

**2024 ANNUAL GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT**

**MISSISSIPPI POWER COMPANY
PLANT VICTOR DANIEL
ASH POND B**

January 31, 2025

Prepared for

Mississippi Power Company
Gulfport, Mississippi



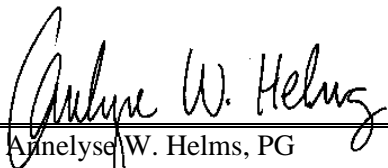
By

Southern Company Services
Earth Science and Environmental Engineering

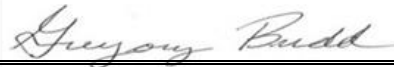


CERTIFICATION STATEMENT

This 2024 Annual Groundwater Monitoring and Corrective Action Report, Mississippi Power Company – Plant Daniel Ash Pond B has been prepared in accordance with the United States Environmental Protection Agency’s coal combustion residual rule (40 CFR Part 257, Subpart D), under the supervision of a licensed Professional Geologist in the State of Mississippi. As such, I certify that the information contained herein is true and accurate to the best of my knowledge.



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EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), this *2024 Annual Groundwater Monitoring and Corrective Action Report* has been prepared to document 2024 semi-annual assessment groundwater monitoring activities at the Mississippi Power Company (MPC) Plant Daniel Ash Pond B (AP-B) and to satisfy the requirements of 40 CFR § 257.90(e). Semi-annual assessment monitoring and associated reporting for Plant Daniel AP-B is performed in accordance with the monitoring requirements 40 CFR § 257.90 through § 257.98.

Statistically significant increases (SSIs) of Appendix III constituents over background were identified in the results of the first detection monitoring event and assessment monitoring was initiated in January 2018. Statistically significant levels (SSLs) of the Appendix IV constituent lithium was identified in downgradient compliance well BAW-5 during the 2018 monitoring period. An alternate source demonstration (ASD) was prepared to address the SSLs for lithium and was completed July 12, 2019. The ASD was submitted in the 2019 Annual Groundwater Monitoring and Corrective Action Report. Therefore, pursuant to §257.95(g)(3)(ii), an assessment of corrective measures is not required, and AP-B remained in assessment monitoring. The following future actions will be taken or are recommended for the Site:

- Continue semi-annual assessment monitoring in 2025.
- Submit 2025 Annual Groundwater Monitoring and Corrective Action Report by January 31, 2026.

Pursuant to 40 CFR § 257.90(e)(6), an Executive Summary Table highlighting program status and significant findings from the most recent semi-annual monitoring period has been included on the next page.

**Executive Summary Table
Monitoring Period Summary
Plant Daniel - Ash Pond B**

Monitoring Period: January 1 - December 31, 2024
 Beginning Status: Assessment
 Ending Status: Assessment

Statistical Analysis Results *

Appendix III SSIs

Constituent	Wells
Boron	BAW-5
Calcium	BAW-4 and BAW-5
Chloride	None.
Fluoride	None.
pH	BAW-3 and BAW-5
Sulfate	BAW-5
TDS	BAW-5

Appendix IV SSLs

Lithium	BAW-5
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* See the attached report for further details regarding statistical exceedances and alternate source demonstrations.

Assessment of Corrective Measures & Groundwater Remedy

Assessment of Corrective Measures

Site Remains in Assessment Monitoring § 257.95 (d)

Groundwater Remedy

Site Remains in Detection Monitoring § 257.95 (d)

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1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations (CFR) § 257 Subpart D), Southern Company Services (SCS) has prepared this *2024 Annual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities at Mississippi Power Company (MPC) Plant Daniel Ash Pond B (AP-B). Groundwater monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements § 257.90 through § 257.95 of the Federal CCR rule.

2.0 MONITORING PROGRAM STATUS

Statistically significant increases (SSIs) of Appendix III constituents over background were identified in the results of the 2017 detection monitoring event. Statistically significant levels (SSLs) of the Appendix IV constituent lithium was identified in downgradient compliance well BAW-5 during the 2018 monitoring period. Pursuant to § 257.94(e)(1), an alternate source demonstration (ASD) was prepared to address the SSLs for lithium and was completed July 12, 2019. The ASD was submitted in the 2019 Annual Groundwater Monitoring and Corrective Action Report. Therefore, pursuant to §257.95(g)(3)(ii), an assessment of corrective measures is not required, and AP-B remained in assessment monitoring.

Removal of CCR material at AP-B was completed in September 2021 and the site was certified clean closed in early 2022. Construction activities continued as AP-B was repurposed into three lined settlement ponds for plant process water. Construction was completed in early 2023. MPC will continue groundwater monitoring in accordance with CCR rule 257.102(c). In accordance with §257.95(g)(3)(ii), MPC will continue assessment monitoring and will not implement assessment of corrective measures under § 257.96. Analytical data from the semi-annual monitoring events are included as **Appendix A, Laboratory Analytical Data and Field Sampling Records**, in accordance with the requirements of § 257.90(e)(3).

3.0 SITE LOCATION AND DESCRIPTION

Plant Daniel is an electric generating facility consisting of two coal-fired units and two natural gas combined cycle units. The plant is located near the town of Escatawpa, Jackson County, Mississippi immediately northwest of the intersection of Mississippi State Highways 63 and 613. The Site is located north of the main plant and northwest of the intersection of Mississippi State Highways 63 and 613, between the Pascagoula River to the west and Highway 63 to the east. The site address is 13201 Highway 63 N, Escatawpa, Mississippi 39562.

The Site is located within Section 35, Township 5 South, Range 6 West, Sections 37, 10, 15, East half of

Section 9, Southwest ¼ of Section 2, Northwest ¼ and south half of Section 11, and the north half and northwest ¼ of the southwest ¼ of Section 14, all of Township 6 South, Range 6 West. **Figure 1, Site Location Map**, depicts the location of Plant Daniel relative to site features and the surrounding area.

3.1 Regional Geology & Hydrogeologic Setting

Jackson County lies in the Pascagoula River Drainage Basin in the Gulf Coastal Plain physiographic province. Topographically, the province is gently rolling to flat with local salt marshes. Rock outcrops are sedimentary in origin and range in age from late Miocene to Recent (Gandl, 1982). A dominant regional structural feature which affects the sediments of Miocene and younger age is the Gulf Coast geosyncline. The sediments dip toward the Gulf of Mexico. Where formations are near the surface, dips are from 15 to 35 feet/mile. Further from the outcrop, dips increase dramatically with depth. Fresh-water aquifers in the Pascagoula area are sand or a mix of sand and gravel beds of Miocene age or younger. These freshwater aquifers and occur less than 1,000 feet below the surface.

The surficial soils underlying Plant Daniel are related to the southern Mississippi's semi-tropical climate and the weathering of parent geologic materials. The resulting soil profile consists of a variety of sediments including sand, silt, clay, gravel, and organics and ranges in age from the Cenozoic to Pleistocene period. Previous site investigations indicate that there are five distinctive geologic units that immediately underlie the site and surrounding area.

- Unit 1 consists of a sandy clay aquitard that is considered to be discontinuous across the site. Unit 1 outcrops at the surface and extends to a maximum depth of 32 feet beneath the site.
- Unit 2 consists of a sand aquifer that extends to approximately 70 feet below land surface (BLS) and is the uppermost aquifer underlying the site.
- Unit 3 is a clay aquitard that immediately underlies Unit 2 and has a thickness ranging from 2.5 to 9.5 feet across the site.
- Unit 4 is a sand and gravel aquifer with a thickness of 34 feet or greater.
- Unit 5 is a clay aquitard.

3.2 Uppermost Aquifer

Two aquifers supply water to the Pascagoula area. These are the Pliocene-age Citronelle and the Miocene Aquifer System, which includes the Graham Ferry Aquifer. Plant Daniel is in the Citronelle aquifer outcrop area. The Citronelle Aquifers are the shallowest aquifers in the Pascagoula area. Although principally a sand and gravel formation, the Citronelle is characterized by occasional lenses and layers of clay which

may cause semi-artesian conditions. Sediments become coarse near the irregular contact with the underlying Pascagoula or Graham Ferry Formation. Also, the Citronelle and overlying coastal deposits are considered one hydrogeologic unit. The Citronelle is primarily a water table aquifer with a saturated thickness of about 45 feet. Recharge is primarily by rainfall which moves vertically and down dip to recharge underlying aquifers and to sustain local streams (Wasson, 1978). For groundwater monitoring purposes, all on-site compliance wells are screened within the uppermost Unit 2 sand aquifer.

4.0 GROUNDWATER MONITORING SYSTEM

Pursuant 40 CFR § 257.91, Plant Daniel designed and installed a certified groundwater monitoring system within the uppermost aquifer (Unit 2) to monitor groundwater quality in the immediate vicinity of the regulated unit. The on-site groundwater compliance wells were positioned to serve as upgradient or downgradient monitoring locations based on the underlying groundwater flow direction. The groundwater monitoring wells were designed and constructed in accordance with the “Design and Installation of Groundwater Monitoring Wells in Aquifers,” ASTM Subcommittee D18.21. As required by § 257.90(e), the following also describes monitoring-related activities performed during the 2024 monitoring period.

4.1 Compliance Monitoring Network

Groundwater monitoring wells at the Site are designated as upgradient compliance wells and downgradient compliance wells. Monitoring wells BAW-1 and BAW-2A serve as upgradient locations for AP-B. Upgradient wells are screened within the same hydrostratigraphic interval(s) as the downgradient locations and represent background groundwater quality at the Site. Upgradient wells are positioned along the northeastern portion of the unit as determined by water level monitoring and potentiometric surface maps constructed for the Site. Monitoring well locations BAW-3 through BAW-5, BAW-7, PZ-8, and PZ-9 serve as downgradient locations for AP-B. The location and designation of Site wells are presented on **Figure 2, Monitoring Well Location Map. Table 1, Monitoring Well Network Details**, summarize the monitoring well construction details, surveyed elevations, and design purpose for the Plant Daniel AP-B.

4.2 Monitoring Well Installation, Abandonment, and Maintenance

Monitoring well replacement and/or abandonment activities were not performed during the 2024 annual monitoring period. Each on-site well was visually inspected prior to sample collection for potential issues such as structural damage, contamination, or maintenance concerns that could compromise sample integrity. No issues were observed during the pre-sampling well inspection, and each well was determined to be in proper working order.

5.0 GROUNDWATER SAMPLING AND ANALYSIS

Site compliance wells are sampled semi-annually, generally in late winter to mid-spring and early to late fall. The temporal spacing ensures sampling events yield independent groundwater samples that generally represent natural variabilities in groundwater quality associated with different climatic and/or meteorological seasons.

During routine semi-annual monitoring events, compliance network wells are sampled and analyzed for Appendix III and Appendix IV constituents. The following subsections summarize the sequential steps and processes for sampling, handling, and transport, and analyzing compliance-related groundwater samples at the Site.

5.1 Groundwater Sample Collection

Prior to recording water levels and collecting samples, each well was opened and allowed to equilibrate to atmospheric pressure. Within a 24-hour period, groundwater depths were measured to the nearest 0.01 foot with an electronic water level indicator referenced from the top of the inner PVC well casing. Groundwater elevations were calculated by subtracting the depth to groundwater from surveyed top-of-casing (TOC) elevations.

Groundwater samples were collected in accordance with 40 CFR § 257.93(a). The monitoring wells at Plant Daniel were purged and sampled from dedicated pumps using low-flow sampling procedures. Field water quality indicator parameters were monitored and recorded prior to sampling with a downhole Aqua TROLL® instrument calibrated per the manufacturer's specifications. Groundwater samples were collected when the following stabilization criteria were met:

- 0.2 standard units for pH
- 5% for specific conductance
- 0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)
- Turbidity measurements less than 10 NTU
- Temperature and ORP - record only, no stabilization criteria

Once stabilization was achieved, samples were submitted to the laboratory following standard chain-of-custody (COC) protocols. Field data recorded in support of groundwater sampling activities for the monitoring period are included in **Appendix A**.

5.2 Sampling Preservation and Handling

Groundwater samples were collected in the designated size and type of laboratory-supplied containers required for specific parameters. Sample bottles were pre-preserved by the laboratory. Where temperature control was required, samples were placed in an ice-packed cooler and cooled to less than 6 °C immediately after collection. Blue ice or other cooling packs were not used for cooling samples. An ice-packed cooler was present during sample collection.

5.3 Chain of Custody

A COC record was used to track sample possession from the time of collection to the time of receipt at the laboratory. All samples were handled under strict COC procedures beginning in the field. COC records are included with the laboratory analytical data reports in **Appendix A**.

5.4 Laboratory Analysis

Laboratory analyses was performed by Eurofins Environment Testing (Eurofins) of Pittsburgh, Pennsylvania and St. Louis, Missouri. Eurofins is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Eurofins maintains a NELAP certification for all parameters analyzed for this project. Groundwater analytical data and chain-of-custody records for the monitoring events are presented in **Appendix A, Table 2, Constituents and Reporting Limits**, lists the monitoring constituents analyzed from Site groundwater samples.

6.0 GROUNDWATER ELEVATION AND FLOW

Groundwater elevations ranged from 6.62 to 9.02 feet referenced to the North American Datum of 1988 (NAVD88) and 5.52 to 7.77 feet NAVD88 during the first and second 2024 semi-annual monitoring events, respectively. **Figure 3, Potentiometric Surface Contour Map (March 18, 2024)**, and **Figure 4, Potentiometric Surface Contour Map (September 30, 2024)**, depict the groundwater elevations and inferred flow directions.

As shown on Figures 3 and 4, groundwater flow is generally to the southwest, consistent with historic observations. Groundwater elevations from the 2024 semi-annual monitoring events are tabulated and included in **Table 3, Groundwater Elevations Summary** for reference.

6.1 Groundwater Velocity Calculations

As part of AP-B closure, a dewatering system was installed and began operation during the 2021 and 2022 monitoring periods. The dewatering system significantly lowered the groundwater level at AP-B to facilitate the excavation of CCR material and pond liner. In all, 22 extraction wells were installed around the perimeter of AP-B. While the dewatering system was active, groundwater elevations were lowered and were not consistent with historical levels. The dewatering system was active from April 2021 through March 2023. After CCR material was removed, a lined storage water pond was constructed at the former CCR storage area and filled with groundwater extracted from the dewatering system. The dewatering system was shut off in March 2023 and groundwater elevations have since returned to equilibrium.

A general estimate of groundwater flow velocities at the site were calculated based on hydraulic gradients, hydraulic conductivities derived from previous slug test results, and an estimated effective porosity of the screened horizon(s). Based on slug testing performed in the uppermost aquifer, the average horizontal hydraulic conductivity was calculated to be approximately 25 feet/day. Hydraulic gradients were calculated from groundwater elevation data during the 2024 monitoring events between the select well pairs presented in **Table 4, Groundwater Flow Velocity Calculations**. An estimated effective porosity of 0.2 was used based on the default values for effective porosity recommended by USEPA for a silty sand-type soil (USEPA, 1989). Horizontal flow velocity was calculated using the commonly used derivative of Darcy's Law:

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

Where:

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

K = Average permeability of the aquifer $\left(\frac{\text{feet}}{\text{day}}\right)$

i = Horizontal hydraulic gradient

n_e = Effective porosity

Groundwater monitoring wells BAW-1 and BAW-5 were used to calculate Flow Path A and BAW-3 and BAW-5 were used to calculate Flow Path B. The horizontal hydraulic gradients ranged from 0.0013 feet per foot (ft/ft) to 0.0019 ft/ft. As presented on **Table 4**, groundwater flow velocity at the site ranges from approximately 0.17 feet per day (ft/day) (or approximately 62.30 feet per year) to 0.24 feet/day (or

approximately 87.29 feet per year). These calculated groundwater flow velocities across the site are consistent with historical calculations and with expected velocities.

7.0 EVALUATION OF GROUNDWATER QUALITY DATA

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at a rate of one sample per every 10 samples and included well duplicates, equipment blanks, and field blanks. Routine analyses of field QA/QC samples are a method for evaluating whether artificial bias could have been introduced into lab results by means of sampling activities or equipment.

7.1 Quality Assurance and Quality Control

Laboratory analytical precision is measured through the calculation of the relative percent difference (RPD) between two data sets generated from a similar source. Specifically, between the original compliance and field duplicate samples. For groundwater analytical data, quality control procedures include calculating the RPD (where field duplicates are collected) between the sample and duplicate sample duplicate concentrations as is calculated as:

$$RPD = \frac{Conc1 - Conc2}{(Conc1 + Conc2)/2}$$

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the original or field duplicate sample

Conc2 = Lower concentration of the original or field duplicate sample

A RPD is calculated for each constituent detected above the RL. Where the RPD is below 20%, the difference is considered acceptable, and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 5, Relative Percent Difference Calculations**, provides the relative percent differences for sample and sample duplicates during 2024 sampling events.

During the first 20214 semi-annual event, RPD exceeded 20% for sulfate for the sample and field duplicate collected from BAW-1. In addition, RPD exceeded 20% for TDS for the sample and field duplicate collected from BAW-3 during the second semi-annual event. The sulfate concentrations observed in MW-BAW-1 for the parent and duplicate samples were 1.41 mg/L and 1.83 mg/L, respectively, resulting in an RPD of 25.93%. The TDS concentration observed in BAW-3, collection during the second semi-annual

event, for the parent and duplicate samples were 30.0 mg/L and 42.0 mg/L, respectively, resulting in an RPD of 33.33%.

If RPD exceeds 20% for samples with concentrations greater than five times the RL, the parent sample and duplicate sampling are qualified with "(+) J." When the concentrations in the parent sample or duplicate sample are less than five times the RL and the difference between the parent sample concentration and duplicate concentration are greater than the RL, the parent and duplicate samples are qualified with "(+) J, (ND) UJ." A summary of qualified data from 2024 monitoring period is provided below.

Well ID	Sample Date	Constituent	Original Concentration (mg/L)	Field Duplicate Concentration (mg/L)	RPD (%)	Reporting Limit (mg/L)	Data Qualifier
BAW-1	03/20/24	Sulfate	1.41	1.83	25.9%	1.0 mg/L	(+) J, (ND) UJ
BAW-3	10/02/24	TDS	30.0	42.0	33.3%	10.0 mg/L	(+) J, (ND) UJ

No additional data qualification is required for the 2024 monitoring period.

8.0 STATISTICAL METHODOLOGY AND TESTS

Statistical analysis of Appendix III and Appendix IV groundwater monitoring data was performed on samples collected from the certified groundwater monitoring network pursuant to 40 CFR § 257.93 and following the appropriate PE-certified method. 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 EPA regulations. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

8.1 Appendix III Evaluation

Intrawell and interwell prediction limits, combined with a 1-of-2 verification (resample) plan, were constructed for the analyzed Appendix III constituents. Intrawell prediction limits compare the most recent compliance sample from a given well to historical data from the same well and provide statistical limits representative of the background data population. Interwell prediction limits pool upgradient well data to

establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present and to identify potential SSIs. When an initial (or apparent) statistically significant increase or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier. If the second sample exceeds its respective background statistical limit, a statistically significant increase (SSI) is identified. If the second sample is below its respective background limit, there is no SSI. In accordance with the Unified Guidance, the following adjustments were made to the statistical analysis program:

- No statistical analyses are required on wells and constituents containing 100% non-detects (EPA Unified Guidance, 2009, Chapter 6).
- When background data contain <15% non-detects, a simple substitution of one-half the reporting limit is used in the statistical analysis. The reporting limit used for non-detects is the practical quantitation limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data.
- Non-parametric prediction limits are used on data containing greater than 50% non-detects.

8.2 Appendix IV Evaluation

When in assessment monitoring, Appendix IV constituents are sampled semi-annually, and concentrations are compared to GWPS. 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 tolerance limit (i.e., background) calculated using the pool of all available upgradient well data (see Chapter 7 of the Unified Guidance), or an applicable groundwater protection standard such as the Maximum Contaminant Level (MCL). 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., Upper Tolerance Limits (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 on the number of background samples. The UTLs were then used as the Groundwater Protection Standards (GWPS).

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

- (1) The MCL established under § 141.62 and 141.66 of this title.
- (2) Where an MCL has not been established:
 - (i) Cobalt 0.006 milligrams per liter (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-identified GWPS.

Following the above requirements, GWPS have been established for statistical comparison of Appendix IV constituents.

8.3 Statistical Exceedances

Laboratory analytical data from the first and second 2024 semi-annual monitoring events were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (October 2017) by Groundwater Stats Consulting, LLC. Statistical analyses were performed to determine if Appendix III constituent concentrations have returned to background levels. Appendix IV assessment monitoring constituents were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

8.3.1 Appendix III Evaluation

A review of the Sanitas™ results presented in **Appendix B** identified the following Appendix III SSIs during the first semi-annual monitoring event:

- BAW-3: pH
- BAW-4: Boron, Calcium, Sulfate, and TDS
- BAW-5: Boron, Calcium, pH, Sulfate, and TDS

During the second semi-annual monitoring event, the following SSIs were identified:

- BAW-3: pH
- BAW-4: Calcium
- BAW-5: Boron, Calcium, pH, Sulfate and TDS

Since the site is performing assessment monitoring, no further action is required regarding these SSIs.

8.3.2 Appendix IV Evaluation

To complete the statistical comparison to GWPS, confidence intervals were constructed for each Appendix IV constituent detected in each of the downgradient monitoring wells. Those confidence intervals were compared to the GWPS. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard.

