrier

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187407-3
Laboratory Sample Delivery Group: Plant Watson
Client Project/Site: Plant Watson

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Cheyenne R Whitmire

Authorized for release by:
6/19/2020 1:16:50 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187407-3

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187407-3

Metals

Method 6020: preparation batch 160-471676 and analytical batch 160-471679 Due to linear range check (LRC) failures, the linear range for arsenic (200ppb) and molybdenum (100ppb) has been lowered to the concentration of the highest calibration standard. The LCS and MS/MSD were above the linear range, but were within acceptable recovery limits. (LCSSRM 160-471676/3-A), (400-187320-A-43-O MS) and (400-187320-A-43-P MSD)

Client requested App III metals list added.

Method Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SL
3050B	Preparation, Metals	SW846	TAL SL

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187407-1	DPT-11-SS RA V2	Solid	04/27/20 12:20	04/30/20 09:27	
400-187407-2	DPT-11-SS RA V3	Solid	04/27/20 12:25	04/30/20 09:27	
400-187407-3	DPT-12-SS RA V2	Solid	04/27/20 15:05	04/30/20 09:27	
400-187407-4	DPT-12-SS RA V3	Solid	04/27/20 15:20	04/30/20 09:27	
400-187407-5	DPT-13-SS RA V2	Solid	04/28/20 10:15	04/30/20 09:27	
400-187407-6	DPT-13-SS RA V3	Solid	04/28/20 11:30	04/30/20 09:27	

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Client Sample ID: DPT-11-SS RA V2

Date Collected: 04/27/20 12:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-1

Matrix: Solid
Percent Solids: 61.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.274	U	0.684	0.274	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Arsenic	**9.06**		1.37	0.547	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Barium	**30.6**		2.74	0.684	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Beryllium	**1.32**		0.137	0.0547	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Cadmium	**0.0468**	**J**	0.0684	0.0328	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Chromium	**7.85**		1.37	0.616	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Cobalt	**5.07**		0.274	0.103	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Lead	**10.6**		0.411	0.171	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Lithium	**6.72**		1.37	0.547	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Molybdenum	**1.12**		0.684	0.274	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Selenium	**2.07**		0.684	0.438	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2
Thallium	0.274	U	0.684	0.274	mg/Kg	☼	05/08/20 10:12	05/08/20 23:02	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Client Sample ID: DPT-11-SS RA V3

Date Collected: 04/27/20 12:25
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-2

Matrix: Solid
Percent Solids: 81.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.230	U	0.575	0.230	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Arsenic	0.460	U	1.15	0.460	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Barium	**6.67**		2.30	0.575	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Beryllium	**0.0577**	**J**	0.115	0.0460	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Cadmium	0.0276	U	0.0575	0.0276	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Chromium	**1.66**		1.15	0.517	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Cobalt	**0.936**		0.230	0.0862	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Lead	**2.23**		0.345	0.144	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Lithium	**1.17**		1.15	0.460	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Molybdenum	**0.374**	**J**	0.575	0.230	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Selenium	0.368	U	0.575	0.368	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2
Thallium	0.230	U	0.575	0.230	mg/Kg	☼	05/08/20 10:12	05/08/20 23:28	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Client Sample ID: DPT-12-SS RA V2

Date Collected: 04/27/20 15:05
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-3

Matrix: Solid
Percent Solids: 77.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.229	U	0.573	0.229	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Arsenic	**0.803**	**J**	1.15	0.458	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Barium	**22.6**		2.29	0.573	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Beryllium	**0.164**		0.115	0.0458	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Cadmium	0.0275	U	0.0573	0.0275	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Chromium	**3.12**		1.15	0.515	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Cobalt	**0.335**		0.229	0.0859	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Lead	**9.82**		0.344	0.143	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Lithium	**4.70**		1.15	0.458	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Molybdenum	**0.263**	**J**	0.573	0.229	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Selenium	**0.751**		0.573	0.367	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2
Thallium	0.229	U	0.573	0.229	mg/Kg	☼	05/08/20 10:12	05/08/20 23:35	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Client Sample ID: DPT-12-SS RA V3

Date Collected: 04/27/20 15:20
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-4