Using GWPS established according to 40 CFR §257.95(h), statistical analysis of Appendix IV data identified the following Statistically Significant Level (SSL) of a GWPS during the first and second semi-annual monitoring events at the listed well:

- BAW-5: Lithium

In accordance with §257.95(g), a notification identifying the SSLs for lithium was placed in the facility's Operating Record on November 14, 2018. As discussed in Section 9.0, an alternate source demonstration (ASD) was previously prepared for this SSL and no further action is required.

9.0 ALTERNATE SOURCE DEMONSTRATION

In accordance with 40 CFR § 257.95(g)(3)(ii), the owner or operator may demonstrate that a source other than the CCR Unit has caused an SSI or that the SSI resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. An ASD report for the elevated lithium concentrations was submitted on July 12, 2019. As discussed in the ASD report, the elevated lithium concentrations are not attributable to the regulated unit, but rather stem from a natural variability in groundwater quality. Therefore, pursuant to §257.95(g)(3)(ii), an assessment of corrective measures is not required, and AP-B will remain in assessment monitoring.

10.0 SUMMARY AND CONCLUSIONS

Based on results reported in the *2024 Annual Groundwater and Corrective Action Monitoring Report*, MPC remains in assessment monitoring. Groundwater samples were collected semi-annually from the certified well network and analyzed for constituents listed in Appendix III and Appendix IV. Statistical evaluations of the 2024 assessment monitoring data identified SSLs of Appendix IV constituents (lithium) above the GWPS in monitoring well BAW-5. However, as discussed in the ASD report, the elevated lithium concentrations are not attributable to the regulated unit, but rather stem from a natural variability in groundwater quality. In accordance with § 257.95(d), MPC will continue assessment monitoring. The following future actions will be taken or are recommended for the Site:

- Continue semi-annual assessment monitoring in 2025.
- Submit 2025 Annual Groundwater Monitoring and Corrective Action Report by January 31, 2026.

11.0 REFERENCES

ASTM Standard D5092, 2004(2010)e1, Standard Practice for Design and Installation of Groundwater Monitoring Wells, ASTM International, West Conshohocken, PA, DOI 10.1520/D5092-04R10E01, www.astm.org.

Gandl, L.A. “Characterization of Aquifers Designated as Potential Drinking Water Sources in Mississippi,” Water Resources Investigation Open-File Report 81-550, Mississippi Department of Natural Resources, Bureau of Pollution Control. 1982. 90 pp.

Southern Company Services, Inc., Alternate Source Demonstration, Mississippi Power Company, Plant Victor Daniel, Ash Pond B, July 12, 2019.

USEPA Waste Management Division Office of Solid Waste. 1989. EPA 530/SW-89-031 Interim Final RCRA Investigation (RFI) Guidance, Volume II and IV.

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 257 and 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.

USEPA. 2011. *Data Validation Standard Operating Procedures.* Science and Ecosystem Support Division. Region IV. Athens, GA. September.

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

Wasson, B.E., 1978, Availability of additional ground-water supplies in the Pascagoula area, Mississippi: Mississippi Research and Development Center Bulletin, 32 p.

TABLES



Table 1. Monitoring Well Network Details

Plant Daniel Ash Pond B

Well ID	Hydraulic Location	Latitude	Longitude	Top of Casing Elevation (ft. MSL)	Ground Elevation (ft. MSL)	Well Depth (ft. BTOC)	Top of Screen Elevation (ft. MSL)	Bottom of Screen Elevation (ft. MSL)	Date of Installation
BAW-1	Upgradient	30.54178	-88.55594	32.24	29.22	60.72	-23.18	-28.18	7/23/2015
BAW-2	Upgradient (Abandoned)	30.53975	-88.55590	42.43	39.70	64.53	-11.80	-21.80	7/23/2015
BAW-2A	Upgradient	30.53969	-88.55590	41.15	38.22	66.93	-15.48	-25.48	3/19/2018
BAW-3	Downgradient	30.53747	-88.55603	40.62	37.60	67.62	-16.70	-26.70	7/23/2015
BAW-4	Downgradient	30.53740	-88.55766	37.05	34.12	69.13	-21.78	-31.78	7/23/2015
BAW-5	Downgradient	30.53773	-88.55904	39.93	37.41	69.12	-18.89	-28.89	7/23/2015
BAW-7	Downgradient	30.54105	-88.55693	35.60	35.92	63.80	-17.90	-27.90	7/23/2015
PZ-8	Piezometer	30.53753	-88.55888	40.05	37.26	68.29	-17.94	-27.94	3/14/2018
PZ-9	Piezometer	30.53742	-88.55897	39.32	36.50	62.82	-13.20	-23.20	3/15/2018

Notes:

1. Elevations shown are referenced Mean Sea Level (MSL) to NAVD 88 (G12) U.S. Survey Feet.
2. MSL - Mean Sea Level.
3. BAW-2 was replaced by BAW-2A due to well damage.
4. BAW-7 was modified during closure to match new grade. Thompson Engineering certified the survey on January 23, 2023.



Table 2. Constituents And Reporting Limits

Plant Daniel Ash Pond B

03/20/2024 - 10/02/2024

Appendix III Constituents			
Constituent	Analytical Method	Reporting Limit	Units of Measure
Boron	EPA 6020B	0.08	mg/L
Calcium	EPA 6020B	0.5	mg/L
Chloride	EPA 9056A	1	mg/L
Fluoride	EPA 9056A	0.1	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	EPA 9056A	1	mg/L
TDS	SM 2540C-2016	10	mg/L
Appendix IV Constituents			
Constituent	Analytical Method	Reporting Limit	Units of Measure
Antimony	EPA 6020B	0.002	mg/L
Arsenic	EPA 6020B	0.001	mg/L
Barium	EPA 6020B	0.01	mg/L
Beryllium	EPA 6020B	0.001	mg/L
Cadmium	EPA 6020B	0.001	SU
Chromium	EPA 6020B	0.002	mg/L
Cobalt	EPA 6020B	0.0005	mg/L
Fluoride	EPA 9056A	0.1	mg/L
Lead	EPA 6020B	0.001	mg/L
Lithium	EPA 6020B	0.005	mg/L
Mercury	EPA 7470A	0.0002	mg/L
Molybdenum	EPA 6020B	0.005	mg/L
Selenium	EPA 6020B	0.005	mg/L
Thallium	EPA 6020B	0.001	mg/L
Combined Radium 226+228	Total Radium Calculation	5	pCi/L

Notes:

1. mg/L - milligrams per liter, SU - standard unit, pCi/L - picocuries per liter, TDS - Total Dissolved Solids, NA - not applicable (varies)
2. Reporting limit values can display range depending upon matrix interferences and dilution factors
3. pH is a field acquired parameter and does not have a laboratory method or reporting limit
4. EPA 6020B – EPA methodology for the "Inductively Coupled Plasma - Mass Spectrometry, part of Test Methods for Evaluating Solid Waste, Physical/Chemical Methods"
5. EPA 9056A – EPA methodology for the "Determination of Inorganic Anions by Ion Chromatography, part of Test methods for Evaluating Solid Waste, Physical/Chemical Methods"
6. SM 2540, 4500 – Standard Method(s) for Examination of Water and Wastewater
7. EPA 7470A – EPA methodology for the "Determination of Mercury in Water by Cold Vapor Atomic Absorption Spectrometry (CVAA)"
8. SM 2540, 4500 – Standard Method(s) for Examination of Water and Wastewater
9. Total Radium Calculation – Term used herein for EPA 9315 + EPA 9320
10. EPA 9315 – Used for Radium-226; SW-846: Alpha-Emitting Radium Isotopes, part of Test Methods for Evaluating Solid Waste, Physical/Chemical Methods
11. EPA 9320 – Used for Radium-228; SW-846: Alpha-Emitting Radium Isotopes, part of Test Methods for Evaluating Solid Waste, Physical/Chemical Methods



Table 3. Groundwater Elevation Summary

Plant Daniel Ash Pond B

Measurement Date		March 18, 2024		September 30, 2024	
Well ID	Top of Casing Elevation (ft. MSL)	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. MSL)	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. MSL)
BAW-1	32.24	23.22	9.02	24.47	7.77
BAW-2A	41.15	32.55	8.60	33.75	7.40
BAW-3	40.62	32.09	8.53	33.27	7.35
BAW-4	37.05	29.69	7.36	30.76	6.29
BAW-5	39.93	33.31	6.62	34.41	5.52
BAW-7	35.60	27.30	8.30	28.54	7.06
PZ-8	40.05	33.27	6.78	34.35	5.70
PZ-9	39.32	32.58	6.74	33.67	5.65

Notes:

1. MSL - Mean Sea Level
2. BTOC - Below Top of Casing



Table 4. Groundwater Velocity Calculations

Plant Daniel Ash Pond B

03/18/2024 - 09/30/2024

Flow Path A								
Sample Date	BAW-1	BAW-5	Distance	Hydraulic Gradient	Hydraulic Conductivity	Assumed Effective Porosity	Calculated Groundwater Flow Velocity	Calculated Groundwater Flow Velocity
	h_1 (ft)	h_2 (ft)	Δl (ft)	$\Delta h/\Delta l$ (ft/ft)	K	ne	Feet/day	Feet/year
03/18/24	9.02	6.62	1764	0.0014	25.09	0.2	0.17	62.30
09/30/24	7.77	5.52	1764	0.0013	25.09	0.2	0.16	58.40

Flow Path B								
Sample Date	BAW-3	BAW-5	Distance	Hydraulic Gradient	Hydraulic Conductivity	Assumed Effective Porosity	Calculated Groundwater Flow Velocity	Calculated Groundwater Flow Velocity
	h_1 (ft)	h_2 (ft)	Δl (ft)	$\Delta h/\Delta l$ (ft/ft)	K	ne	Feet/day	Feet/year
03/18/24	8.53	6.74	960	0.0019	25.09	0.2	0.23	85.38
09/30/24	7.35	5.52	960	0.0019	25.09	0.2	0.24	87.29

Notes:

ft=feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year



Table 5. Relative Percent Defference (RPD) Calculations

Plant Daniel Ash Pond B

03/20/2024 -10/02/2024

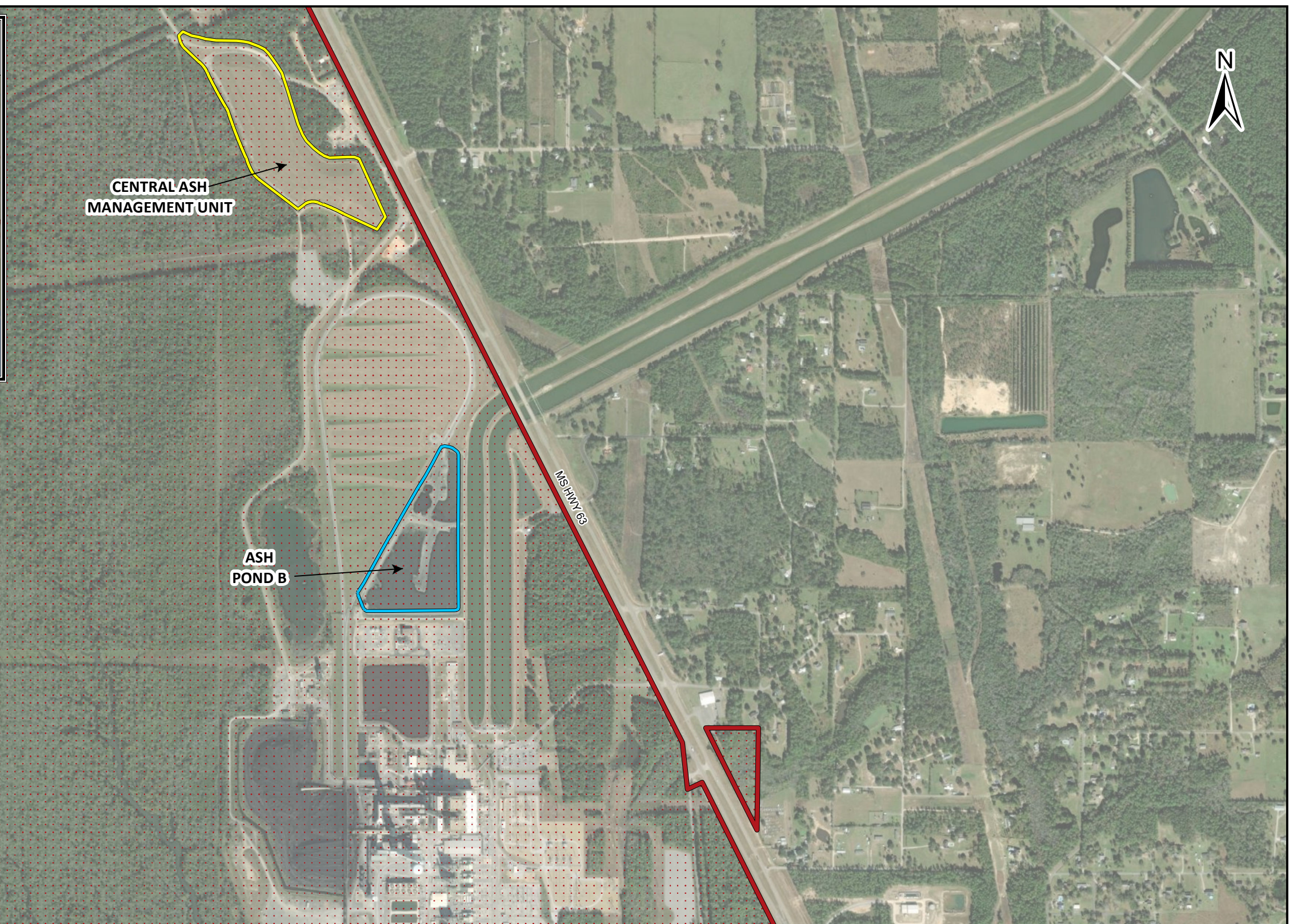
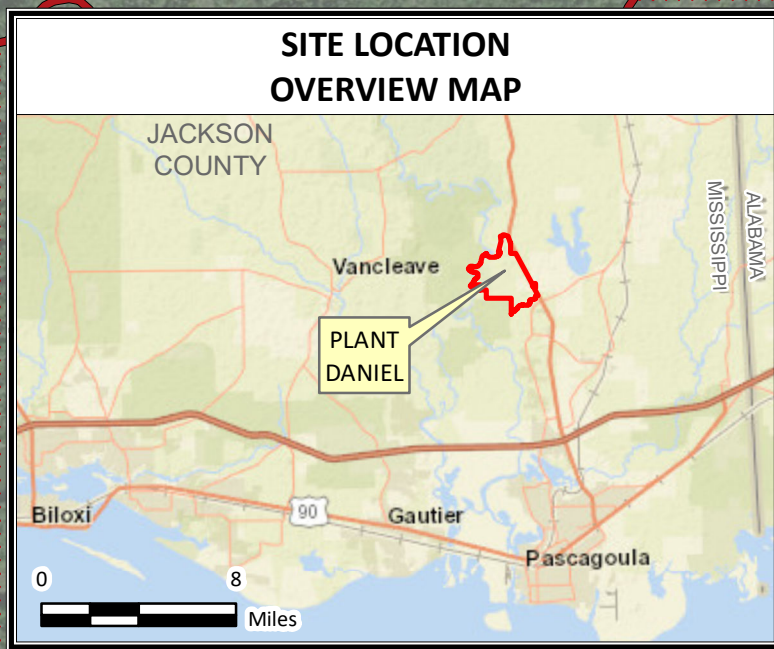
First Semi-Annual Monitoring Event					
Well ID	Constituent	Units	Original Result	Duplicate Result	RPD %
BAW-1	Barium	mg/L	0.0347	0.0359	3.40
	Calcium	mg/L	1.05	1.10	4.65
	Cobalt	mg/L	0.00128	0.00129	0.78
	Chloride	mg/L	6.17	6.84	10.30
	Sulfate	mg/L	1.41	1.83	25.93
	TDS	mg/L	29	29	0.00
BAW-7	Barium	mg/L	0.0307	0.03	2.57
	Calcium	mg/L	1.38	1.39	0.72
	Cobalt	mg/L	0.00186	0.0019	2.13
	Chloride	mg/L	8.37	8.70	3.87
	Sulfate	mg/L	1.66	1.82	9.20
	TDS	mg/L	40	40	0.00

Second Semi-Annual Monitoring Event					
Well ID	Constituent	Units	Original Result	Duplicate Result	RPD %
BAW-3	Barium	mg/L	0.0407	0.0431	5.73
	Calcium	mg/L	0.781	0.8	2.40
	Cobalt	mg/L	0.0105	0.0107	1.89
	Chloride	mg/L	5.35	5.29	1.13
	TDS	mg/L	30	42	33.33

Notes:

1. The RPD calculations presented are for constituent pairs where original and duplicate results are valid, unqualified detections.
2. RPD calculation results less than or equal to 20% are considered acceptable.
3. Results greater than 20% are given data validation flags to indicate RPD criteria failure.
4. Communication to sampling team and lab may be necessary to explore nature of RPD failure(s).

FIGURES



- LEGEND**
- Ash Pond B Boundary
 - Central Ash Management Unit (CAMU) Boundary
 - Property Boundary (Approximate)








Projection: NAD 1983 State Plane Mississippi East FIPS2301 Feet
 Base Map: Maxar Vivid Standard, 10/31/2016 (west), 11/17/2020 (east).

SCALE	1:12000
DATE	1/21/2025
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:	SITE LOCATION MAP PLANT DANIEL ASH POND B
FIGURE NO.	
Southern Company	




NOTES:
 1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.

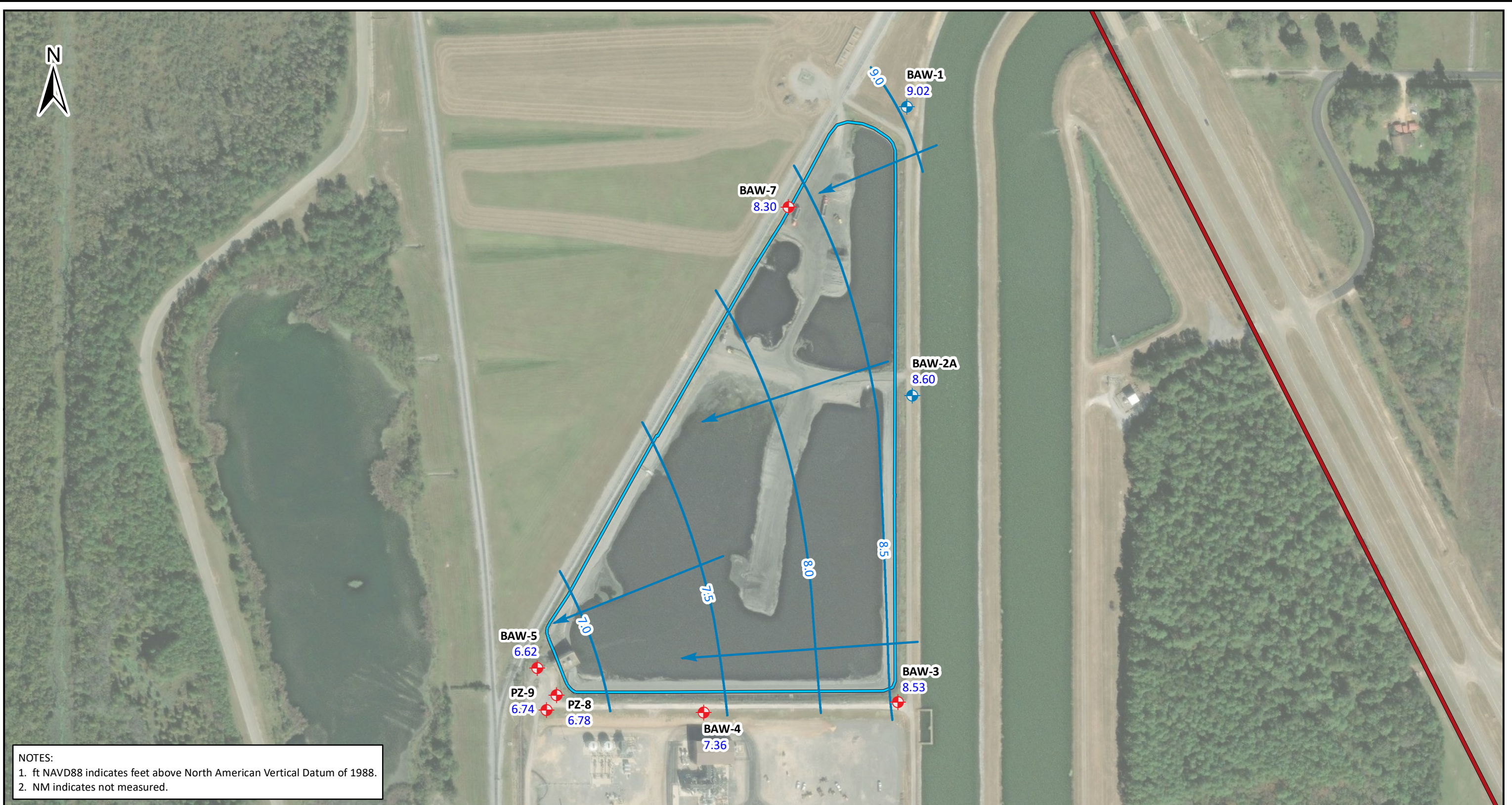
- LEGEND**
-  Downgradient Compliance Well
 -  Upgradient Compliance Well
 -  Abandoned Well
 -  Ash Pond B Boundary
 -  Property Boundary (Approximate)



Base Map: Maxar Vivid Standard, 10/16/2021.
 Projection: NAD 1983 State Plane Mississippi East FIPS2301 Feet

SCALE	1:3,000
DATE	1/17/2025
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:	WELL LOCATION MAP PLANT DANIEL ASH POND B
FIGURE NO.	
	



NOTES:
 1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
 2. NM indicates not measured.

LEGEND	
	Downgradient Compliance Well
	Upgradient Compliance Well
	Estimated Potentiometric Surface Contour
	Approximate Groundwater Flow Direction
	Ash Pond B Boundary
	Property Boundary (Approximate)
BAW-1	Well Name
9.02	Groundwater Elevation (ft NAVD88)



Base Map: Maxar Vivid Standard, 10/16/2021.
 Projection: NAD 1983 State Plane Mississippi East FIPS2301 Feet

SCALE	1:3,000
DATE	1/17/2025
DRAWN BY	KAR
CHECKED BY	RFS

DRAWING TITLE: POTENTIOMETRIC SURFACE CONTOUR MAP MARCH 18, 2024 PLANT DANIEL ASH POND B	
FIGURE NO.	FIGURE 3



NOTES:
 1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
 2. NM indicates not measured.

LEGEND

- Downgradient Compliance Well
- Upgradient Compliance Well
- Estimated Potentiometric Surface Contour
- Approximate Groundwater Flow Direction
- Ash Pond B Boundary
- Property Boundary (Approximate)
- BAW-1** Well Name
- 7.77** Groundwater Elevation (ft NAVD88)



Base Map: Maxar Vivid Standard, 10/16/2021.
 Projection: NAD 1983 State Plane Mississippi East FIPS2301 Feet

SCALE
1:3,000

DATE
1/17/2025

DRAWN BY
KAR

CHECKED BY
AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
SEPTEMBER 30, 2024
PLANT DANIEL ASH POND B

FIGURE NO.
FIGURE 4



APPENDIX A

Laboratory and Field Records

Low-Flow Test Report:

Test Date / Time: 3/20/2024 3:22:15 PM

Project: Daniel CCR BAW-1

Operator Name: Todd Voreis

Location Name: Daniel CCR BAW-1 Well Diameter: 2 in Casing Type: PVC Screen Length: 5 ft Top of Screen: 55.6 ft Total Depth: 60.6 ft Initial Depth to Water: 23.06 ft	Pump Type: BP Tubing Type: PE Pump Intake From TOC: 58.1 ft Estimated Total Volume Pumped: 28000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.1 ft	Instrument Used: Aqua TROLL 400 Serial Number: 852546
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Test Notes:

Weather Conditions:

Sunny, 69 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/20/2024 3:22 PM	00:00	6.67 pH	21.95 °C	36.10 µS/cm	8.20 mg/L		53.1 mV	23.06 ft	400.00 ml/min
3/20/2024 3:27 PM	05:00	4.83 pH	22.13 °C	37.91 µS/cm	5.24 mg/L	1.23 NTU	80.1 mV	23.16 ft	400.00 ml/min
3/20/2024 3:32 PM	10:00	4.79 pH	22.10 °C	38.29 µS/cm	5.20 mg/L	1.04 NTU	89.4 mV	23.16 ft	400.00 ml/min
3/20/2024 3:37 PM	15:00	4.81 pH	21.98 °C	38.18 µS/cm	5.24 mg/L	1.22 NTU	122.1 mV	23.16 ft	400.00 ml/min
3/20/2024 3:42 PM	20:00	4.83 pH	21.82 °C	38.26 µS/cm	5.27 mg/L	1.20 NTU	137.6 mV	23.16 ft	400.00 ml/min
3/20/2024 3:47 PM	25:00	4.84 pH	21.77 °C	38.28 µS/cm	5.29 mg/L	1.05 NTU	149.2 mV	23.16 ft	400.00 ml/min
3/20/2024 3:52 PM	30:00	4.87 pH	21.86 °C	38.32 µS/cm	5.31 mg/L	0.93 NTU	155.9 mV	23.16 ft	400.00 ml/min
3/20/2024 3:57 PM	35:00	4.89 pH	21.85 °C	38.51 µS/cm	5.32 mg/L	0.90 NTU	118.3 mV	23.16 ft	400.00 ml/min
3/20/2024 4:02 PM	40:00	4.88 pH	21.88 °C	38.37 µS/cm	5.35 mg/L	0.84 NTU	162.0 mV	23.16 ft	400.00 ml/min
3/20/2024 4:07 PM	45:00	4.89 pH	21.82 °C	38.43 µS/cm	5.35 mg/L	0.78 NTU	164.9 mV	23.16 ft	400.00 ml/min
3/20/2024 4:12 PM	50:00	4.90 pH	21.77 °C	38.43 µS/cm	5.36 mg/L	0.86 NTU	121.1 mV	23.16 ft	400.00 ml/min
3/20/2024 4:17 PM	55:00	4.91 pH	21.81 °C	38.44 µS/cm	5.34 mg/L	0.72 NTU	120.4 mV	23.16 ft	400.00 ml/min
3/20/2024 4:22 PM	01:00:00	4.91 pH	21.72 °C	38.34 µS/cm	5.35 mg/L	0.60 NTU	166.1 mV	23.16 ft	400.00 ml/min

3/20/2024 4:27 PM	01:05:00	4.92 pH	21.73 °C	38.43 µS/cm	5.34 mg/L	0.64 NTU	168.1 mV	23.16 ft	400.00 ml/min
3/20/2024 4:32 PM	01:10:00	4.93 pH	21.68 °C	38.37 µS/cm	5.35 mg/L	0.60 NTU	168.2 mV	23.16 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-1	Sample time 1635
DUP-07	Fake sample time 1535

Low-Flow Test Report:

Test Date / Time: 3/21/2024 12:00:23 PM

Project: Daniel CCR BAW-2A

Operator Name: Todd Voreis

Location Name: Daniel CCR BAW-2A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 57.2 ft Total Depth: 67.2 ft Initial Depth to Water: 32.45 ft	Pump Type: BP Tubing Type: PE Pump Intake From TOC: 62.7 ft Estimated Total Volume Pumped: 26000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 852546
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Test Notes:

Weather Conditions:

Partly cloudy, 70 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/21/2024 12:00 PM	00:00	4.95 pH	23.28 °C	61.94 µS/cm	7.87 mg/L		171.3 mV	32.45 ft	400.00 ml/min
3/21/2024 12:05 PM	05:00	4.80 pH	23.20 °C	62.68 µS/cm	2.00 mg/L	3.85 NTU	131.1 mV	32.45 ft	400.00 ml/min
3/21/2024 12:10 PM	10:00	4.81 pH	23.16 °C	62.44 µS/cm	2.73 mg/L	3.31 NTU	123.8 mV	32.45 ft	400.00 ml/min
3/21/2024 12:15 PM	15:00	4.81 pH	23.16 °C	62.34 µS/cm	2.95 mg/L	2.32 NTU	121.7 mV	32.45 ft	400.00 ml/min
3/21/2024 12:20 PM	20:00	4.81 pH	23.13 °C	62.20 µS/cm	3.03 mg/L	1.86 NTU	158.2 mV	32.45 ft	400.00 ml/min
3/21/2024 12:25 PM	25:00	4.83 pH	23.12 °C	62.02 µS/cm	3.06 mg/L	1.63 NTU	158.5 mV	32.45 ft	400.00 ml/min
3/21/2024 12:30 PM	30:00	4.82 pH	23.15 °C	61.79 µS/cm	3.06 mg/L	1.24 NTU	158.4 mV	32.45 ft	400.00 ml/min
3/21/2024 12:35 PM	35:00	4.84 pH	23.16 °C	61.55 µS/cm	3.05 mg/L	1.14 NTU	119.4 mV	32.45 ft	400.00 ml/min
3/21/2024 12:40 PM	40:00	4.85 pH	23.16 °C	61.10 µS/cm	3.02 mg/L	1.22 NTU	117.1 mV	32.45 ft	400.00 ml/min
3/21/2024 12:45 PM	45:00	4.85 pH	23.12 °C	60.84 µS/cm	3.02 mg/L	1.29 NTU	116.3 mV	32.45 ft	400.00 ml/min
3/21/2024 12:50 PM	50:00	4.84 pH	23.11 °C	60.49 µS/cm	3.07 mg/L	1.07 NTU	116.4 mV	32.45 ft	400.00 ml/min
3/21/2024 12:55 PM	55:00	4.84 pH	23.10 °C	60.22 µS/cm	3.07 mg/L	1.05 NTU	116.2 mV	32.45 ft	400.00 ml/min
3/21/2024 1:00 PM	01:00:00	4.86 pH	23.07 °C	60.37 µS/cm	3.05 mg/L	1.25 NTU	115.1 mV	32.45 ft	400.00 ml/min

3/21/2024 1:05 PM	01:05:00	4.86 pH	23.09 °C	59.94 µS/cm	3.06 mg/L	0.95 NTU	114.8 mV	32.45 ft	400.00 ml/min
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Samples

Sample ID:	Description:
BAW-2A	Sample time 1310

Low-Flow Test Report:

Test Date / Time: 3/21/2024 9:05:36 AM

Project: Daniel CCR BAW-3

Operator Name: Todd Voreis

Location Name: Daniel CCR BAW-3 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 58.4 ft Total Depth: 68.4 ft Initial Depth to Water: 32 ft	Pump Type: BP Tubing Type: PE Pump Intake From TOC: 58.1 ft Estimated Total Volume Pumped: 26000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 852546
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Test Notes:

Weather Conditions:

Partly cloudy, 59 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/21/2024 9:05 AM	00:00	4.29 pH	19.77 °C	51.67 µS/cm	2.58 mg/L		141.9 mV	32.00 ft	400.00 ml/min
3/21/2024 9:10 AM	05:00	4.31 pH	21.64 °C	48.84 µS/cm	0.71 mg/L	2.63 NTU	130.6 mV	32.00 ft	400.00 ml/min
3/21/2024 9:15 AM	10:00	4.30 pH	21.70 °C	48.67 µS/cm	0.51 mg/L	2.89 NTU	171.0 mV	32.00 ft	400.00 ml/min
3/21/2024 9:20 AM	15:00	4.33 pH	21.76 °C	48.42 µS/cm	0.50 mg/L	2.57 NTU	167.8 mV	32.00 ft	400.00 ml/min
3/21/2024 9:25 AM	20:00	4.34 pH	21.86 °C	48.18 µS/cm	0.51 mg/L	1.77 NTU	163.8 mV	32.00 ft	400.00 ml/min
3/21/2024 9:30 AM	25:00	4.35 pH	21.87 °C	47.97 µS/cm	0.51 mg/L	1.52 NTU	159.7 mV	32.00 ft	400.00 ml/min
3/21/2024 9:35 AM	30:00	4.35 pH	21.95 °C	47.78 µS/cm	0.48 mg/L	1.68 NTU	156.5 mV	32.00 ft	400.00 ml/min
3/21/2024 9:40 AM	35:00	4.38 pH	22.00 °C	47.56 µS/cm	0.46 mg/L	1.44 NTU	152.7 mV	32.00 ft	400.00 ml/min
3/21/2024 9:45 AM	40:00	4.39 pH	22.09 °C	47.45 µS/cm	0.45 mg/L	1.16 NTU	150.1 mV	32.00 ft	400.00 ml/min
3/21/2024 9:50 AM	45:00	4.40 pH	22.08 °C	47.33 µS/cm	0.44 mg/L	1.14 NTU	111.0 mV	32.00 ft	400.00 ml/min
3/21/2024 9:55 AM	50:00	4.40 pH	22.12 °C	47.26 µS/cm	0.43 mg/L	1.14 NTU	108.4 mV	32.00 ft	400.00 ml/min
3/21/2024 10:00 AM	55:00	4.40 pH	22.17 °C	47.16 µS/cm	0.43 mg/L	1.45 NTU	138.9 mV	32.00 ft	400.00 ml/min
3/21/2024 10:05 AM	01:00:00	4.40 pH	22.09 °C	47.10 µS/cm	0.42 mg/L	1.22 NTU	141.1 mV	32.00 ft	400.00 ml/min

3/21/2024 10:10 AM	01:05:00	4.39 pH	22.09 °C	47.12 µS/cm	0.42 mg/L	1.04 NTU	141.8 mV	32.00 ft	400.00 ml/min
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Samples

Sample ID:	Description:
BAW-3	Sample time 1015

Low-Flow Test Report:

Test Date / Time: 3/21/2024 2:22:26 PM

Project: Daniel CCR BAW-4

Operator Name: Todd Voreis

Location Name: Daniel CCR BAW-4 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 59.9 ft Total Depth: 69.9 ft Initial Depth to Water: 29.51 ft	Pump Type: BP Tubing Type: PE Pump Intake From TOC: 64.9 ft Estimated Total Volume Pumped: 38000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.03 ft	Instrument Used: Aqua TROLL 400 Serial Number: 852546
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Test Notes:

Weather Conditions:

Partly cloudy, 67 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.2	
3/21/2024 2:22 PM	00:00	6.33 pH	20.03 °C	888.74 µS/cm	9.10 mg/L		122.7 mV	29.51 ft	400.00 ml/min
3/21/2024 2:27 PM	05:00	5.54 pH	21.82 °C	106.01 µS/cm	0.41 mg/L	96.70 NTU	25.5 mV	29.54 ft	400.00 ml/min
3/21/2024 2:32 PM	10:00	5.59 pH	21.95 °C	110.86 µS/cm	0.21 mg/L	56.50 NTU	16.9 mV	29.54 ft	400.00 ml/min
3/21/2024 2:37 PM	15:00	5.59 pH	21.95 °C	110.64 µS/cm	0.19 mg/L	20.20 NTU	11.8 mV	29.54 ft	400.00 ml/min
3/21/2024 2:42 PM	20:00	5.57 pH	21.94 °C	108.10 µS/cm	0.20 mg/L	8.53 NTU	8.1 mV	29.54 ft	400.00 ml/min
3/21/2024 2:47 PM	25:00	5.54 pH	21.82 °C	104.94 µS/cm	0.20 mg/L	8.98 NTU	5.3 mV	29.54 ft	400.00 ml/min
3/21/2024 2:52 PM	30:00	5.51 pH	21.91 °C	103.15 µS/cm	0.21 mg/L	8.90 NTU	4.0 mV	29.54 ft	400.00 ml/min
3/21/2024 2:57 PM	35:00	5.50 pH	21.91 °C	101.79 µS/cm	0.21 mg/L	7.87 NTU	2.1 mV	29.54 ft	400.00 ml/min
3/21/2024 3:02 PM	40:00	5.49 pH	21.86 °C	100.74 µS/cm	0.21 mg/L	5.61 NTU	0.6 mV	29.54 ft	400.00 ml/min
3/21/2024 3:07 PM	45:00	5.48 pH	21.91 °C	99.78 µS/cm	0.21 mg/L	4.50 NTU	0.8 mV	29.54 ft	400.00 ml/min
3/21/2024 3:12 PM	50:00	5.46 pH	21.94 °C	98.41 µS/cm	0.21 mg/L	4.22 NTU	-0.3 mV	29.54 ft	400.00 ml/min
3/21/2024 3:17 PM	55:00	5.47 pH	21.91 °C	98.19 µS/cm	0.21 mg/L	3.35 NTU	-1.3 mV	29.54 ft	400.00 ml/min
3/21/2024 3:22 PM	01:00:00	5.46 pH	21.90 °C	98.09 µS/cm	0.21 mg/L	3.09 NTU	-0.5 mV	29.54 ft	400.00 ml/min

3/21/2024 3:27 PM	01:05:00	5.47 pH	21.93 °C	97.60 µS/cm	0.21 mg/L	2.60 NTU	-1.3 mV	29.54 ft	400.00 ml/min
3/21/2024 3:32 PM	01:10:00	5.46 pH	21.81 °C	97.26 µS/cm	0.20 mg/L	3.05 NTU	-2.1 mV	29.54 ft	400.00 ml/min
3/21/2024 3:37 PM	01:15:00	5.47 pH	21.77 °C	97.21 µS/cm	0.21 mg/L	4.09 NTU	-2.8 mV	29.54 ft	400.00 ml/min
3/21/2024 3:42 PM	01:20:00	5.47 pH	21.88 °C	97.10 µS/cm	0.20 mg/L	3.60 NTU	-1.8 mV	29.54 ft	400.00 ml/min
3/21/2024 3:47 PM	01:25:00	5.47 pH	21.82 °C	96.92 µS/cm	0.20 mg/L	3.17 NTU	-3.4 mV	29.54 ft	400.00 ml/min
3/21/2024 3:52 PM	01:30:00	5.47 pH	21.87 °C	96.45 µS/cm	0.20 mg/L	2.24 NTU	-3.8 mV	29.54 ft	400.00 ml/min
3/21/2024 3:57 PM	01:35:00	5.47 pH	21.78 °C	96.10 µS/cm	0.20 mg/L	1.92 NTU	-2.5 mV	29.54 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-4	Sample time 1600

Low-Flow Test Report:

Test Date / Time: 3/20/2024 4:39:39 PM

Project: Daniel CCR BAW-5

Operator Name: Rick Hagendorfer

Location Name: Daniel CCR BAW-05 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 59.1 ft Total Depth: 69.1 ft Initial Depth to Water: 33.26 ft	Pump Type: QED Tubing Type: PE Pump Intake From TOC: 64.1 ft Estimated Total Volume Pumped: 18000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.12 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1055720
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Test Notes:

Weather Conditions:

Sunny 68

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/20/2024 4:39 PM	00:00	6.10 pH	23.52 °C	287.73 µS/cm	1.64 mg/L		81.6 mV	33.26 ft	400.00 ml/min
3/20/2024 4:44 PM	05:00	6.09 pH	23.08 °C	282.58 µS/cm	0.27 mg/L	7.77 NTU	65.2 mV	33.38 ft	400.00 ml/min
3/20/2024 4:49 PM	10:00	6.12 pH	23.01 °C	282.59 µS/cm	0.22 mg/L	7.69 NTU	57.5 mV	33.38 ft	400.00 ml/min
3/20/2024 4:54 PM	15:00	6.13 pH	23.02 °C	286.09 µS/cm	0.21 mg/L	7.15 NTU	52.9 mV	33.38 ft	400.00 ml/min
3/20/2024 4:59 PM	20:00	6.15 pH	23.03 °C	289.99 µS/cm	0.21 mg/L	6.04 NTU	48.5 mV	33.38 ft	400.00 ml/min
3/20/2024 5:04 PM	25:00	6.16 pH	23.00 °C	293.45 µS/cm	0.22 mg/L	5.01 NTU	44.8 mV	33.38 ft	400.00 ml/min
3/20/2024 5:09 PM	30:00	6.18 pH	23.02 °C	294.15 µS/cm	0.22 mg/L	3.27 NTU	41.6 mV	33.38 ft	400.00 ml/min
3/20/2024 5:14 PM	35:00	6.18 pH	23.03 °C	294.34 µS/cm	0.22 mg/L	2.33 NTU	38.9 mV	33.38 ft	400.00 ml/min
3/20/2024 5:19 PM	40:00	6.19 pH	22.99 °C	295.23 µS/cm	0.22 mg/L	2.28 NTU	35.9 mV	33.38 ft	400.00 ml/min
3/20/2024 5:24 PM	45:00	6.20 pH	22.98 °C	295.44 µS/cm	0.23 mg/L	1.86 NTU	33.5 mV	33.38 ft	400.00 ml/min

Samples

Sample ID:	Description:
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BAW-05

Sample time 1726

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 3/21/2024 8:57:52 AM

Project: Daniel CCR BAW-7

Operator Name: Rick Hagendorfer

Location Name: Daniel CCR BAW-07 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 53.8 ft Total Depth: 63.8 ft Initial Depth to Water: 27.22 ft	Pump Type: QED Tubing Type: PE Pump Intake From TOC: 58.8 ft Estimated Total Volume Pumped: 58000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.09 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1055720
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Test Notes:

Truck that sprays the railroad tracks for weeds passed by while filling equipment blanks.

Stopped filling bottles when we saw him approaching, then resumed filling a few minutes after he drove away.