Matrix: Solid
Percent Solids: 82.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.221	U	0.552	0.221	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Arsenic	0.441	U	1.10	0.441	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Barium	**0.996**	**J**	2.21	0.552	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Beryllium	0.0441	U	0.110	0.0441	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Cadmium	0.0265	U	0.0552	0.0265	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Chromium	0.496	U	1.10	0.496	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Cobalt	**0.144**	**J**	0.221	0.0827	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Lead	**0.384**		0.331	0.138	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Lithium	0.441	U	1.10	0.441	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Molybdenum	0.221	U	0.552	0.221	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Selenium	0.353	U	0.552	0.353	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2
Thallium	0.221	U	0.552	0.221	mg/Kg	☼	05/08/20 10:12	05/08/20 23:42	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Client Sample ID: DPT-13-SS RA V2

Date Collected: 04/28/20 10:15
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-5

Matrix: Solid
Percent Solids: 75.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.235	U	0.588	0.235	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Arsenic	**0.796**	**J**	1.18	0.470	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Barium	**32.8**		2.35	0.588	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Beryllium	**0.495**		0.118	0.0470	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Cadmium	0.0282	U	0.0588	0.0282	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Chromium	**7.10**		1.18	0.529	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Cobalt	**0.968**		0.235	0.0882	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Lead	**11.4**		0.353	0.147	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Lithium	**4.62**		1.18	0.470	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Molybdenum	**0.691**		0.588	0.235	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Selenium	**1.18**		0.588	0.376	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2
Thallium	0.235	U	0.588	0.235	mg/Kg	☼	05/08/20 10:12	05/08/20 23:49	2

Client Sample Results

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Client Sample ID: DPT-13-SS RA V3

Date Collected: 04/28/20 11:30
Date Received: 04/30/20 09:27

Lab Sample ID: 400-187407-6

Matrix: Solid
Percent Solids: 77.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	0.581	0.232	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Arsenic	0.464	U	1.16	0.464	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Barium	**1.06**	**J**	2.32	0.581	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Beryllium	0.0464	U	0.116	0.0464	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Cadmium	0.0279	U	0.0581	0.0279	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Chromium	0.522	U	1.16	0.522	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Cobalt	**0.194**	**J**	0.232	0.0871	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Lead	**0.291**	**J**	0.348	0.145	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Lithium	0.464	U	1.16	0.464	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Molybdenum	0.232	U	0.581	0.232	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Selenium	0.372	U	0.581	0.372	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2
Thallium	0.232	U	0.581	0.232	mg/Kg	☼	05/08/20 10:12	05/08/20 23:55	2

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Client Sample ID: DPT-11-SS RA V2
Lab Sample ID: 400-187407-1
Date Collected: 04/27/20 12:20
Matrix: Solid
Date Received: 04/30/20 09:27
Percent Solids: 61.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471676	05/08/20 10:12	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 23:02	CB	TAL SL

Client Sample ID: DPT-11-SS RA V3
Lab Sample ID: 400-187407-2
Date Collected: 04/27/20 12:25
Matrix: Solid
Date Received: 04/30/20 09:27
Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471676	05/08/20 10:12	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 23:28	CB	TAL SL

Client Sample ID: DPT-12-SS RA V2
Lab Sample ID: 400-187407-3
Date Collected: 04/27/20 15:05
Matrix: Solid
Date Received: 04/30/20 09:27
Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471676	05/08/20 10:12	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 23:35	CB	TAL SL

Client Sample ID: DPT-12-SS RA V3
Lab Sample ID: 400-187407-4
Date Collected: 04/27/20 15:20
Matrix: Solid
Date Received: 04/30/20 09:27
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471676	05/08/20 10:12	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 23:42	CB	TAL SL

Client Sample ID: DPT-13-SS RA V2
Lab Sample ID: 400-187407-5
Date Collected: 04/28/20 10:15
Matrix: Solid
Date Received: 04/30/20 09:27
Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471676	05/08/20 10:12	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 23:49	CB	TAL SL

Client Sample ID: DPT-13-SS RA V3
Lab Sample ID: 400-187407-6
Date Collected: 04/28/20 11:30
Matrix: Solid
Date Received: 04/30/20 09:27
Percent Solids: 77.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			471676	05/08/20 10:12	CB	TAL SL
Total/NA	Analysis	6020		2	471679	05/08/20 23:55	CB	TAL SL