Weather Conditions:

Sunny 55

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/21/2024 8:57 AM	00:00	5.70 pH	16.99 °C	55.16 µS/cm	8.71 mg/L		88.7 mV	27.22 ft	400.00 ml/min
3/21/2024 9:02 AM	05:00	4.88 pH	21.12 °C	50.29 µS/cm	5.72 mg/L	42.10 NTU	92.0 mV	27.31 ft	400.00 ml/min
3/21/2024 9:07 AM	10:00	4.88 pH	21.11 °C	49.38 µS/cm	5.62 mg/L	33.80 NTU	95.7 mV	27.31 ft	400.00 ml/min
3/21/2024 9:12 AM	15:00	4.88 pH	21.20 °C	49.02 µS/cm	5.73 mg/L	41.60 NTU	109.5 mV	27.31 ft	400.00 ml/min
3/21/2024 9:17 AM	20:00	4.87 pH	21.41 °C	48.83 µS/cm	5.48 mg/L	33.60 NTU	102.2 mV	27.31 ft	400.00 ml/min
3/21/2024 9:22 AM	25:00	4.86 pH	21.43 °C	48.45 µS/cm	5.87 mg/L	24.20 NTU	117.6 mV	27.31 ft	400.00 ml/min
3/21/2024 9:27 AM	30:00	4.88 pH	21.49 °C	48.54 µS/cm	5.84 mg/L	22.60 NTU	106.2 mV	27.31 ft	400.00 ml/min
3/21/2024 9:32 AM	35:00	4.89 pH	21.51 °C	49.12 µS/cm	6.13 mg/L	14.10 NTU	121.5 mV	27.31 ft	400.00 ml/min
3/21/2024 9:37 AM	40:00	4.89 pH	21.60 °C	48.57 µS/cm	6.05 mg/L	13.10 NTU	108.8 mV	27.31 ft	400.00 ml/min
3/21/2024 9:42 AM	45:00	4.89 pH	21.56 °C	48.37 µS/cm	5.79 mg/L	10.30 NTU	109.0 mV	27.31 ft	400.00 ml/min
3/21/2024 9:47 AM	50:00	4.89 pH	21.55 °C	48.25 µS/cm	6.00 mg/L	9.19 NTU	109.5 mV	27.31 ft	400.00 ml/min
3/21/2024 9:52 AM	55:00	4.88 pH	21.41 °C	48.30 µS/cm	6.04 mg/L	8.95 NTU	110.1 mV	27.31 ft	400.00 ml/min
3/21/2024 9:57 AM	01:00:00	4.89 pH	21.33 °C	48.04 µS/cm	5.95 mg/L	7.08 NTU	126.5 mV	27.31 ft	400.00 ml/min

3/21/2024 10:02 AM	01:05:00	4.89 pH	21.35 °C	48.71 µS/cm	6.07 mg/L	6.56 NTU	111.6 mV	27.31 ft	400.00 ml/min
3/21/2024 10:07 AM	01:10:00	4.89 pH	21.44 °C	48.40 µS/cm	6.07 mg/L	5.76 NTU	111.8 mV	27.31 ft	400.00 ml/min
3/21/2024 10:12 AM	01:15:00	4.89 pH	21.37 °C	48.44 µS/cm	6.10 mg/L	6.26 NTU	128.4 mV	27.31 ft	400.00 ml/min
3/21/2024 10:17 AM	01:20:00	4.90 pH	21.42 °C	49.11 µS/cm	6.29 mg/L	6.35 NTU	129.4 mV	27.31 ft	400.00 ml/min
3/21/2024 10:22 AM	01:25:00	4.89 pH	21.55 °C	48.24 µS/cm	6.20 mg/L	6.14 NTU	113.4 mV	27.31 ft	400.00 ml/min
3/21/2024 10:27 AM	01:30:00	4.89 pH	21.55 °C	48.51 µS/cm	6.23 mg/L	6.23 NTU	113.1 mV	27.31 ft	400.00 ml/min
3/21/2024 10:32 AM	01:35:00	4.88 pH	21.66 °C	48.37 µS/cm	6.20 mg/L	5.50 NTU	113.6 mV	27.31 ft	400.00 ml/min
3/21/2024 10:37 AM	01:40:00	4.88 pH	21.59 °C	48.23 µS/cm	6.21 mg/L	4.74 NTU	113.5 mV	27.31 ft	400.00 ml/min
3/21/2024 10:42 AM	01:45:00	4.91 pH	21.56 °C	48.46 µS/cm	6.29 mg/L	4.29 NTU	112.3 mV	27.31 ft	400.00 ml/min
3/21/2024 10:47 AM	01:50:00	4.91 pH	21.59 °C	48.15 µS/cm	6.22 mg/L	4.12 NTU	129.1 mV	27.31 ft	400.00 ml/min
3/21/2024 10:52 AM	01:55:00	4.90 pH	21.62 °C	48.82 µS/cm	6.28 mg/L	4.08 NTU	114.0 mV	27.31 ft	400.00 ml/min
3/21/2024 10:57 AM	02:00:00	4.90 pH	21.73 °C	48.62 µS/cm	6.21 mg/L	3.95 NTU	130.3 mV	27.31 ft	400.00 ml/min
3/21/2024 11:02 AM	02:05:00	4.91 pH	21.87 °C	48.05 µS/cm	6.24 mg/L	3.60 NTU	114.2 mV	27.31 ft	400.00 ml/min
3/21/2024 11:07 AM	02:10:00	4.90 pH	21.99 °C	48.37 µS/cm	6.31 mg/L	3.36 NTU	131.5 mV	27.31 ft	400.00 ml/min
3/21/2024 11:12 AM	02:15:00	4.90 pH	22.03 °C	48.75 µS/cm	6.32 mg/L	3.25 NTU	115.4 mV	27.31 ft	400.00 ml/min
3/21/2024 11:17 AM	02:20:00	4.91 pH	22.00 °C	48.82 µS/cm	6.38 mg/L	3.69 NTU	131.6 mV	27.31 ft	400.00 ml/min
3/21/2024 11:22 AM	02:25:00	4.89 pH	21.99 °C	48.56 µS/cm	6.32 mg/L	3.42 NTU	134.1 mV	27.31 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-07	Sample time 1125
DUP-08	Fake sample time 1025
FB-03	Sample time 0815
EB-03	Sample time 0820

Low-Flow Test Report:

Test Date / Time: 3/21/2024 12:40:37 PM

Project: Daniel CCR BAW-8

Operator Name: Rick Hagendorfer

Location Name: Daniel CCR BAW-8 Well Diameter: 2 in Casing Type: PVC Screen Length: 63.7 ft Top of Screen: 58.7 ft Total Depth: 68.7 ft Initial Depth to Water: 33.12 ft	Pump Type: BP Tubing Type: Pe Pump Intake From TOC: 63.7 ft Estimated Total Volume Pumped: 8000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.06 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1055720
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Test Notes:

Weather Conditions:

Cloudy 65

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/21/2024 12:40 PM	00:00	6.00 pH	23.61 °C	259.40 µS/cm	5.99 mg/L		125.6 mV	33.12 ft	400.00 ml/min
3/21/2024 12:45 PM	05:00	6.15 pH	22.62 °C	265.12 µS/cm	0.51 mg/L	0.62 NTU	77.3 mV	33.18 ft	400.00 ml/min
3/21/2024 12:50 PM	10:00	6.17 pH	22.53 °C	263.29 µS/cm	0.37 mg/L	0.58 NTU	65.6 mV	33.18 ft	400.00 ml/min
3/21/2024 12:55 PM	15:00	6.17 pH	22.47 °C	263.18 µS/cm	0.32 mg/L	0.70 NTU	59.7 mV	33.18 ft	400.00 ml/min
3/21/2024 1:00 PM	20:00	6.18 pH	22.48 °C	263.76 µS/cm	0.24 mg/L	0.46 NTU	54.6 mV	33.18 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-08	Sample time 1304

Low-Flow Test Report:

Test Date / Time: 3/21/2024 2:17:27 PM

Project: Daniel CCR BAW-9

Operator Name: Rick Hagendorfer

Location Name: Daniel CCR BAW-9 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 53.1 ft Total Depth: 63.1 ft Initial Depth to Water: 32.42 ft	Pump Type: BP Tubing Type: Pe Pump Intake From TOC: 58.1 ft Estimated Total Volume Pumped: 10000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.09 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1055720
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Test Notes:

Weather Conditions:

Cloudy 65

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/21/2024 2:17 PM	00:00	6.17 pH	22.13 °C	289.32 µS/cm	0.32 mg/L		57.0 mV	32.42 ft	400.00 ml/min
3/21/2024 2:22 PM	05:00	6.19 pH	22.07 °C	290.24 µS/cm	0.25 mg/L	0.70 NTU	52.4 mV	32.51 ft	400.00 ml/min
3/21/2024 2:27 PM	10:00	6.19 pH	21.96 °C	286.26 µS/cm	0.22 mg/L	0.88 NTU	49.8 mV	32.51 ft	400.00 ml/min
3/21/2024 2:32 PM	15:00	6.21 pH	22.03 °C	287.14 µS/cm	0.28 mg/L	1.23 NTU	46.6 mV	32.51 ft	400.00 ml/min
3/21/2024 2:37 PM	20:00	6.22 pH	22.03 °C	287.35 µS/cm	0.33 mg/L	0.99 NTU	43.8 mV	32.51 ft	400.00 ml/min
3/21/2024 2:42 PM	25:00	6.20 pH	22.01 °C	284.35 µS/cm	0.30 mg/L	0.77 NTU	42.8 mV	32.51 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-09	Sample time 1445

Water Quality Instrument Calibration Form

Project/Site: Plant Daniel Project #: _____ Field Personnel: Rick Henderson RDH Environmental

Water Quality Meter - Model/Serial #: Aqua Troll 400-1055720

Turbidimeter - Model/Serial #: Hach 2100Q-19100C080487

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L) ¹	Reading (mg/L)	Reading (%)	Pass or Fail
Acceptance Criteria: +/- 0.3mg/L								
CAL ICV CCV		3-20-24	0639	14.6	10.18	10.24	100.2	P F
CAL ICV CCV		3-20-24	0643	14.6	10.18	10.23	99.9	P F
CAL ICV CCV		3-20-24	1406	27.9	7.84	7.68	97.3	P F
CAL ICV CCV								P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
Acceptance Criteria: +/- 5%								
CAL ICV CCV		3-20-24	0634	1413	36J1475	10/2024	1393	P F
CAL ICV CCV		3-20-24	0637	1413	36J1475	10/2024	1412	P F
CAL ICV CCV		3-20-24	1409	1413	36J1475	10/2024	1423	P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
Acceptance Criteria: +/- 0.2 SU								
CAL ICV CCV		3-20-24	0620	4.00	36E1074	5/2025	4.01	P F
CAL ICV CCV		3-20-24	0623	7.00	36E1252	5/2025	6.94	P F
CAL ICV CCV		3-20-24	0624	7.00	36E1252	5/2025	7.04	P F
CAL ICV CCV		3-20-24	0626	4.00	36E1074	5/2025	4.02	P F
CAL ICV CCV		3-20-24	1416	4.00	36E1074	5/2025	4.08	P F
CAL ICV CCV		3-20-24	1550	7.00	36E1252	5/2025	7.06	P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
Geosyntec Acceptance Criteria: +/- 5%								
CAL ICV CCV		3-20-24	0628	228 @ 25°	24002258	6/2024	226	P F
CAL ICV CCV		3-20-24	0629	228 @ 25°	24002258	6/2024	228	P F
CAL ICV CCV		3-20-24	1414	228 @ 25°	24002258	6/2024	227	P F
CAL ICV CCV								P F

0.1 - 10 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 10%				
CAL ICV CCV	10	3-20-24	9.29	P F
CAL ICV CCV	10	3-20-24	9.55	P F
CAL ICV CCV	10	3-20-24	9.41	P F
CAL ICV CCV				P F

11 - 40 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 8%				
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

41 - 100 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 6.5%				
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

>100 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 5%				
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Lot # A3149
Exp. 10/2024

Specific Conductance Probe Cleaned? Yes No Disolved Oxygen membrane Changed? Yes No No

1. See Table FS 2200-2 on the back of this form
 CAL - Initial Calibration
 ICV - Initial Calibration Verification
 CCV - Continuing Calibration Verification
 Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration
 Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)
 Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)
 If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Comments: _____

Water Quality Instrument Calibration Form

Project/Site: Plant Danrud Project #: _____ Field Personnel: Rick Hagedorn RDH Environmental

Water Quality Meter - Model/Serial #: Aqua Troll 400/ Serial # 1055720 Turbidimeter - Model/Serial # Hach 2100Q/Serial # 191000030487

Lot # 17199
Exp. 10/2024

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L) ¹	Reading (mg/L)	Reading (%)	Pass or Fail
Acceptance Criteria: +/- 0.3mg/L								
CAL ICV CCV		3-2-24	0704	17.9	9.49	9.53	99.1	P F
CAL ICV CCV		3-2-24	0707	17.7	9.53	9.58	100.1	P F
CAL ICV CCV		3-2-24	1402	19.3	9.22	9.31	99.2	P F
CAL ICV CCV								P F

0.1 - 10 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 10%			
CAL ICV CCV	3/2/24 0707	9.43	P F
CAL ICV CCV	3/2/24 0708	9.35	P F
CAL ICV CCV	3/2/24 0742	9.54	P F
CAL ICV CCV	POK		P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
Acceptance Criteria: +/- 5%								
CAL ICV CCV		3-2-24	0651	1413	3651475	10/2024	1413	P F
CAL ICV CCV		3-2-24	0659	1413	3651475	10/2024	1412	P F
CAL ICV CCV		3-2-24	1357	1413	3651475	10/2024	1429	P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

11 - 40 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 8%			
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
Acceptance Criteria: +/- 0.2 SU								
CAL ICV CCV		3-2-24	0637	4.00	36E1074	5/2025	4.00	P F
CAL ICV CCV		3-2-24	0640	7.00	36E1252	5/2025	7.02	P F
CAL ICV CCV		3-2-24	0642	9.00	36E1252	5/2025	7.00	P F
CAL ICV CCV		3-2-24	0645	4.00	36E1074	5/2025	4.00	P F
CAL ICV CCV		3-2-24	1352	4.00	36E1074	5/2025	4.09	P F
CAL ICV CCV		3-2-24	1354	7.00	36E1252	5/2025	7.09	P F

41 - 100 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 6.5%			
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
Geosyntec Acceptance Criteria: +/- 5%								
CAL ICV CCV		3-2-24	0648	228±25°	24002258	6/2024	227	P F
CAL ICV CCV		3-2-24	0649	778±25°	24002258	6/2024	228	P F
CAL ICV CCV		3-2-24	1359	778±25°	24002258	6/2024	229	P F
CAL ICV CCV								P F

>100 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 5%			
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F

Specific Conductance Probe Cleaned? (Yes) No Disolved Oxygen membrane Changed? Yes (No)

1. See Table FS 2200-2 on the back of this form
 CAL - Initial Calibration
 ICV - Initial Calibration Verification
 CCV - Continuing Calibration Verification

Comments: _____

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration
 Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)
 Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)
 If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier



ANALYTICAL REPORT

PREPARED FOR

Attn: Robert (Trey) Singleton
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Generated 4/24/2024 2:31:13 PM Revision 1

JOB DESCRIPTION

Plant Daniel Ash Pond

JOB NUMBER

180-171314-1

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization



Authorized for release by
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Revision 1



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Case Narrative

Client: Southern Company
Project: Plant Daniel Ash Pond

Job ID: 180-171314-1

Job ID: 180-171314-1

Eurofins Pittsburgh

Job Narrative 180-171314-1

042424 Revised report to include field pH at client request. This report replaces the report previously issued on 041824.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/22/2024 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.8°C, 2.8°C, 3.0°C and 3.6°C.

HPLC/IC

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

Metals

Method 6020B - Total Recoverable: The continuing calibration verification (CCV) associated with batch 180-463957 recovered above the upper control limit for Chromium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: BAW-1 (180-171314-1), BAW-2A (180-171314-2), BAW-3 (180-171314-3), BAW-4 (180-171314-4), BAW-5 (180-171314-5), BAW-7 (180-171314-6), BAW-8 (180-171314-7), BAW-9 (180-171314-8), DUP-07 (180-171314-9), DUP-08 (180-171314-10), FB-03 (180-171314-11), EB-03 (180-171314-12), (LCS 180-463817/2-A), (MB 180-463817/1-A), (180-171396-E-1-A), (180-171396-E-1-B MS), (180-171396-E-1-C MSD), (180-171396-E-1-A PDS) and (180-171396-E-1-A SD ^5).

Method 6020B - Total Recoverable: The linear range check (LRC) standard recovery associated with preparation batch 180-463817 and analytical batch 180-463957 is outside the acceptance criteria for the following analytes: Boron. The concentration of these analytes are below those found in the calibration standard. The sample results have been reported.

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

General Chemistry

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

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Definitions/Glossary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Qualifiers

HPLC/IC

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.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Laboratory: Eurofins 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	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-25
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-24
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-24 *
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-25
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-25
Pennsylvania	NELAP	02-00416	04-30-25
Rhode Island	State	LAO00362	01-01-25
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-25
US Fish & Wildlife	US Federal Programs	058448	03-31-24 *
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-24

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

Sample Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-171314-1	BAW-1	Water	03/20/24 16:35	03/22/24 09:30
180-171314-2	BAW-2A	Water	03/21/24 13:10	03/22/24 09:30
180-171314-3	BAW-3	Water	03/21/24 10:15	03/22/24 09:30
180-171314-4	BAW-4	Water	03/21/24 16:00	03/22/24 09:30
180-171314-5	BAW-5	Water	03/20/24 17:26	03/22/24 09:30
180-171314-6	BAW-7	Water	03/21/24 11:25	03/22/24 09:30
180-171314-7	BAW-8	Water	03/21/24 13:04	03/22/24 09:30
180-171314-8	BAW-9	Water	03/21/24 14:45	03/22/24 09:30
180-171314-9	DUP-07	Water	03/20/24 15:35	03/22/24 09:30
180-171314-10	DUP-08	Water	03/21/24 10:25	03/22/24 09:30
180-171314-11	FB-03	Water	03/21/24 08:15	03/22/24 09:30
180-171314-12	EB-03	Water	03/21/24 08:20	03/22/24 09:30



Method Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
EPA 7470A	Mercury (CVAA)	SW846	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
Field Sampling	Field Sampling	EPA	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
7470A	Preparation, Mercury	SW846	EET 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:

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

Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-1

Date Collected: 03/20/24 16:35

Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-1

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 9056A		1	1 mL	1 mL	463571	03/27/24 06:12	M1D	EET PIT
Instrument ID: CHICS2100B										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 21:36	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:18	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:21	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			466337	03/20/24 17:35	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-2A

Date Collected: 03/21/24 13:10

Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-2

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 9056A		1	1 mL	1 mL	463571	03/27/24 07:25	M1D	EET PIT
Instrument ID: CHICS2100B										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 21:39	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:24	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:24	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			466337	03/21/24 14:10	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-3

Date Collected: 03/21/24 10:15

Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-3

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 9056A		1	1 mL	1 mL	463571	03/27/24 07:40	M1D	EET PIT
Instrument ID: CHICS2100B										

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Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-3
Date Collected: 03/21/24 10:15
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-3
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			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 21:42	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:26	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:25	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			466337	03/21/24 11:15	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-4
Date Collected: 03/21/24 16:00
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-4
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 9056A		1	1 mL	1 mL	463571	03/27/24 07:55	M1D	EET PIT
Instrument ID: CHICS2100B										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 21:45	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:29	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:26	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			466337	03/21/24 17:00	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-5
Date Collected: 03/20/24 17:26
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-5
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 9056A		1	1 mL	1 mL	463571	03/27/24 02:59	M1D	EET PIT
Instrument ID: CHICS2100B										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 21:48	MRG	EET PIT
Instrument ID: DORY										

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Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-5
Date Collected: 03/20/24 17:26
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-5
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			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:32	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:27	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			466337	03/20/24 18:26	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-7
Date Collected: 03/21/24 11:25
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-6
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 9056A		1	1 mL	1 mL	463964	03/30/24 01:32	M1D	EET PIT
Instrument ID: CHICS2100B										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 21:56	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:35	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:31	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			466337	03/21/24 12:25	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-8
Date Collected: 03/21/24 13:04
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-7
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 9056A		1	1 mL	1 mL	464013	03/30/24 16:33	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 21:59	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:37	LWM	EET PIT
Instrument ID: DORY										

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Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-8
Date Collected: 03/21/24 13:04
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-7
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			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:32	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			466337	03/21/24 14:04	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-9
Date Collected: 03/21/24 14:45
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-8
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 9056A		1	1 mL	1 mL	464013	03/30/24 16:51	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 22:02	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:46	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:34	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			466337	03/21/24 15:45	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: DUP-07
Date Collected: 03/20/24 15:35
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-9
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 9056A		1	1 mL	1 mL	464013	03/30/24 15:19	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 22:04	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:49	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:35	RJR	EET PIT
Instrument ID: HGY										

Eurofins Pittsburgh

Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: DUP-07
Date Collected: 03/20/24 15:35
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-9
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	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT

Client Sample ID: DUP-08
Date Collected: 03/21/24 10:25
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-10
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 9056A Instrument ID: INTEGRION		1	1 mL	1 mL	464013	03/30/24 16:14	M1D	EET PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: DORY		1			463957	03/28/24 22:07	MRG	EET PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: DORY		1			465756	04/17/24 19:51	LWM	EET PIT
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGY		1			463616	03/26/24 12:36	RJR	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT

Client Sample ID: FB-03
Date Collected: 03/21/24 08:15
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-11
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 9056A Instrument ID: INTEGRION		1	1 mL	1 mL	463707	03/28/24 01:14	M1D	EET PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: DORY		1			463957	03/28/24 22:10	MRG	EET PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: DORY		1			465756	04/17/24 19:54	LWM	EET PIT
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGY		1			463616	03/26/24 12:37	RJR	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	463636	03/26/24 17:03	LWM	EET PIT

Lab Chronicle

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: EB-03
Date Collected: 03/21/24 08:20
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-12
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 9056A		1	1 mL	1 mL	463707	03/28/24 00:55	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463957	03/28/24 22:13	MRG	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	463817	03/28/24 12:12	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			465756	04/17/24 19:57	LWM	EET PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	463409	03/25/24 07:29	RJR	EET PIT
Total/NA	Analysis	EPA 7470A		1			463616	03/26/24 12:38	RJR	EET PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463636	03/26/24 17:03	LWM	EET PIT
Instrument ID: NOEQUIP										

Laboratory References:

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

Analyst References:

Lab: EET PIT

Batch Type: Prep

- RJR = Ron Rosenbaum
- SJM = Shannon Mueller

Batch Type: Analysis

- FDS = Sampler Field
- LWM = Leslie McIntire
- M1D = Maureen Donlin
- MRG = Mismel Garcia
- RJR = Ron Rosenbaum



Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-1

Lab Sample ID: 180-171314-1

Date Collected: 03/20/24 16:35

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.17		1.00	0.713	mg/L			03/27/24 06:12	1
Fluoride	0.0436	J B	0.100	0.0260	mg/L			03/27/24 06:12	1
Sulfate	1.41		1.00	0.756	mg/L			03/27/24 06:12	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 21:36	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 21:36	1
Barium	0.0347		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 21:36	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 21:36	1
Boron	<0.0601	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 21:36	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 21:36	1
Calcium	1.05		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 21:36	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:18	1
Cobalt	0.00128		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 21:36	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 21:36	1
Lithium	0.00133	J	0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 21:36	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 21:36	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 21:36	1
Thallium	0.000549	J	0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 21:36	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000141	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	29.0		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.93				SU			03/20/24 17:35	1

Client Sample ID: BAW-2A

Lab Sample ID: 180-171314-2

Date Collected: 03/21/24 13:10

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.52		1.00	0.713	mg/L			03/27/24 07:25	1
Fluoride	0.0515	J B	0.100	0.0260	mg/L			03/27/24 07:25	1
Sulfate	6.92		1.00	0.756	mg/L			03/27/24 07:25	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 21:39	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 21:39	1
Barium	0.0265		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 21:39	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 21:39	1
Boron	0.0604	J ^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 21:39	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 21:39	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-2A

Lab Sample ID: 180-171314-2

Date Collected: 03/21/24 13:10

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.469	J	0.500	0.127	mg/L		03/28/24 12:12	03/28/24 21:39	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:24	1
Cobalt	0.000677		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 21:39	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 21:39	1
Lithium	0.00174	J	0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 21:39	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 21:39	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 21:39	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 21:39	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000150	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	38.0		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.86				SU			03/21/24 14:10	1

Client Sample ID: BAW-3

Lab Sample ID: 180-171314-3

Date Collected: 03/21/24 10:15

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.21		1.00	0.713	mg/L			03/27/24 07:40	1
Fluoride	0.0537	J B	0.100	0.0260	mg/L			03/27/24 07:40	1
Sulfate	7.60		1.00	0.756	mg/L			03/27/24 07:40	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 21:42	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 21:42	1
Barium	0.0418		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 21:42	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 21:42	1
Boron	<0.0601	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 21:42	1
Cadmium	0.000401	J	0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 21:42	1
Calcium	0.818		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 21:42	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:26	1
Cobalt	0.00945		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 21:42	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 21:42	1
Lithium	0.00355	J	0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 21:42	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 21:42	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 21:42	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 21:42	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000133	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:25	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-3

Date Collected: 03/21/24 10:15

Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	31.0		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.39				SU			03/21/24 11:15	1

Client Sample ID: BAW-4

Date Collected: 03/21/24 16:00

Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-4

Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.17		1.00	0.713	mg/L			03/27/24 07:55	1
Fluoride	0.0578	J B	0.100	0.0260	mg/L			03/27/24 07:55	1
Sulfate	12.1		1.00	0.756	mg/L			03/27/24 07:55	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 21:45	1
Arsenic	0.00159		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 21:45	1
Barium	0.0246		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 21:45	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 21:45	1
Boron	0.115	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 21:45	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 21:45	1
Calcium	7.31		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 21:45	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:29	1
Cobalt	0.00160		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 21:45	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 21:45	1
Lithium	0.0130		0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 21:45	1
Molybdenum	0.000937	J	0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 21:45	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 21:45	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 21:45	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000135	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	64.0		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.47				SU			03/21/24 17:00	1

Client Sample ID: BAW-5

Date Collected: 03/20/24 17:26

Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-5

Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.00		1.00	0.713	mg/L			03/27/24 02:59	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-5

Lab Sample ID: 180-171314-5

Date Collected: 03/20/24 17:26

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.110	B	0.100	0.0260	mg/L			03/27/24 02:59	1
Sulfate	30.0		1.00	0.756	mg/L			03/27/24 02:59	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 21:48	1
Arsenic	0.00515		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 21:48	1
Barium	0.0958		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 21:48	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 21:48	1
Boron	0.686	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 21:48	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 21:48	1
Calcium	28.9		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 21:48	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:32	1
Cobalt	0.00131		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 21:48	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 21:48	1
Lithium	0.0786		0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 21:48	1
Molybdenum	0.00366	J	0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 21:48	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 21:48	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 21:48	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000134	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	164		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.20				SU			03/20/24 18:26	1

Client Sample ID: BAW-7

Lab Sample ID: 180-171314-6

Date Collected: 03/21/24 11:25

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.37		1.00	0.713	mg/L			03/30/24 01:32	1
Fluoride	0.0292	J	0.100	0.0260	mg/L			03/30/24 01:32	1
Sulfate	1.66		1.00	0.756	mg/L			03/30/24 01:32	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 21:56	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 21:56	1
Barium	0.0307		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 21:56	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 21:56	1
Boron	<0.0601	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 21:56	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 21:56	1
Calcium	1.38		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 21:56	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-7

Lab Sample ID: 180-171314-6

Date Collected: 03/21/24 11:25

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:35	1
Cobalt	0.00186		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 21:56	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 21:56	1
Lithium	0.00370	J	0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 21:56	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 21:56	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 21:56	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 21:56	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000143	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	40.0		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.89				SU			03/21/24 12:25	1

Client Sample ID: BAW-8

Lab Sample ID: 180-171314-7

Date Collected: 03/21/24 13:04

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.1		1.00	0.713	mg/L			03/30/24 16:33	1
Fluoride	0.0833	J	0.100	0.0260	mg/L			03/30/24 16:33	1
Sulfate	30.6		1.00	0.756	mg/L			03/30/24 16:33	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 21:59	1
Arsenic	0.00461		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 21:59	1
Barium	0.0612		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 21:59	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 21:59	1
Boron	0.578	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 21:59	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 21:59	1
Calcium	18.6		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 21:59	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:37	1
Cobalt	0.00402		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 21:59	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 21:59	1
Lithium	0.0597		0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 21:59	1
Molybdenum	0.00274	J	0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 21:59	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 21:59	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 21:59	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000142	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:32	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: BAW-8
Date Collected: 03/21/24 13:04
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	150		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.18				SU			03/21/24 14:04	1

Client Sample ID: BAW-9
Date Collected: 03/21/24 14:45
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-8
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.3		1.00	0.713	mg/L			03/30/24 16:51	1
Fluoride	0.115		0.100	0.0260	mg/L			03/30/24 16:51	1
Sulfate	39.8		1.00	0.756	mg/L			03/30/24 16:51	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 22:02	1
Arsenic	0.0110		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 22:02	1
Barium	0.0695		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 22:02	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 22:02	1
Boron	0.558	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 22:02	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 22:02	1
Calcium	15.9		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 22:02	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:46	1
Cobalt	0.00338		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 22:02	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 22:02	1
Lithium	0.0336		0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 22:02	1
Molybdenum	0.00807		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 22:02	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 22:02	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 22:02	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000138	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	162		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.20				SU			03/21/24 15:45	1

Client Sample ID: DUP-07
Date Collected: 03/20/24 15:35
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-9
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.84		1.00	0.713	mg/L			03/30/24 15:19	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: DUP-07
Date Collected: 03/20/24 15:35
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-9
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0417	J	0.100	0.0260	mg/L			03/30/24 15:19	1
Sulfate	1.83		1.00	0.756	mg/L			03/30/24 15:19	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 22:04	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 22:04	1
Barium	0.0359		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 22:04	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 22:04	1
Boron	<0.0601	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 22:04	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 22:04	1
Calcium	1.10		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 22:04	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:49	1
Cobalt	0.00129		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 22:04	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 22:04	1
Lithium	0.00137	J	0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 22:04	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 22:04	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 22:04	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 22:04	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000143	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	29.0		10.0	10.0	mg/L			03/26/24 16:48	1

Client Sample ID: DUP-08
Date Collected: 03/21/24 10:25
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-10
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.70		1.00	0.713	mg/L			03/30/24 16:14	1
Fluoride	<0.0260		0.100	0.0260	mg/L			03/30/24 16:14	1
Sulfate	1.82		1.00	0.756	mg/L			03/30/24 16:14	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 22:07	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 22:07	1
Barium	0.0315		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 22:07	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 22:07	1
Boron	<0.0601	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 22:07	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 22:07	1
Calcium	1.39		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 22:07	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:51	1
Cobalt	0.00190		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 22:07	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 22:07	1
Lithium	0.00379	J	0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 22:07	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: DUP-08
Date Collected: 03/21/24 10:25
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-10
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 22:07	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 22:07	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 22:07	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000142	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	40.0		10.0	10.0	mg/L			03/26/24 16:48	1

Client Sample ID: FB-03
Date Collected: 03/21/24 08:15
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171314-11
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			03/28/24 01:14	1
Fluoride	<0.0260		0.100	0.0260	mg/L			03/28/24 01:14	1
Sulfate	<0.756		1.00	0.756	mg/L			03/28/24 01:14	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 22:10	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 22:10	1
Barium	<0.00314		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 22:10	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 22:10	1
Boron	<0.0601	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 22:10	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 22:10	1
Calcium	<0.127		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 22:10	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:54	1
Cobalt	<0.000261		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 22:10	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 22:10	1
Lithium	<0.00129		0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 22:10	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 22:10	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 22:10	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 22:10	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000148	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<10.0		10.0	10.0	mg/L			03/26/24 17:03	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Client Sample ID: EB-03

Lab Sample ID: 180-171314-12

Date Collected: 03/21/24 08:20

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			03/28/24 00:55	1
Fluoride	<0.0260		0.100	0.0260	mg/L			03/28/24 00:55	1
Sulfate	<0.756		1.00	0.756	mg/L			03/28/24 00:55	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 22:13	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 22:13	1
Barium	<0.00314		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 22:13	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 22:13	1
Boron	<0.0601	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 22:13	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 22:13	1
Calcium	<0.127		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 22:13	1
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:57	1
Cobalt	<0.000261		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 22:13	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 22:13	1
Lithium	<0.00129		0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 22:13	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 22:13	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 22:13	1
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 22:13	1

Method: SW846 EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000143	J	0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<10.0		10.0	10.0	mg/L			03/26/24 17:03	1

QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-463571/58
Matrix: Water
Analysis Batch: 463571

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			03/27/24 02:30	1
Fluoride	0.03160	J	0.100	0.0260	mg/L			03/27/24 02:30	1
Sulfate	<0.756		1.00	0.756	mg/L			03/27/24 02:30	1

Lab Sample ID: LCS 180-463571/59
Matrix: Water
Analysis Batch: 463571

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	50.55		mg/L		101	80 - 120
Fluoride	2.50	2.713		mg/L		109	80 - 120
Sulfate	50.0	49.80		mg/L		100	80 - 120

Lab Sample ID: 180-171314-5 MS
Matrix: Water
Analysis Batch: 463571

Client Sample ID: BAW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	9.00		50.0	59.13		mg/L		100	80 - 120
Fluoride	0.110	B	2.50	2.707		mg/L		104	80 - 120
Sulfate	30.0		50.0	79.46		mg/L		99	80 - 120

Lab Sample ID: 180-171314-5 MSD
Matrix: Water
Analysis Batch: 463571

Client Sample ID: BAW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	9.00		50.0	59.32		mg/L		101	80 - 120	0	15
Fluoride	0.110	B	2.50	2.690		mg/L		103	80 - 120	1	15
Sulfate	30.0		50.0	78.62		mg/L		97	80 - 120	1	15

Lab Sample ID: MB 180-463707/6
Matrix: Water
Analysis Batch: 463707

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			03/27/24 13:06	1
Fluoride	<0.0260		0.100	0.0260	mg/L			03/27/24 13:06	1
Sulfate	<0.756		1.00	0.756	mg/L			03/27/24 13:06	1

Lab Sample ID: LCS 180-463707/7
Matrix: Water
Analysis Batch: 463707

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	48.14		mg/L		96	80 - 120
Fluoride	2.50	2.544		mg/L		102	80 - 120
Sulfate	50.0	47.53		mg/L		95	80 - 120

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-463964/30
Matrix: Water
Analysis Batch: 463964

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			03/29/24 17:39	1
Fluoride	<0.0260		0.100	0.0260	mg/L			03/29/24 17:39	1
Sulfate	<0.756		1.00	0.756	mg/L			03/29/24 17:39	1

Lab Sample ID: LCS 180-463964/31
Matrix: Water
Analysis Batch: 463964

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	47.30		mg/L		95	80 - 120
Fluoride	2.50	2.573		mg/L		103	80 - 120
Sulfate	50.0	46.48		mg/L		93	80 - 120

Lab Sample ID: MB 180-464013/6
Matrix: Water
Analysis Batch: 464013

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			03/30/24 11:47	1
Fluoride	<0.0260		0.100	0.0260	mg/L			03/30/24 11:47	1
Sulfate	<0.756		1.00	0.756	mg/L			03/30/24 11:47	1

Lab Sample ID: LCS 180-464013/7
Matrix: Water
Analysis Batch: 464013

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	47.86		mg/L		96	80 - 120
Fluoride	2.50	2.539		mg/L		102	80 - 120
Sulfate	50.0	47.33		mg/L		95	80 - 120

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

Lab Sample ID: MB 180-463817/1-A
Matrix: Water
Analysis Batch: 463957

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 463817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000967		0.00200	0.000967	mg/L		03/28/24 12:12	03/28/24 21:31	1
Arsenic	<0.000282		0.00100	0.000282	mg/L		03/28/24 12:12	03/28/24 21:31	1
Barium	<0.00314		0.0100	0.00314	mg/L		03/28/24 12:12	03/28/24 21:31	1
Beryllium	<0.000274		0.00100	0.000274	mg/L		03/28/24 12:12	03/28/24 21:31	1
Boron	<0.0601	^5-	0.0800	0.0601	mg/L		03/28/24 12:12	03/28/24 21:31	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		03/28/24 12:12	03/28/24 21:31	1
Calcium	<0.127		0.500	0.127	mg/L		03/28/24 12:12	03/28/24 21:31	1
Cobalt	<0.000261		0.000500	0.000261	mg/L		03/28/24 12:12	03/28/24 21:31	1
Lead	<0.000376		0.00100	0.000376	mg/L		03/28/24 12:12	03/28/24 21:31	1
Lithium	<0.00129		0.00500	0.00129	mg/L		03/28/24 12:12	03/28/24 21:31	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		03/28/24 12:12	03/28/24 21:31	1
Selenium	<0.000739		0.00500	0.000739	mg/L		03/28/24 12:12	03/28/24 21:31	1

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

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

Lab Sample ID: MB 180-463817/1-A
Matrix: Water
Analysis Batch: 463957

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 463817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.000472		0.00100	0.000472	mg/L		03/28/24 12:12	03/28/24 21:31	1

Lab Sample ID: MB 180-463817/1-A
Matrix: Water
Analysis Batch: 465756

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 463817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.00153		0.00200	0.00153	mg/L		03/28/24 12:12	04/17/24 19:12	1

Lab Sample ID: LCS 180-463817/2-A
Matrix: Water
Analysis Batch: 463957

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 463817

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.250	0.2723		mg/L		109	80 - 120
Arsenic	1.00	1.060		mg/L		106	80 - 120
Barium	1.00	1.040		mg/L		104	80 - 120
Beryllium	0.500	0.5132		mg/L		103	80 - 120
Boron	0.250	0.2445	^5-	mg/L		98	80 - 120
Cadmium	0.500	0.5295		mg/L		106	80 - 120
Calcium	25.0	26.50		mg/L		106	80 - 120
Chromium	0.500	0.5452	^+	mg/L		109	80 - 120
Cobalt	0.500	0.5163		mg/L		103	80 - 120
Lead	0.500	0.5323		mg/L		106	80 - 120
Lithium	0.500	0.5244		mg/L		105	80 - 120
Molybdenum	0.500	0.5428		mg/L		109	80 - 120
Selenium	1.00	1.067		mg/L		107	80 - 120
Thallium	1.00	1.087		mg/L		109	80 - 120

Lab Sample ID: LCS 180-463817/2-A
Matrix: Water
Analysis Batch: 465756

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 463817

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chromium	0.500	0.5001		mg/L		100	80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-463409/1-A
Matrix: Water
Analysis Batch: 463616

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 463409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		03/25/24 07:29	03/26/24 12:19	1

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

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

Lab Sample ID: LCS 180-463409/2-A
Matrix: Water
Analysis Batch: 463616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 463409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.002801		mg/L		112	80 - 120

Lab Sample ID: 180-171314-1 MS
Matrix: Water
Analysis Batch: 463616

Client Sample ID: BAW-1
Prep Type: Total/NA
Prep Batch: 463409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000141	J	0.00100	0.001206		mg/L		107	75 - 125

Lab Sample ID: 180-171314-1 MSD
Matrix: Water
Analysis Batch: 463616

Client Sample ID: BAW-1
Prep Type: Total/NA
Prep Batch: 463409

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.000141	J	0.00100	0.001215		mg/L		107	75 - 125	1	20

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

Lab Sample ID: MB 180-463633/1
Matrix: Water
Analysis Batch: 463633

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	<10.0		10.0	10.0	mg/L			03/26/24 16:48	1

Lab Sample ID: LCS 180-463633/2
Matrix: Water
Analysis Batch: 463633

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	305	314.0		mg/L		103	85 - 115

Lab Sample ID: 180-171314-5 DU
Matrix: Water
Analysis Batch: 463633

Client Sample ID: BAW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	164		167.0		mg/L		2	10

Lab Sample ID: MB 180-463636/1
Matrix: Water
Analysis Batch: 463636

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	<10.0		10.0	10.0	mg/L			03/26/24 17:03	1

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

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

Lab Sample ID: LCS 180-463636/2
Matrix: Water
Analysis Batch: 463636

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	305	288.0		mg/L		94	85 - 115

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

QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

HPLC/IC

Analysis Batch: 463571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total/NA	Water	EPA 9056A	
180-171314-2	BAW-2A	Total/NA	Water	EPA 9056A	
180-171314-3	BAW-3	Total/NA	Water	EPA 9056A	
180-171314-4	BAW-4	Total/NA	Water	EPA 9056A	
180-171314-5	BAW-5	Total/NA	Water	EPA 9056A	
MB 180-463571/58	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-463571/59	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-171314-5 MS	BAW-5	Total/NA	Water	EPA 9056A	
180-171314-5 MSD	BAW-5	Total/NA	Water	EPA 9056A	

Analysis Batch: 463707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-11	FB-03	Total/NA	Water	EPA 9056A	
180-171314-12	EB-03	Total/NA	Water	EPA 9056A	
MB 180-463707/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-463707/7	Lab Control Sample	Total/NA	Water	EPA 9056A	

Analysis Batch: 463964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-6	BAW-7	Total/NA	Water	EPA 9056A	
MB 180-463964/30	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-463964/31	Lab Control Sample	Total/NA	Water	EPA 9056A	

Analysis Batch: 464013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-7	BAW-8	Total/NA	Water	EPA 9056A	
180-171314-8	BAW-9	Total/NA	Water	EPA 9056A	
180-171314-9	DUP-07	Total/NA	Water	EPA 9056A	
180-171314-10	DUP-08	Total/NA	Water	EPA 9056A	
MB 180-464013/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-464013/7	Lab Control Sample	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 463409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total/NA	Water	7470A	
180-171314-2	BAW-2A	Total/NA	Water	7470A	
180-171314-3	BAW-3	Total/NA	Water	7470A	
180-171314-4	BAW-4	Total/NA	Water	7470A	
180-171314-5	BAW-5	Total/NA	Water	7470A	
180-171314-6	BAW-7	Total/NA	Water	7470A	
180-171314-7	BAW-8	Total/NA	Water	7470A	
180-171314-8	BAW-9	Total/NA	Water	7470A	
180-171314-9	DUP-07	Total/NA	Water	7470A	
180-171314-10	DUP-08	Total/NA	Water	7470A	
180-171314-11	FB-03	Total/NA	Water	7470A	
180-171314-12	EB-03	Total/NA	Water	7470A	
MB 180-463409/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-463409/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-171314-1 MS	BAW-1	Total/NA	Water	7470A	

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QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Metals (Continued)

Prep Batch: 463409 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1 MSD	BAW-1	Total/NA	Water	7470A	

Analysis Batch: 463616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total/NA	Water	EPA 7470A	463409
180-171314-2	BAW-2A	Total/NA	Water	EPA 7470A	463409
180-171314-3	BAW-3	Total/NA	Water	EPA 7470A	463409
180-171314-4	BAW-4	Total/NA	Water	EPA 7470A	463409
180-171314-5	BAW-5	Total/NA	Water	EPA 7470A	463409
180-171314-6	BAW-7	Total/NA	Water	EPA 7470A	463409
180-171314-7	BAW-8	Total/NA	Water	EPA 7470A	463409
180-171314-8	BAW-9	Total/NA	Water	EPA 7470A	463409
180-171314-9	DUP-07	Total/NA	Water	EPA 7470A	463409
180-171314-10	DUP-08	Total/NA	Water	EPA 7470A	463409
180-171314-11	FB-03	Total/NA	Water	EPA 7470A	463409
180-171314-12	EB-03	Total/NA	Water	EPA 7470A	463409
MB 180-463409/1-A	Method Blank	Total/NA	Water	EPA 7470A	463409
LCS 180-463409/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	463409
180-171314-1 MS	BAW-1	Total/NA	Water	EPA 7470A	463409
180-171314-1 MSD	BAW-1	Total/NA	Water	EPA 7470A	463409