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

Metals

Prep Batch: 471676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187407-1	DPT-11-SS RA V2	Total/NA	Solid	3050B	
400-187407-2	DPT-11-SS RA V3	Total/NA	Solid	3050B	
400-187407-3	DPT-12-SS RA V2	Total/NA	Solid	3050B	
400-187407-4	DPT-12-SS RA V3	Total/NA	Solid	3050B	
400-187407-5	DPT-13-SS RA V2	Total/NA	Solid	3050B	
400-187407-6	DPT-13-SS RA V3	Total/NA	Solid	3050B	
MB 160-471676/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 160-471676/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSSRM 160-471676/3-A	Lab Control Sample	Total/NA	Solid	3050B	
400-187320-A-43-O MS	Matrix Spike	Total/NA	Solid	3050B	
400-187320-A-43-P MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 471679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187407-1	DPT-11-SS RA V2	Total/NA	Solid	6020	471676
400-187407-2	DPT-11-SS RA V3	Total/NA	Solid	6020	471676
400-187407-3	DPT-12-SS RA V2	Total/NA	Solid	6020	471676
400-187407-4	DPT-12-SS RA V3	Total/NA	Solid	6020	471676
400-187407-5	DPT-13-SS RA V2	Total/NA	Solid	6020	471676
400-187407-6	DPT-13-SS RA V3	Total/NA	Solid	6020	471676
MB 160-471676/1-A	Method Blank	Total/NA	Solid	6020	471676
LCS 160-471676/2-A	Lab Control Sample	Total/NA	Solid	6020	471676
LCSSRM 160-471676/3-A	Lab Control Sample	Total/NA	Solid	6020	471676
400-187320-A-43-O MS	Matrix Spike	Total/NA	Solid	6020	471676
400-187320-A-43-P MSD	Matrix Spike Duplicate	Total/NA	Solid	6020	471676

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-471676/1-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.199	U	0.497	0.199	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Arsenic	0.397	U	0.993	0.397	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Barium	0.497	U	1.99	0.497	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Beryllium	0.0397	U	0.0993	0.0397	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Cadmium	0.0238	U	0.0497	0.0238	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Chromium	0.447	U	0.993	0.447	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Cobalt	0.0745	U	0.199	0.0745	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Lead	0.124	U	0.298	0.124	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Lithium	0.397	U	0.993	0.397	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Molybdenum	0.199	U	0.497	0.199	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Selenium	0.318	U	0.497	0.318	mg/Kg		05/08/20 10:12	05/08/20 21:20	2
Thallium	0.199	U	0.497	0.199	mg/Kg		05/08/20 10:12	05/08/20 21:20	2

Lab Sample ID: LCS 160-471676/2-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	9.55	10.11		mg/Kg		106	80 - 120

Lab Sample ID: LCSSRM 160-471676/3-A
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471676

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	99.4	75.25		mg/Kg		75.7	20.7 - 256.5
Arsenic	97.6	108.4		mg/Kg		111.1	70.0 - 130.1
Barium	320	351.3		mg/Kg		109.8	75.0 - 125.0
Beryllium	41.4	45.52		mg/Kg		110.0	75.1 - 125.1
Cadmium	114	119.6		mg/Kg		104.9	75.0 - 125.4
Chromium	147	149.3		mg/Kg		101.6	70.1 - 129.9
Cobalt	46.7	48.41		mg/Kg		103.7	75.2 - 125.1
Lead	105	118.8		mg/Kg		113.1	70.5 - 128.6
Molybdenum	78.8	93.08		mg/Kg		118.1	69.5 - 130.7
Selenium	93.1	102.4		mg/Kg		110.0	64.6 - 135.3
Thallium	104	116.8		mg/Kg		112.3	67.3 - 131.7

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

Lab Sample ID: 400-187320-A-43-O MS
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 471676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.218	U	63.1	64.78		mg/Kg	☼	103	75 - 125
Arsenic	0.437	U	126	119.8		mg/Kg	☼	95	75 - 125
Barium	1.65	J	126	135.1		mg/Kg	☼	106	75 - 125
Beryllium	0.0437	U	12.6	13.23		mg/Kg	☼	105	75 - 125
Cadmium	0.0262	U	126	132.6		mg/Kg	☼	105	75 - 125
Chromium	0.671	J	126	120.7		mg/Kg	☼	95	75 - 125
Cobalt	0.168	J	126	122.3		mg/Kg	☼	97	75 - 125
Lead	0.536		126	133.2		mg/Kg	☼	105	75 - 125
Lithium	0.437	U	12.6	14.11		mg/Kg	☼	112	75 - 125
Molybdenum	0.218	U	63.1	70.44		mg/Kg	☼	112	75 - 125
Selenium	0.349	U	63.1	56.57		mg/Kg	☼	90	75 - 125
Thallium	0.218	U	25.2	26.38		mg/Kg	☼	105	75 - 125

Lab Sample ID: 400-187320-A-43-P MSD
Matrix: Solid
Analysis Batch: 471679

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 471676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.218	U	59.3	57.80		mg/Kg	☼	98	75 - 125	11	30
Arsenic	0.437	U	119	111.4		mg/Kg	☼	94	75 - 125	7	30
Barium	1.65	J	119	118.4		mg/Kg	☼	98	75 - 125	13	30
Beryllium	0.0437	U	11.9	11.61		mg/Kg	☼	98	75 - 125	13	30
Cadmium	0.0262	U	119	119.8		mg/Kg	☼	101	75 - 125	10	30
Chromium	0.671	J	119	111.5		mg/Kg	☼	94	75 - 125	8	30
Cobalt	0.168	J	119	115.1		mg/Kg	☼	97	75 - 125	6	30
Lead	0.536		119	118.8		mg/Kg	☼	100	75 - 125	11	30
Lithium	0.437	U	11.9	12.29		mg/Kg	☼	104	75 - 125	14	30
Molybdenum	0.218	U	59.3	62.69		mg/Kg	☼	106	75 - 125	12	30
Selenium	0.349	U	59.3	53.16		mg/Kg	☼	90	75 - 125	6	30
Thallium	0.218	U	23.7	23.96		mg/Kg	☼	101	75 - 125	10	30

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

400-187407 COC

Client Information	Sampler: Nathan Quick	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93871-34057.5
Client Contact: Lauren Parker	Phone: 985-264-5408	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 5 of 6
Company: Southern Company				Job #:
Address: 3535 Colonnade Parkway Bin S 530 EC	Due Date Requested: Perquote			
City: Birmingham	TAT Requested (days): perquote			
State, Zip: AL, 35243				
Phone: 205-992-6283(Tel)	PO #: SCS10382606			
Email: laparker@southernco.com	WO #:			
Project Name: Plant Watson	Project #: 40001674			
Site: Plant Watson	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc_AVS, Moisture	SM4500_SO4_E - Sulfate, Total	SM4500_S2_D - Sulfide, Total	9315_Ra226, 9320_Ra228	6020 - Uranium & Thorium	Ra226Ra228_GFPC - Combined Radium-226 and Radium-228	Moisture - Percent Moisture	9315_Ra226 - Radium 226	9320_Ra228 - Radium 228	Ra226Ra228_GFPC - Radium 226 + Radium 228	Leach test	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	CB	N	N	N	N	D	D	D			
DPT-11-55 Ra U2	4/27/20	1220	C	Solid	N	N				X	X	X	X				X		
DPT-11-55 Ra U3		1225	C	Solid						X	X	X	X				X		
DPT-12-55 Ra U2		1505	C	Solid						X	X	X	X				X		
DPT-12-55 Ra U3		1520	C	Solid						X	X	X	X				X		
DPT-13-55 Ra U2	4/28/20	1015	C	Solid						X	X	X	X				X		
DPT-13-55 Ra U3		1130	C	Solid	V	V				X	X	X	X				X		
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															

Baton Rouge 218

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/29/20 12:35	Company: Geosyntec	Received by:	Date/Time: 4/29/2020 12:35	Company: ETA
Relinquished by:	Date/Time: 4/29/2020	Company: ETA	Received by:	Date/Time: 4/30/20 927	Company: ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C, 0.4°C IR 8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187407-3
SDG Number: Plant Watson

Login Number: 187407
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.4°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-187407-3
SDG Number: Plant Watson

Login Number: 187407
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/01/20 08:58 PM

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Watson

Job ID: 400-187407-3
SDG: Plant Watson

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	05-14-20
ANAB	Dept. of Energy	L2305.01	05-14-20
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20