Prep Batch: 463817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total Recoverable	Water	3005A	
180-171314-2	BAW-2A	Total Recoverable	Water	3005A	
180-171314-3	BAW-3	Total Recoverable	Water	3005A	
180-171314-4	BAW-4	Total Recoverable	Water	3005A	
180-171314-5	BAW-5	Total Recoverable	Water	3005A	
180-171314-6	BAW-7	Total Recoverable	Water	3005A	
180-171314-7	BAW-8	Total Recoverable	Water	3005A	
180-171314-8	BAW-9	Total Recoverable	Water	3005A	
180-171314-9	DUP-07	Total Recoverable	Water	3005A	
180-171314-10	DUP-08	Total Recoverable	Water	3005A	
180-171314-11	FB-03	Total Recoverable	Water	3005A	
180-171314-12	EB-03	Total Recoverable	Water	3005A	
MB 180-463817/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-463817/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 463957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total Recoverable	Water	EPA 6020B	463817
180-171314-2	BAW-2A	Total Recoverable	Water	EPA 6020B	463817
180-171314-3	BAW-3	Total Recoverable	Water	EPA 6020B	463817
180-171314-4	BAW-4	Total Recoverable	Water	EPA 6020B	463817
180-171314-5	BAW-5	Total Recoverable	Water	EPA 6020B	463817
180-171314-6	BAW-7	Total Recoverable	Water	EPA 6020B	463817
180-171314-7	BAW-8	Total Recoverable	Water	EPA 6020B	463817
180-171314-8	BAW-9	Total Recoverable	Water	EPA 6020B	463817
180-171314-9	DUP-07	Total Recoverable	Water	EPA 6020B	463817
180-171314-10	DUP-08	Total Recoverable	Water	EPA 6020B	463817
180-171314-11	FB-03	Total Recoverable	Water	EPA 6020B	463817

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QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Metals (Continued)

Analysis Batch: 463957 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-12	EB-03	Total Recoverable	Water	EPA 6020B	463817
MB 180-463817/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	463817
LCS 180-463817/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	463817

Analysis Batch: 465756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total Recoverable	Water	EPA 6020B	463817
180-171314-2	BAW-2A	Total Recoverable	Water	EPA 6020B	463817
180-171314-3	BAW-3	Total Recoverable	Water	EPA 6020B	463817
180-171314-4	BAW-4	Total Recoverable	Water	EPA 6020B	463817
180-171314-5	BAW-5	Total Recoverable	Water	EPA 6020B	463817
180-171314-6	BAW-7	Total Recoverable	Water	EPA 6020B	463817
180-171314-7	BAW-8	Total Recoverable	Water	EPA 6020B	463817
180-171314-8	BAW-9	Total Recoverable	Water	EPA 6020B	463817
180-171314-9	DUP-07	Total Recoverable	Water	EPA 6020B	463817
180-171314-10	DUP-08	Total Recoverable	Water	EPA 6020B	463817
180-171314-11	FB-03	Total Recoverable	Water	EPA 6020B	463817
180-171314-12	EB-03	Total Recoverable	Water	EPA 6020B	463817
MB 180-463817/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	463817
LCS 180-463817/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	463817

General Chemistry

Analysis Batch: 463633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total/NA	Water	SM 2540C	
180-171314-2	BAW-2A	Total/NA	Water	SM 2540C	
180-171314-3	BAW-3	Total/NA	Water	SM 2540C	
180-171314-4	BAW-4	Total/NA	Water	SM 2540C	
180-171314-5	BAW-5	Total/NA	Water	SM 2540C	
180-171314-6	BAW-7	Total/NA	Water	SM 2540C	
180-171314-7	BAW-8	Total/NA	Water	SM 2540C	
180-171314-8	BAW-9	Total/NA	Water	SM 2540C	
180-171314-9	DUP-07	Total/NA	Water	SM 2540C	
180-171314-10	DUP-08	Total/NA	Water	SM 2540C	
MB 180-463633/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-463633/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-171314-5 DU	BAW-5	Total/NA	Water	SM 2540C	

Analysis Batch: 463636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-11	FB-03	Total/NA	Water	SM 2540C	
180-171314-12	EB-03	Total/NA	Water	SM 2540C	
MB 180-463636/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-463636/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 466337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total/NA	Water	Field Sampling	
180-171314-2	BAW-2A	Total/NA	Water	Field Sampling	

Eurofins Pittsburgh

QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-1

Field Service / Mobile Lab (Continued)

Analysis Batch: 466337 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-3	BAW-3	Total/NA	Water	Field Sampling	
180-171314-4	BAW-4	Total/NA	Water	Field Sampling	
180-171314-5	BAW-5	Total/NA	Water	Field Sampling	
180-171314-6	BAW-7	Total/NA	Water	Field Sampling	
180-171314-7	BAW-8	Total/NA	Water	Field Sampling	
180-171314-8	BAW-9	Total/NA	Water	Field Sampling	

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Chain of Custody Record

Client Information		Lab PM		Carrier Tracking No(s)		COC No:					
SCS Contacts Company: SCS Address: 3535 Colonnade Pkwy Bin S 530 EC City: Birmingham State, Zip: Alabama Phone: 205 992 6283 Email: SCS Contacts Project Name: Daniel Ash Pond B CCR Site:		Sampler: <i>Bob Toop / Kevin Alexander / Krisma</i> Phone: 850-336-0192 Lab PM: Brown, Shali E-Mail: shali.brown@eurofins.com		180-1771314 Chain of Custody 		Page: 1 of 2 Job #:					
Due Date Requested:		Analysis Requested		Total Number of Containers		Preservation Codes:					
TAT Requested (days):	PO #	WO #	Project #	SSOW#	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Custom 14 (App III and IV)	7470 Mercury	90656 Chloride Fluoride Sulfate	Total Dissolved Solids	Ra 226 Ra 228 and Combined
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, etc.)	Preservation Code:	Field Filtered Sample (Yes or No) <th>Perform MS/MSD (Yes or No) <th>7470 Mercury <th>90656 Chloride Fluoride Sulfate <th>Total Dissolved Solids <th>Ra 226 Ra 228 and Combined </th></th></th></th></th>	Perform MS/MSD (Yes or No) <th>7470 Mercury <th>90656 Chloride Fluoride Sulfate <th>Total Dissolved Solids <th>Ra 226 Ra 228 and Combined </th></th></th></th>	7470 Mercury <th>90656 Chloride Fluoride Sulfate <th>Total Dissolved Solids <th>Ra 226 Ra 228 and Combined </th></th></th>	90656 Chloride Fluoride Sulfate <th>Total Dissolved Solids <th>Ra 226 Ra 228 and Combined </th></th>	Total Dissolved Solids <th>Ra 226 Ra 228 and Combined </th>	Ra 226 Ra 228 and Combined
BAW-1	3-20-24	1635	G	W	W	NO	X	X	X	X	X
BAW-2A	3-21-24	1310	G	W	W	NO	X	X	X	X	X
BAW-3	3-21-24	1015	G	W	W	NO	X	X	X	X	X
BAW-4	3-21-24	1600	G	W	W	NO	X	X	X	X	X
BAW-5	3-20-24	1726	G	W	W	NO	X	X	X	X	X
BAW-7	3-21-24	1125	G	W	W	NO	X	X	X	X	X
BAW-8	3-21-24	1304	G	W	W	NO	X	X	X	X	X
BAW-9	3-21-24	1445	G	W	W	NO	X	X	X	X	X
DWP-07	3-20-24	1535	G	W	W	NO	X	X	X	X	X
DWP-08	3-21-24	1025	G	W	W	NO	X	X	X	X	X
FB-03	3-21-24	0815	G	W	W	NO	X	X	X	X	X

Special Instructions/Note:

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

Special Instructions/QC Requirements

Date/Time		Time	
Date/Time: 3-21-24	Date/Time: 1648	Company: P-04 ENV.	Company: P-04 ENV.
Date/Time:	Date/Time:	Company:	Company:
Date/Time:	Date/Time:	Company:	Company:

Relinquished by: *[Signature]*
 Relinquished by: *[Signature]*
 Relinquished by:

Empty Kit Relinquished by:
 Relinquished by:
 Relinquished by:
 Relinquished by:

Custody Seals Intact: Yes No
 Custody Seal No.:

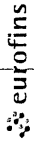
Method of Shipment: _____
 Date/Time: 3/22/24 0930
 Company: EPITIME
 Date/Time:
 Date/Time:

Cooler Temperature(s) °C and Other Remarks:



Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468



Chain of Custody Record

Environment Testing
America

Client Information		Lab PM		Carrier Tracking No(s)		COC No:	
Company: SCS		Brown, Shali					
Address: 3535 Colonnade Pkwy Bin S 530 EC		E-Mail: shall.brown@eurofinset.com				Page: <i>Page 2 of 2</i>	
City: Birmingham		Phone: 205 992 6283				Job #:	
State, Zip: Alabama		Email: 18020047				Preservation Codes:	
Project Name: Daniel Ash Pond B CCR		SSOW#: 18020047				M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Due Date Requested:		TAT Requested (days):		Analysis Requested		Total Number of Containers	
PO #:		Sample Date		Sample Time		Total Dissolved Solids	
WO #:		Sample Type (C=Comp, G=grab)		Preservation Code:		Chloride Fluoride Sulfate	
Project #:		Sample Date		Sample Time		7470 Mercury	
SSOW#:		Sample Date		Sample Time		90656 Chloride Fluoride Sulfate	
Site:		Sample Date		Sample Time		6020B Custom 14 (App III and IV)	
Sample Identification		Sample Date		Sample Time		6020B Custom 14 (App III and IV)	
EB-03		3-21-24		0820		6	
Matrix (W=water, S=solid, O=water/oil, etc.-Tissue, A=Air)		Sample Type (C=Comp, G=grab)		Preservation Code:		Total Number of Containers	
W		G		WS		6	
Field Filtered Sample (Yes or No)		Sample Date		Sample Time		Total Dissolved Solids	
X		3-21-24		0820		Ra 226 Ra 228 and Combined	
Perform MS/MSD (Yes or No)		Sample Date		Sample Time		90656 Chloride Fluoride Sulfate	
X		3-21-24		0820		7470 Mercury	
Special Instructions/Note:		Sample Date		Sample Time		90656 Chloride Fluoride Sulfate	
		3-21-24		0820		6020B Custom 14 (App III and IV)	

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab
Deliverable Requested I, II, III, IV, Other (specify)		Special Instructions/QC Requirements	
Empty Kit Relinquished by		Method of Shipment:	
Relinquished by <i>[Signature]</i>		Date/Time	
Relinquished by <i>[Signature]</i>		Date/Time	
Relinquished by <i>[Signature]</i>		Date/Time	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks	



Part # 156297-435 RROB2 EXP 01/25

SHIP DATE: 21MAR24
ACTWGT: 59.25 LB
CAD: 6994563/SSFE2500
DIMS: 24x14x14 IN
BILL THIRD PARTY

ORIGIN ID:MOBA (850) 336-0192
TESTAMERICA PITTSBURGH LAB
SEE CHECKERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

TO EUROFINS TESTAMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068
REF: DEPT:



FRI - 22 MAR 10:30A
PRIORITY OVERNIGHT
AHS
15238
PA-US
PIT

MPS# 2724 7404 8984
Mstr# 2724 7404 8973

XS AGCA

Uncorrected temp 3.3
Thermometer ID 17
CF -0.3 Initials [Signature]
PT-WI-SR-001 effective 11/8/18



180-171314 Waybill

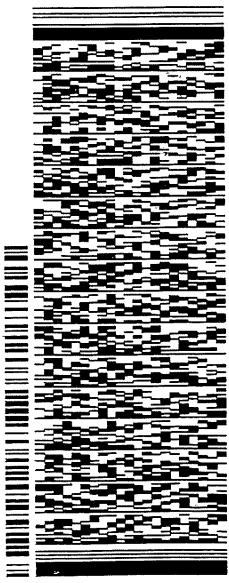
Part # 156297-435 RROB2 EXP 01/25

SHIP DATE: 21MAR24
ACTWGT: 64.05 LB
CAD: 6994563/SSFE2500
DIMS: 24x14x14 IN
BILL THIRD PARTY

ORIGIN ID:MOBA (850) 336-0192
TESTAMERICA PITTSBURGH LAB
SEE CHECKERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

TO EUROFINS TESTAMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068
REF: DEPT:



FRI - 22 MAR 10:30A
PRIORITY OVERNIGHT
15238
PA-US
PIT

MPS# 2724 7404 8995
Mstr# 2724 7404 8973

XS AGCA

Uncorrected temp 3.9 °C
Thermometer ID 17
CF -0.3 Initials [Signature]
PT-WI-SR-001 effective 11/8/18

RT 198
FZ 197
1 10:30
A
8995
03.22



ORIGIN ID:MOBA (850) 336-0192
TESTAMERICA PITTSBURGH LAB
SEE CHECKS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

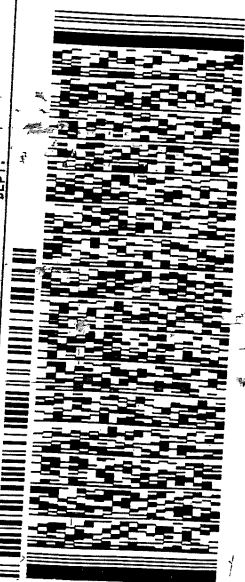
TO: EUROFINS TESTAMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068
REF: INVT: PO:

SHIP DATE: 21 MAR 24
ACTWGT: 63.65 LB
CAD: 6994563/SSF
DIMS: 24x14x14
BILL THIRD PART

RT 198
FZ 197
10:30
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FedEx Express
E
J241024011001 4V




4 of 4
MPS# 2724 7404 9009
0263
Mstr# 2724 7404 8973
0201

XS AGCA

15238
PA-US PIT

Uncorrected temp 3.1 °C
Thermometer ID 17
CF-0.3 Initials RR



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

ORIGIN ID:MOBA (850) 336-0192
TESTAMERICA PITTSBURGH LAB
SEE CHECKS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

TO: EUROFINS TESTAMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068
REF: INVT: PO:


SHIP DATE: 21 MAR 24
ACTWGT: 73.55 LB
CAD: 6994563/SSF
DIMS: 24x14x14
BILL THIR

RT 198
FZ 197
10:30
A

FedEx Express
E
J241024011001 4V

Uncorrected temp 3.1 °C
Thermometer ID 17
CF-0.3 Initials RR

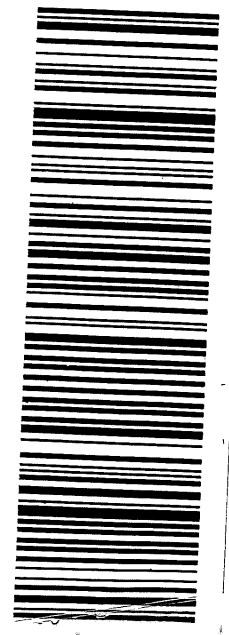
PT-WI-SR-001 effective 11/8/18



1 of 4
TRK# 2724 7404 8973
0201
MASTER

XS AGCA

15238
PA-US PIT



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Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-171314-1

Login Number: 171314

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

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	



ANALYTICAL REPORT

PREPARED FOR

Attn: Robert (Trey) Singleton
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Generated 4/23/2024 7:53:20 PM

JOB DESCRIPTION

Plant Daniel Ash Pond

JOB NUMBER

180-171314-2

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization



Generated
4/23/2024 7:53:20 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031



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Case Narrative

Client: Southern Company
Project: Plant Daniel Ash Pond

Job ID: 180-171314-2

Job ID: 180-171314-2

Eurofins Pittsburgh

Job Narrative 180-171314-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/22/2024 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.8°C, 2.8°C, 3.0°C and 3.6°C.

Gas Flow Proportional Counter

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

Rad

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Laboratory: Eurofins 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	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

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

Sample Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-171314-1	BAW-1	Water	03/20/24 16:35	03/22/24 09:30
180-171314-2	BAW-2A	Water	03/21/24 13:10	03/22/24 09:30
180-171314-3	BAW-3	Water	03/21/24 10:15	03/22/24 09:30
180-171314-4	BAW-4	Water	03/21/24 16:00	03/22/24 09:30
180-171314-5	BAW-5	Water	03/20/24 17:26	03/22/24 09:30
180-171314-6	BAW-7	Water	03/21/24 11:25	03/22/24 09:30
180-171314-7	BAW-8	Water	03/21/24 13:04	03/22/24 09:30
180-171314-8	BAW-9	Water	03/21/24 14:45	03/22/24 09:30
180-171314-9	DUP-07	Water	03/20/24 15:35	03/22/24 09:30
180-171314-10	DUP-08	Water	03/21/24 10:25	03/22/24 09:30
180-171314-11	FB-03	Water	03/21/24 08:15	03/22/24 09:30
180-171314-12	EB-03	Water	03/21/24 08:20	03/22/24 09:30



Method Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

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

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



Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: BAW-1

Lab Sample ID: 180-171314-1

Date Collected: 03/20/24 16:35

Matrix: Water

Date Received: 03/22/24 09:30

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			1003.33 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:57	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			1003.33 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656291	04/10/24 12:02	SCB	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-2A

Lab Sample ID: 180-171314-2

Date Collected: 03/21/24 13:10

Matrix: Water

Date Received: 03/22/24 09:30

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			997.25 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:57	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			997.25 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656291	04/10/24 12:02	SCB	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-3

Lab Sample ID: 180-171314-3

Date Collected: 03/21/24 10:15

Matrix: Water

Date Received: 03/22/24 09:30

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			999.47 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:57	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			999.47 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656291	04/10/24 12:03	SCB	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-4

Lab Sample ID: 180-171314-4

Date Collected: 03/21/24 16:00

Matrix: Water

Date Received: 03/22/24 09:30

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			995.64 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:58	EMH	EET SL
Instrument ID: GFPCBLUE										

Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: BAW-4

Lab Sample ID: 180-171314-4

Date Collected: 03/21/24 16:00

Matrix: Water

Date Received: 03/22/24 09:30

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			995.64 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656291	04/10/24 12:03	SCB	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-5

Lab Sample ID: 180-171314-5

Date Collected: 03/20/24 17:26

Matrix: Water

Date Received: 03/22/24 09:30

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			992.98 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:58	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			992.98 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656291	04/10/24 12:03	SCB	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-7

Lab Sample ID: 180-171314-6

Date Collected: 03/21/24 11:25

Matrix: Water

Date Received: 03/22/24 09:30

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			993.78 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:58	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			993.78 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656291	04/10/24 12:03	SCB	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-8

Lab Sample ID: 180-171314-7

Date Collected: 03/21/24 13:04

Matrix: Water

Date Received: 03/22/24 09:30

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			990.93 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:58	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			990.93 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656291	04/10/24 12:03	SCB	EET SL
Instrument ID: GFPCBLUE										

Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: BAW-8

Lab Sample ID: 180-171314-7

Date Collected: 03/21/24 13:04

Matrix: Water

Date Received: 03/22/24 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	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL

Client Sample ID: BAW-9

Lab Sample ID: 180-171314-8

Date Collected: 03/21/24 14:45

Matrix: Water

Date Received: 03/22/24 09:30

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			998.28 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:58	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			998.28 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656293	04/10/24 11:55	SCB	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: DUP-07

Lab Sample ID: 180-171314-9

Date Collected: 03/20/24 15:35

Matrix: Water

Date Received: 03/22/24 09:30

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			992.62 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:58	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			992.62 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656293	04/10/24 11:55	SCB	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: DUP-08

Lab Sample ID: 180-171314-10

Date Collected: 03/21/24 10:25

Matrix: Water

Date Received: 03/22/24 09:30

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			999.57 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 08:58	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			999.57 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656293	04/10/24 11:55	SCB	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: FB-03

Lab Sample ID: 180-171314-11

Date Collected: 03/21/24 08:15

Matrix: Water

Date Received: 03/22/24 09:30

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			997.20 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			657955	04/22/24 08:44	SCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			997.20 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656293	04/10/24 11:55	SCB	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: EB-03

Lab Sample ID: 180-171314-12

Date Collected: 03/21/24 08:20

Matrix: Water

Date Received: 03/22/24 09:30

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			992.36 mL	1.0 g	654483	03/28/24 09:26	KAK	EET SL
Total/NA	Analysis	9315		1			658078	04/22/24 16:52	EMH	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			992.36 mL	1.0 g	654485	03/28/24 09:44	KAK	EET SL
Total/NA	Analysis	9320		1			656293	04/10/24 11:55	SCB	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Analysis	Ra226_Ra228		1			658328	04/23/24 18:39	FLC	EET SL
Instrument ID: NOEQUIP										

Laboratory References:

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

Analyst References:

Lab: EET SL

Batch Type: Prep

KAK = Kayla King

Batch Type: Analysis

EMH = Elizabeth Hoerchler

FLC = Fernando Cruz

SCB = Sarah Bernsen

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: BAW-1

Lab Sample ID: 180-171314-1

Date Collected: 03/20/24 16:35

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.248		0.0968	0.0993	1.00	0.0979	pCi/L	03/28/24 09:26	04/22/24 08:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					03/28/24 09:26	04/22/24 08:57	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.720		0.402	0.407	1.00	0.565	pCi/L	03/28/24 09:44	04/10/24 12:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					03/28/24 09:44	04/10/24 12:02	1
Y Carrier	81.1		30 - 110					03/28/24 09:44	04/10/24 12:02	1

Method: TAL-STL 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	0.968		0.413	0.419	5.00	0.565	pCi/L		04/23/24 18:39	1

Client Sample ID: BAW-2A

Lab Sample ID: 180-171314-2

Date Collected: 03/21/24 13:10

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.222		0.0926	0.0947	1.00	0.0953	pCi/L	03/28/24 09:26	04/22/24 08:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					03/28/24 09:26	04/22/24 08:57	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.891		0.458	0.465	1.00	0.642	pCi/L	03/28/24 09:44	04/10/24 12:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					03/28/24 09:44	04/10/24 12:02	1
Y Carrier	77.8		30 - 110					03/28/24 09:44	04/10/24 12:02	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: BAW-2A

Lab Sample ID: 180-171314-2

Date Collected: 03/21/24 13:10

Matrix: Water

Date Received: 03/22/24 09:30

Method: TAL-STL 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	1.11		0.467	0.475	5.00	0.642	pCi/L		04/23/24 18:39	1

Client Sample ID: BAW-3

Lab Sample ID: 180-171314-3

Date Collected: 03/21/24 10:15

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.162		0.0759	0.0773	1.00	0.0841	pCi/L	03/28/24 09:26	04/22/24 08:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		30 - 110					03/28/24 09:26	04/22/24 08:57	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.764		0.379	0.385	1.00	0.517	pCi/L	03/28/24 09:44	04/10/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		30 - 110					03/28/24 09:44	04/10/24 12:03	1
Y Carrier	79.3		30 - 110					03/28/24 09:44	04/10/24 12:03	1

Method: TAL-STL 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	0.926		0.387	0.393	5.00	0.517	pCi/L		04/23/24 18:39	1

Client Sample ID: BAW-4

Lab Sample ID: 180-171314-4

Date Collected: 03/21/24 16:00

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.212		0.0867	0.0888	1.00	0.0905	pCi/L	03/28/24 09:26	04/22/24 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		30 - 110					03/28/24 09:26	04/22/24 08:58	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: BAW-4

Lab Sample ID: 180-171314-4

Date Collected: 03/21/24 16:00

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.542	U	0.387	0.391	1.00	0.593	pCi/L	03/28/24 09:44	04/10/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		30 - 110					03/28/24 09:44	04/10/24 12:03	1
Y Carrier	84.5		30 - 110					03/28/24 09:44	04/10/24 12:03	1

Method: TAL-STL 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	0.754		0.397	0.401	5.00	0.593	pCi/L		04/23/24 18:39	1

Client Sample ID: BAW-5

Lab Sample ID: 180-171314-5

Date Collected: 03/20/24 17:26

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.467		0.128	0.135	1.00	0.102	pCi/L	03/28/24 09:26	04/22/24 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.0		30 - 110					03/28/24 09:26	04/22/24 08:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.291	U	0.395	0.396	1.00	0.662	pCi/L	03/28/24 09:44	04/10/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.0		30 - 110					03/28/24 09:44	04/10/24 12:03	1
Y Carrier	78.9		30 - 110					03/28/24 09:44	04/10/24 12:03	1

Method: TAL-STL 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	0.758		0.415	0.418	5.00	0.662	pCi/L		04/23/24 18:39	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: BAW-7

Lab Sample ID: 180-171314-6

Date Collected: 03/21/24 11:25

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.181		0.0906	0.0921	1.00	0.111	pCi/L	03/28/24 09:26	04/22/24 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		30 - 110					03/28/24 09:26	04/22/24 08:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.425	U	0.326	0.328	1.00	0.497	pCi/L	03/28/24 09:44	04/10/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		30 - 110					03/28/24 09:44	04/10/24 12:03	1
Y Carrier	82.6		30 - 110					03/28/24 09:44	04/10/24 12:03	1

Method: TAL-STL 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	0.606		0.338	0.341	5.00	0.497	pCi/L		04/23/24 18:39	1

Client Sample ID: BAW-8

Lab Sample ID: 180-171314-7

Date Collected: 03/21/24 13:04

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.372		0.113	0.118	1.00	0.0923	pCi/L	03/28/24 09:26	04/22/24 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		30 - 110					03/28/24 09:26	04/22/24 08:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.498	U	0.458	0.460	1.00	0.734	pCi/L	03/28/24 09:44	04/10/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		30 - 110					03/28/24 09:44	04/10/24 12:03	1
Y Carrier	82.2		30 - 110					03/28/24 09:44	04/10/24 12:03	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: BAW-8

Lab Sample ID: 180-171314-7

Date Collected: 03/21/24 13:04

Matrix: Water

Date Received: 03/22/24 09:30

Method: TAL-STL 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	0.870		0.472	0.475	5.00	0.734	pCi/L		04/23/24 18:39	1

Client Sample ID: BAW-9

Lab Sample ID: 180-171314-8

Date Collected: 03/21/24 14:45

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.308		0.109	0.112	1.00	0.108	pCi/L	03/28/24 09:26	04/22/24 08:58	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	85.5		30 - 110					03/28/24 09:26	04/22/24 08:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.716		0.439	0.443	1.00	0.651	pCi/L	03/28/24 09:44	04/10/24 11:55	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	85.5		30 - 110					03/28/24 09:44	04/10/24 11:55	1
Y Carrier	81.9		30 - 110					03/28/24 09:44	04/10/24 11:55	1

Method: TAL-STL 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	1.02		0.452	0.457	5.00	0.651	pCi/L		04/23/24 18:39	1

Client Sample ID: DUP-07

Lab Sample ID: 180-171314-9

Date Collected: 03/20/24 15:35

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.145		0.0946	0.0955	1.00	0.136	pCi/L	03/28/24 09:26	04/22/24 08:58	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	94.3		30 - 110					03/28/24 09:26	04/22/24 08:58	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: DUP-07

Lab Sample ID: 180-171314-9

Date Collected: 03/20/24 15:35

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.460	U	0.370	0.373	1.00	0.576	pCi/L	03/28/24 09:44	04/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		30 - 110					03/28/24 09:44	04/10/24 11:55	1
Y Carrier	79.3		30 - 110					03/28/24 09:44	04/10/24 11:55	1

Method: TAL-STL 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	0.606		0.382	0.385	5.00	0.576	pCi/L		04/23/24 18:39	1

Client Sample ID: DUP-08

Lab Sample ID: 180-171314-10

Date Collected: 03/21/24 10:25

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.260		0.108	0.110	1.00	0.127	pCi/L	03/28/24 09:26	04/22/24 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		30 - 110					03/28/24 09:26	04/22/24 08:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.436	U	0.357	0.360	1.00	0.558	pCi/L	03/28/24 09:44	04/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		30 - 110					03/28/24 09:44	04/10/24 11:55	1
Y Carrier	81.5		30 - 110					03/28/24 09:44	04/10/24 11:55	1

Method: TAL-STL 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	0.697		0.373	0.376	5.00	0.558	pCi/L		04/23/24 18:39	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: FB-03

Lab Sample ID: 180-171314-11

Date Collected: 03/21/24 08:15

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0875	U	0.0669	0.0674	1.00	0.0961	pCi/L	03/28/24 09:26	04/22/24 08:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		30 - 110					03/28/24 09:26	04/22/24 08:44	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0170	U	0.282	0.282	1.00	0.524	pCi/L	03/28/24 09:44	04/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		30 - 110					03/28/24 09:44	04/10/24 11:55	1
Y Carrier	81.9		30 - 110					03/28/24 09:44	04/10/24 11:55	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.105	U	0.290	0.290	5.00	0.524	pCi/L		04/23/24 18:39	1

Client Sample ID: EB-03

Lab Sample ID: 180-171314-12

Date Collected: 03/21/24 08:20

Matrix: Water

Date Received: 03/22/24 09:30

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.112		0.0675	0.0682	1.00	0.0856	pCi/L	03/28/24 09:26	04/22/24 16:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.5		30 - 110					03/28/24 09:26	04/22/24 16:52	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0404	U	0.267	0.267	1.00	0.492	pCi/L	03/28/24 09:44	04/10/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.5		30 - 110					03/28/24 09:44	04/10/24 11:55	1
Y Carrier	81.9		30 - 110					03/28/24 09:44	04/10/24 11:55	1

Client Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Client Sample ID: EB-03

Lab Sample ID: 180-171314-12

Date Collected: 03/21/24 08:20

Matrix: Water

Date Received: 03/22/24 09:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.152	U	0.275	0.276	5.00	0.492	pCi/L		04/23/24 18:39	1

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

QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-654483/1-A
Matrix: Water
Analysis Batch: 658078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654483

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.09513	U	0.0707	0.0713	1.00	0.102	pCi/L	03/28/24 09:26	04/22/24 08:57	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	100		30 - 110		03/28/24 09:26	04/22/24 08:57	1			

Lab Sample ID: LCS 160-654483/2-A
Matrix: Water
Analysis Batch: 658078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654483

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.86		1.12	1.00	0.114	pCi/L	96	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	96.5		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-654485/1-A
Matrix: Water
Analysis Batch: 656291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654485

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4169	U	0.348	0.350	1.00	0.545	pCi/L	03/28/24 09:44	04/10/24 12:02	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	100		30 - 110		03/28/24 09:44	04/10/24 12:02	1			
Y Carrier	82.2		30 - 110		03/28/24 09:44	04/10/24 12:02	1			

Lab Sample ID: LCS 160-654485/2-A
Matrix: Water
Analysis Batch: 656291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654485

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	9.04	10.42		1.38	1.00	0.463	pCi/L	115	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	96.5		30 - 110						
Y Carrier	81.1		30 - 110						

QC Association Summary

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond

Job ID: 180-171314-2

Rad


Prep Batch: 654483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total/NA	Water	PrecSep-21	
180-171314-2	BAW-2A	Total/NA	Water	PrecSep-21	
180-171314-3	BAW-3	Total/NA	Water	PrecSep-21	
180-171314-4	BAW-4	Total/NA	Water	PrecSep-21	
180-171314-5	BAW-5	Total/NA	Water	PrecSep-21	
180-171314-6	BAW-7	Total/NA	Water	PrecSep-21	
180-171314-7	BAW-8	Total/NA	Water	PrecSep-21	
180-171314-8	BAW-9	Total/NA	Water	PrecSep-21	
180-171314-9	DUP-07	Total/NA	Water	PrecSep-21	
180-171314-10	DUP-08	Total/NA	Water	PrecSep-21	
180-171314-11	FB-03	Total/NA	Water	PrecSep-21	
180-171314-12	EB-03	Total/NA	Water	PrecSep-21	
MB 160-654483/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-654483/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 654485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171314-1	BAW-1	Total/NA	Water	PrecSep_0	
180-171314-2	BAW-2A	Total/NA	Water	PrecSep_0	
180-171314-3	BAW-3	Total/NA	Water	PrecSep_0	
180-171314-4	BAW-4	Total/NA	Water	PrecSep_0	
180-171314-5	BAW-5	Total/NA	Water	PrecSep_0	
180-171314-6	BAW-7	Total/NA	Water	PrecSep_0	
180-171314-7	BAW-8	Total/NA	Water	PrecSep_0	
180-171314-8	BAW-9	Total/NA	Water	PrecSep_0	
180-171314-9	DUP-07	Total/NA	Water	PrecSep_0	
180-171314-10	DUP-08	Total/NA	Water	PrecSep_0	
180-171314-11	FB-03	Total/NA	Water	PrecSep_0	
180-171314-12	EB-03	Total/NA	Water	PrecSep_0	
MB 160-654485/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-654485/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Chain of Custody Record

Client Information Client Contact: <i>Heather Waters / Krisma</i> SCS Contacts: <i>850-336-0192</i> Company: SCS		Lab PM: Brown, Shali E-Mail: shali.brown@eurofins.com		Carrier Tracking No(s): Page: <i>1 of 2</i> Job #:	
Address: 3535 Colonnade Pkwy Bin S 530 EC City: Birmingham State, Zip: Alabama Phone: 205 992 6283 Email: Project #: 18020047 Daniel Ash Pond B CCR Site:		Due Date Requested: TAT Requested (days): PO #: WO #: Project #: S5OW#:		Analysis Requested: Total Dissolved Solids 90656 Chloride Fluoride Sulfate 7470 Mercury 6020B Custom 14 (App III and IV) Perform MS/MSD (Yes or No)	
Sample Identification RAW-1 RAW-2A RAW-3 RAW-4 RAW-5 RAW-7 RAW-8 RAW-9 DUP-07 DUP-08 FB-03		Sample Date 3-20-24 3-21-24 3-21-24 3-21-24 3-20-24 3-21-24 3-21-24 3-21-24 3-20-24 3-21-24 3-21-24 3-21-24		Sample Time 1635 1310 1015 1600 1726 1125 1304 1445 1535 1025 0815	
Sample Type (C=Comp, G=grab) G G G G G G G G G G G G		Matrix (W=water, S=solid, O=water/oil, etc.) W W W W W W W W W W W W		Field Filtered Sample (Yes or No) No No No No No No No No No No No	
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 Other: 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 X - EDTA Z - other (specify)		Total Number of Containers 6 6 6 6 6 6 6 6 6 6 6 6		Special Instructions/Note: 180-1771314 Chain of Custody 	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements	
Deliverable Requested I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: 3-21-24 1648		Date/Time: 3/22/24 0930	
Relinquished by:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing
America

Client Information Client Contact: SCS Contacts Company: SCS		Lab PM Brown, Shali E-Mail shali.brown@eurofinset.com		Carrier Tracking No(s)		COC No: Page: <i>Page 2 of 2</i> Job #:									
Address: 3535 Colonnade Pkwy Bin S 530 EC City: Birmingham State, Zip: Alabama Phone: 205 992 6283 Email:		Due Date Requested: TAT Requested (days): PO #: WO #: Project #: 18020047 SSOW#:		Analysis Requested Ra 226 Ra 228 and Combined Total Dissolved Solids 90656 Chloride Fluoride Sulfate 7470 Mercury 6020B Custom 14 (App III and IV) Perfrom MS/MSD (Yes or No)		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 Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)									
Sample Identification EB-03		Sample Date 3-21-24		Sample Time 0820		Sample Type G=grab		Matrix (W=water, S=solid, O=water/oil, etc-Tissue, A=Air)		Field Filtered Sample (Yes or No)		Total Number of Containers 6		Special Instructions/Note:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested I, II, III, IV, Other (specify)		Empty Kit Relinquished by		Relinquished by <i>[Signature]</i>		Relinquished by Date/Time 3-21-24 1648		Relinquished by Date/Time		Relinquished by Date/Time		Relinquished by Date/Time	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.		Date 3-21-24		Date/Time 1648		Date/Time 1648		Date/Time 0930		Date/Time 0930		Date/Time 0930	
Cooler Temperature(s) °C and Other Remarks		Received by <i>[Signature]</i>		Received by <i>[Signature]</i>		Received by <i>[Signature]</i>		Received by <i>[Signature]</i>		Received by <i>[Signature]</i>		Received by <i>[Signature]</i>		Received by <i>[Signature]</i>	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements		Method of Shipment:		Company RATH EM.		Company RATH EM.		Company RATH EM.		Company RATH EM.		Company RATH EM.	



Part # 156297-435 RRB02 EXP 01/25

SHIP DATE: 21MAR24
ACTWGT: 59.25 LB
CAD: 6994563/SSFE2500
DIMS: 24x14x14 IN
BILL THIRD PARTY

ORIGIN ID:MOBA (850) 336-0192
TESTAMERICA PITTSBURGH LAB
SEE CHECKERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

TO EUROFINS TESTAMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068
REF: DEPT:



FRI - 22 MAR 10:30A
PRIORITY OVERNIGHT
AHS
15238
PA-US
PIT

MPS# 2724 7404 8984
Mstr# 2724 7404 8973

XS AGCA

Uncorrected temp 3.3
Thermometer ID 17
CF -0.3 Initials [Signature]
PT-WI-SR-001 effective 11/8/18



180-171314 Waybill

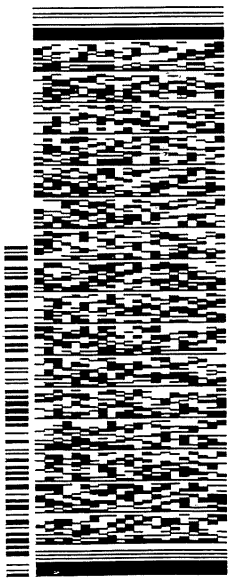
Part # 156297-435 RRB02 EXP 01/25

SHIP DATE: 21MAR24
ACTWGT: 64.05 LB
CAD: 6994563/SSFE2500
DIMS: 24x14x14 IN
BILL THIRD PARTY

ORIGIN ID:MOBA (850) 336-0192
TESTAMERICA PITTSBURGH LAB
SEE CHECKERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

TO EUROFINS TESTAMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068
REF: DEPT:



FRI - 22 MAR 10:30A
PRIORITY OVERNIGHT
15238
PA-US
PIT

MPS# 2724 7404 8995
Mstr# 2724 7404 8973

XS AGCA

Uncorrected temp 3.9 °C
Thermometer ID 17
CF -0.3 Initials [Signature]
PT-WI-SR-001 effective 11/8/18

RT 198 1 10:30
FZ 197
A 8995 03.22



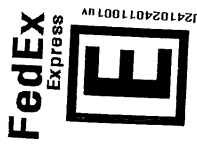
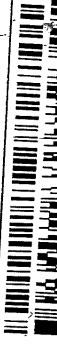
ORIGIN ID:MOBA (850) 336-0192
TESTAMERICA PITTSBURGH LAB
SEE CHECKS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

TO: EUROFINS TESTAMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068
REF: INVT: PO:

SHIP DATE: 21 MAR 2
ACTWGT: 63.65 LB
CAD: 6994563/SSF
DIMS: 24x14x14
BILL THIRD PART

RT 198
FZ 197
10:30
A



4 of 4
MPS# 2724 7404 9009
0263
Mstr# 2724 7404 8973
0201

XS AGCA

15238
PA-US
PIT

Uncorrected temp 3.1 °C
Thermometer ID 17
CF-0.3 Initials RR
PT-WI-SR-001 effective 11/8/18

ORIGIN ID:MOBA (850) 336-0192
TESTAMERICA PITTSBURGH LAB
SEE CHECKS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

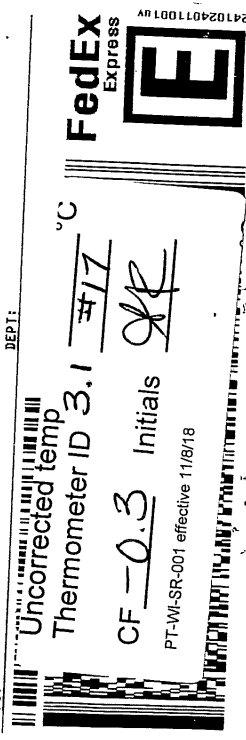
TO: EUROFINS TESTAMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068
REF: INVT: PO:

SHIP DATE: 21 MAR 24
ACTWGT: 73.55 LB
CAD: 6994563/SSF
DIMS: 24x14x14
BILL THIR

RT 198
FZ 197
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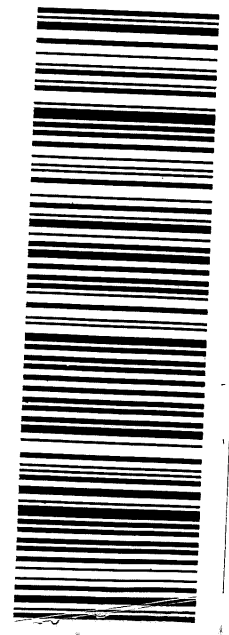
DEPT:



1 of 4
TRK# 2724 7404 8973
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Chain of Custody Record



Environment Testing



Client Information (Sub Contract Lab)		Sampler: Lab PM: Brown, Shall		COC No: 180-510090.1	
Client Contact: Shipping/Receiving		Phone: E-Mail: Shall.Brown@et.eurofins.com		Page: Page 1 of 2	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-171314-2	
Address: 13715 Rider Trail North,		Due Date Requested: 4/4/2024		Preservation Codes:	
City: Earth City		TAT Requested (days):		A - HCL 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 Y - Trizma Z - other (specify)	
State, Zip: MO, 63045		PO #:		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 Other:	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:		Total Number of containers	
Email:		Project #: 18020047		Analysis Requested	
Site: Plant Daniel Ash Pond		SSOW#:		Perform MS/MSD (Yes or No)	
		Sample Date		Field Filtered Sample (Yes or No)	
		Sample Time		930_Ra226/PreSep_0 Standard Target List	
		Sample ID (Lab ID)		9315_Ra226/PreSep_21 Radium 226	
		Sample Time		Ra226Ra228_GFPc	
		Sample Date		Special Instructions/Note:	
BAW-1 (180-171314-1)		3/20/24		X	
BAW-2A (180-171314-2)		3/21/24		X	
BAW-3 (180-171314-3)		3/21/24		X	
BAW-4 (180-171314-4)		3/21/24		X	
BAW-5 (180-171314-5)		3/20/24		X	
BAW-7 (180-171314-6)		3/21/24		X	
BAW-8 (180-171314-7)		3/21/24		X	
BAW-9 (180-171314-8)		3/21/24		X	
DUP-07 (180-171314-9)		3/20/24		X	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our 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 Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.</p>					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested: I, II, III, IV, Other (specify)					
Primary Deliverable Rank: 2					
Special Instructions/QC Requirements:					
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Empty Kit Relinquished by: Date: Method of Shipment:					
Relinquished by: <i>Deegan</i> Date/Time: 3-25-24 1700 Company: E.I. Hark					
Relinquished by: Date/Time: Received by: Richard Thomley Date/Time: MAR 26 2024 1000 Company: ETH STL					
Relinquished by: Date/Time: Received by: Date/Time: Company: Company: Company:					
Custody Seals Intact: Custody Seal No.:					
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Δ <input type="checkbox"/> No					



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-510090.2									
Client Contact: Shipping/Receiving		E-Mail: Shali.Brown@eurofins.com	State of Origin: Mississippi	Page: Page 2 of 2									
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):											
Address: 13715 Rider Trail North, Earth City, MO, 63045		Job #: 180-171314-2											
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Preservation Codes: 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 X - EDTA Y - Trizma Z - other (specify) Other:											
Project Name: Plant Daniel Ash Pond		Analysis Requested:											
Site:		Total Number of Containers											
Due Date Requested: 4/4/2024		Field Filtered Sample (Yes or No)											
TAT Requested (days):		Perform MS/MSD (Yes or No)											
PO #:		920_Ra228/PreSep_0 Standard Target List											
WO #:		9315_Ra226/PreSep_21 Radium 226											
Project #: 18020047		Ra226Ra228_GFPc											
SSOW#:													
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, Sw=soil, O=wastewater, BT=tissue, A=air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	920_Ra228/PreSep_0 Standard Target List	9315_Ra226/PreSep_21 Radium 226	Ra226Ra228_GFPc	Total Number of Containers	Special Instructions/Note:
DUP-08 (180-171314-10)	3/21/24	10:25 Central	Water	X	X	X	X	2					
FB-03 (180-171314-11)	3/21/24	08:15 Central	Water	X	X	X	X	2					
EB-03 (180-171314-12)	3/21/24	08:20 Central	Water	X	X	X	X	2					
<p>Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.</p>													
<p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2</p> <p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months</p> <p>Special Instructions/QC Requirements:</p>													
<p>Empty Kit Relinquished by: _____ Date: _____</p> <p>Time: _____ Method of Shipment: _____</p> <p>Relinquished by: <i>[Signature]</i> Date/Time: 3-25-24 17:00 Company: <i>[Signature]</i></p> <p>Relinquished by: _____ Date/Time: _____ Company: _____</p> <p>Relinquished by: _____ Date/Time: _____ Company: _____</p> <p>Custody Seals Intact: _____ (Custody Seal No. _____)</p> <p>Δ Yes Δ No Cooler Temperature(s) °C and Other Remarks</p>													
<p>Received by: Richard Thornley Date/Time: MAR 26 2024 10:00 Company: ETHA STC</p> <p>Received by: _____ Date/Time: _____ Company: _____</p> <p>Received by: _____ Date/Time: _____ Company: _____</p>													



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-171314-2

Login Number: 171314

List Number: 1

Creator: Abernathy, Eric L

List Source: Eurofins 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: 180-171314-2

Login Number: 171314

List Number: 2

Creator: Thornley, Richard W

List Source: Eurofins St. Louis

List Creation: 03/26/24 01:42 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?	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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Low-Flow Test Report:

Test Date / Time: 10/2/2024 12:24:53 PM

Project: Daniel CCR BAW-1

Operator Name: Todd Voreis

Location Name: Daniel CCR BAW-1 Well Diameter: 2 in Casing Type: PVC Screen Length: 5 ft Top of Screen: 55.6 ft Total Depth: 60.6 ft Initial Depth to Water: 24.45 ft	Pump Type: BP Tubing Type: Pe Pump Intake From TOC: 58.1 ft Estimated Total Volume Pumped: 8000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 800306
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Test Notes:

Weather Conditions:

Fair, 88 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/2/2024 12:24 PM	00:00	5.01 pH	24.70 °C	37.46 µS/cm	5.31 mg/L		137.2 mV	24.45 ft	400.00 ml/min
10/2/2024 12:29 PM	05:00	4.84 pH	22.39 °C	39.36 µS/cm	5.37 mg/L	0.96 NTU	214.4 mV	24.45 ft	400.00 ml/min
10/2/2024 12:34 PM	10:00	4.88 pH	22.34 °C	39.49 µS/cm	5.38 mg/L	0.65 NTU	130.9 mV	24.45 ft	400.00 ml/min
10/2/2024 12:39 PM	15:00	4.92 pH	22.34 °C	39.69 µS/cm	5.38 mg/L	0.66 NTU	128.6 mV	24.45 ft	400.00 ml/min
10/2/2024 12:44 PM	20:00	4.94 pH	22.30 °C	39.76 µS/cm	5.41 mg/L	0.65 NTU	128.9 mV	24.45 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-1	Sample time 1250

Low-Flow Test Report:

Test Date / Time: 10/2/2024 9:52:34 AM

Project: Daniel CCR BAW-2A

Operator Name: Todd Voreis

Location Name: Daniel CCR BAW-2A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 57.2 ft Total Depth: 67.2 ft Initial Depth to Water: 33.75 ft	Pump Type: BP Tubing Type: Pe Pump Intake From TOC: 62.2 ft Estimated Total Volume Pumped: 32000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.01 ft	Instrument Used: Aqua TROLL 400 Serial Number: 800306
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Test Notes:

Weather Conditions:

Sunny, 82 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/2/2024 9:52 AM	00:00	4.92 pH	24.31 °C	63.83 µS/cm	3.99 mg/L		136.6 mV	33.75 ft	400.00 ml/min
10/2/2024 9:57 AM	05:00	4.87 pH	23.18 °C	66.25 µS/cm	2.96 mg/L	3.02 NTU	103.2 mV	33.76 ft	400.00 ml/min
10/2/2024 10:02 AM	10:00	4.88 pH	23.04 °C	66.30 µS/cm	3.32 mg/L	2.49 NTU	102.7 mV	33.76 ft	400.00 ml/min
10/2/2024 10:07 AM	15:00	4.88 pH	23.05 °C	66.33 µS/cm	3.23 mg/L	1.95 NTU	170.5 mV	33.76 ft	400.00 ml/min
10/2/2024 10:12 AM	20:00	4.85 pH	23.98 °C	66.36 µS/cm	2.97 mg/L	2.16 NTU	103.8 mV	33.76 ft	400.00 ml/min
10/2/2024 10:17 AM	25:00	4.90 pH	23.18 °C	65.61 µS/cm	3.25 mg/L	1.37 NTU	173.4 mV	33.76 ft	400.00 ml/min
10/2/2024 10:22 AM	30:00	4.92 pH	23.05 °C	65.54 µS/cm	3.09 mg/L	1.47 NTU	178.1 mV	33.76 ft	400.00 ml/min
10/2/2024 10:27 AM	35:00	4.91 pH	23.08 °C	65.54 µS/cm	3.11 mg/L	0.98 NTU	106.2 mV	33.76 ft	400.00 ml/min
10/2/2024 10:32 AM	40:00	4.92 pH	23.06 °C	65.86 µS/cm	3.18 mg/L	0.86 NTU	179.7 mV	33.76 ft	400.00 ml/min
10/2/2024 10:37 AM	45:00	4.93 pH	23.09 °C	65.67 µS/cm	3.13 mg/L	0.56 NTU	108.4 mV	33.76 ft	400.00 ml/min
10/2/2024 10:42 AM	50:00	4.93 pH	23.08 °C	65.82 µS/cm	3.16 mg/L	0.51 NTU	185.9 mV	33.76 ft	400.00 ml/min
10/2/2024 10:47 AM	55:00	4.93 pH	23.09 °C	65.70 µS/cm	3.18 mg/L	0.61 NTU	111.7 mV	33.76 ft	400.00 ml/min
10/2/2024 10:52 AM	01:00:00	4.94 pH	23.05 °C	65.47 µS/cm	3.22 mg/L	0.62 NTU	190.5 mV	33.76 ft	400.00 ml/min

10/2/2024 10:57 AM	01:05:00	4.94 pH	23.10 °C	65.20 µS/cm	3.15 mg/L	0.69 NTU	112.5 mV	33.76 ft	400.00 ml/min
10/2/2024 11:02 AM	01:10:00	4.94 pH	23.13 °C	65.49 µS/cm	3.22 mg/L	0.49 NTU	192.6 mV	33.76 ft	400.00 ml/min
10/2/2024 11:07 AM	01:15:00	4.95 pH	23.11 °C	65.75 µS/cm	3.22 mg/L	0.54 NTU	198.5 mV	33.76 ft	400.00 ml/min
10/2/2024 11:12 AM	01:20:00	4.95 pH	23.16 °C	65.50 µS/cm	3.19 mg/L	0.52 NTU	200.2 mV	33.76 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-2A	Sample time 1115
FB-03	Sample time 1130

Low-Flow Test Report:

Test Date / Time: 10/2/2024 8:08:55 AM

Project: Daniel CCR BAW-3

Operator Name: Todd Voreis

Location Name: Daniel CCR BAW-3 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 58.4 ft Total Depth: 68.4 ft Initial Depth to Water: 33.27 ft	Pump Type: BP Tubing Type: Pe Pump Intake From TOC: 58.1 ft Estimated Total Volume Pumped: 18000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.01 ft	Instrument Used: Aqua TROLL 400 Serial Number: 800306
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Test Notes:

Weather Conditions:

Sunny, 73 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/2/2024 8:08 AM	00:00	4.49 pH	21.74 °C	48.06 µS/cm	0.67 mg/L		161.6 mV	33.27 ft	400.00 ml/min
10/2/2024 8:13 AM	05:00	4.50 pH	21.64 °C	48.25 µS/cm	0.70 mg/L	5.01 NTU	230.5 mV	33.27 ft	400.00 ml/min
10/2/2024 8:18 AM	10:00	4.50 pH	21.67 °C	48.10 µS/cm	0.67 mg/L	3.82 NTU	135.8 mV	33.27 ft	400.00 ml/min
10/2/2024 8:23 AM	15:00	4.50 pH	21.71 °C	47.97 µS/cm	0.65 mg/L	2.96 NTU	124.4 mV	33.28 ft	400.00 ml/min
10/2/2024 8:28 AM	20:00	4.50 pH	21.71 °C	47.83 µS/cm	0.62 mg/L	2.71 NTU	119.2 mV	33.28 ft	400.00 ml/min
10/2/2024 8:33 AM	25:00	4.50 pH	21.73 °C	47.60 µS/cm	0.61 mg/L	1.58 NTU	117.7 mV	33.28 ft	400.00 ml/min
10/2/2024 8:38 AM	30:00	4.51 pH	21.79 °C	47.46 µS/cm	0.60 mg/L	1.53 NTU	113.0 mV	33.28 ft	400.00 ml/min
10/2/2024 8:43 AM	35:00	4.51 pH	21.84 °C	47.43 µS/cm	0.59 mg/L	1.42 NTU	110.8 mV	33.28 ft	400.00 ml/min
10/2/2024 8:48 AM	40:00	4.51 pH	21.85 °C	47.42 µS/cm	0.58 mg/L	1.31 NTU	109.0 mV	33.28 ft	400.00 ml/min
10/2/2024 8:53 AM	45:00	4.52 pH	21.89 °C	47.38 µS/cm	0.58 mg/L	1.10 NTU	109.2 mV	33.28 ft	400.00 ml/min

Samples

Sample ID:	Description:
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BAW-3	Sample time 0859
DUP-05	Fake sample time 0759

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 10/2/2024 7:51:37 AM

Project: Daniel CCR BAW-4

Operator Name: Keith Krisman

Location Name: Daniel CCR BAW-4 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 59.9 ft Total Depth: 69.9 ft Initial Depth to Water: 30.92 ft	Pump Type: QED Tubing Type: PE Pump Intake From TOC: 64.9 ft Estimated Total Volume Pumped: 34000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.03 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1055720
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Test Notes:

Weather Conditions:

Sunny 72 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/2/2024 7:51 AM	00:00	5.94 pH	23.19 °C	90.90 µS/cm	0.22 mg/L		50.9 mV	30.92 ft	400.00 ml/min
10/2/2024 7:56 AM	05:00	5.88 pH	23.21 °C	84.05 µS/cm	0.17 mg/L	62.40 NTU	48.5 mV	30.95 ft	400.00 ml/min
10/2/2024 8:01 AM	10:00	5.81 pH	23.24 °C	78.96 µS/cm	0.17 mg/L	32.30 NTU	51.2 mV	30.95 ft	400.00 ml/min
10/2/2024 8:06 AM	15:00	5.77 pH	23.28 °C	76.18 µS/cm	0.17 mg/L	15.10 NTU	49.9 mV	30.95 ft	400.00 ml/min
10/2/2024 8:11 AM	20:00	5.72 pH	23.30 °C	73.58 µS/cm	0.19 mg/L	21.30 NTU	48.6 mV	30.95 ft	400.00 ml/min
10/2/2024 8:16 AM	25:00	5.66 pH	23.29 °C	69.75 µS/cm	0.19 mg/L	8.25 NTU	48.0 mV	30.95 ft	400.00 ml/min
10/2/2024 8:21 AM	30:00	5.62 pH	23.31 °C	67.00 µS/cm	0.20 mg/L	4.61 NTU	46.7 mV	30.95 ft	400.00 ml/min
10/2/2024 8:26 AM	35:00	5.59 pH	23.35 °C	65.60 µS/cm	0.20 mg/L	4.14 NTU	46.1 mV	30.95 ft	400.00 ml/min
10/2/2024 8:31 AM	40:00	5.56 pH	23.37 °C	63.99 µS/cm	0.20 mg/L	3.95 NTU	45.3 mV	30.95 ft	400.00 ml/min
10/2/2024 8:36 AM	45:00	5.54 pH	23.43 °C	63.13 µS/cm	0.20 mg/L	3.05 NTU	44.2 mV	30.95 ft	400.00 ml/min
10/2/2024 8:41 AM	50:00	5.53 pH	23.47 °C	62.82 µS/cm	0.20 mg/L	3.17 NTU	43.3 mV	30.95 ft	400.00 ml/min
10/2/2024 8:46 AM	55:00	5.52 pH	23.51 °C	62.24 µS/cm	0.20 mg/L	3.61 NTU	42.2 mV	30.95 ft	400.00 ml/min
10/2/2024 8:51 AM	01:00:00	5.52 pH	23.53 °C	62.05 µS/cm	0.20 mg/L	2.08 NTU	41.4 mV	30.95 ft	400.00 ml/min

10/2/2024 8:56 AM	01:05:00	5.51 pH	23.58 °C	61.61 µS/cm	0.20 mg/L	2.41 NTU	40.7 mV	30.95 ft	400.00 ml/min
10/2/2024 9:01 AM	01:10:00	5.51 pH	23.61 °C	61.46 µS/cm	0.20 mg/L	2.03 NTU	39.9 mV	30.95 ft	400.00 ml/min
10/2/2024 9:06 AM	01:15:00	5.51 pH	23.65 °C	61.39 µS/cm	0.20 mg/L	2.26 NTU	39.0 mV	30.95 ft	400.00 ml/min
10/2/2024 9:11 AM	01:20:00	5.51 pH	23.70 °C	61.19 µS/cm	0.20 mg/L	2.17 NTU	37.9 mV	30.95 ft	400.00 ml/min
10/2/2024 9:16 AM	01:25:00	5.51 pH	23.75 °C	61.51 µS/cm	0.20 mg/L	1.93 NTU	36.9 mV	30.95 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-4	Sample time 0918

Low-Flow Test Report:

Test Date / Time: 10/2/2024 2:46:18 PM

Project: Daniel CCR BAW-5

Operator Name: Keith Krisman

Location Name: Daniel CCR BAW-5 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 59.1 ft Total Depth: 69.1 ft Initial Depth to Water: 34.5 ft	Pump Type: QED Tubing Type: PE Pump Intake From TOC: 64.1 ft Estimated Total Volume Pumped: 16000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.06 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1055720
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Test Notes:

Weather Conditions:

Sunny 88 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/2/2024 2:46 PM	00:00	6.19 pH	26.26 °C	283.82 µS/cm	2.16 mg/L		42.2 mV	34.50 ft	400.00 ml/min
10/2/2024 2:51 PM	05:00	6.11 pH	24.35 °C	300.73 µS/cm	0.73 mg/L	0.60 NTU	33.9 mV	34.56 ft	400.00 ml/min
10/2/2024 2:56 PM	10:00	6.12 pH	24.15 °C	303.48 µS/cm	0.57 mg/L	0.53 NTU	26.8 mV	34.56 ft	400.00 ml/min
10/2/2024 3:01 PM	15:00	6.12 pH	24.19 °C	310.08 µS/cm	0.50 mg/L	0.34 NTU	21.4 mV	34.56 ft	400.00 ml/min
10/2/2024 3:06 PM	20:00	6.12 pH	24.15 °C	314.69 µS/cm	0.44 mg/L	0.49 NTU	16.8 mV	34.56 ft	400.00 ml/min
10/2/2024 3:11 PM	25:00	6.12 pH	24.06 °C	317.97 µS/cm	0.38 mg/L	0.52 NTU	13.6 mV	34.56 ft	400.00 ml/min
10/2/2024 3:16 PM	30:00	6.12 pH	24.06 °C	319.97 µS/cm	0.34 mg/L	0.72 NTU	10.2 mV	34.56 ft	400.00 ml/min
10/2/2024 3:21 PM	35:00	6.13 pH	24.11 °C	321.74 µS/cm	0.30 mg/L	0.66 NTU	6.8 mV	34.56 ft	400.00 ml/min
10/2/2024 3:26 PM	40:00	6.14 pH	24.09 °C	321.20 µS/cm	0.28 mg/L	0.66 NTU	4.2 mV	34.56 ft	400.00 ml/min

Samples

Sample ID:	Description:
BAW-5	Sample time 1530

Low-Flow Test Report:

Test Date / Time: 10/2/2024 2:03:29 PM

Project: Daniel CCR BAW-7

Operator Name: Todd Voreis

Location Name: Daniel CCR BAW-7 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 53.8 ft Total Depth: 63.8 ft Initial Depth to Water: 28.47 ft	Pump Type: BP Tubing Type: Pe Pump Intake From TOC: 58.8 ft Estimated Total Volume Pumped: 76000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 800306
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Test Notes:

Weather Conditions:

Partly cloudy, 90 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/2/2024 2:03 PM	00:00	4.91 pH	28.53 °C	42.07 µS/cm	5.49 mg/L		134.7 mV	28.47 ft	400.00 ml/min
10/2/2024 2:08 PM	05:00	4.91 pH	22.54 °C	42.10 µS/cm	5.51 mg/L	28.60 NTU	121.6 mV	28.47 ft	400.00 ml/min
10/2/2024 2:13 PM	10:00	4.89 pH	22.38 °C	42.00 µS/cm	5.70 mg/L	28.10 NTU	206.2 mV	28.47 ft	400.00 ml/min
10/2/2024 2:18 PM	15:00	4.89 pH	22.58 °C	41.86 µS/cm	5.95 mg/L	25.40 NTU	219.4 mV	28.47 ft	400.00 ml/min
10/2/2024 2:23 PM	20:00	4.86 pH	22.06 °C	42.15 µS/cm	6.01 mg/L	16.30 NTU	129.4 mV	28.47 ft	400.00 ml/min
10/2/2024 2:28 PM	25:00	4.86 pH	22.11 °C	41.98 µS/cm	6.14 mg/L	11.80 NTU	221.3 mV	28.47 ft	400.00 ml/min
10/2/2024 2:33 PM	30:00	4.86 pH	22.20 °C	42.49 µS/cm	6.39 mg/L	8.03 NTU	234.4 mV	28.47 ft	400.00 ml/min
10/2/2024 2:38 PM	35:00	4.85 pH	22.38 °C	42.39 µS/cm	6.28 mg/L	7.56 NTU	252.9 mV	28.47 ft	400.00 ml/min
10/2/2024 2:43 PM	40:00	4.86 pH	22.19 °C	42.49 µS/cm	6.31 mg/L	5.23 NTU	274.6 mV	28.47 ft	400.00 ml/min
10/2/2024 2:48 PM	45:00	4.85 pH	22.05 °C	42.40 µS/cm	6.38 mg/L	4.89 NTU	286.1 mV	28.47 ft	400.00 ml/min
10/2/2024 2:53 PM	50:00	4.86 pH	21.90 °C	42.56 µS/cm	6.39 mg/L	4.35 NTU	282.5 mV	28.47 ft	400.00 ml/min
10/2/2024 2:58 PM	55:00	4.86 pH	21.98 °C	42.67 µS/cm	6.42 mg/L	3.86 NTU	270.3 mV	28.47 ft	400.00 ml/min
10/2/2024 3:03 PM	01:00:00	4.86 pH	22.12 °C	42.47 µS/cm	6.17 mg/L	3.25 NTU	265.3 mV	28.47 ft	400.00 ml/min

10/2/2024 3:08 PM	01:05:00	4.86 pH	22.02 °C	42.90 µS/cm	6.46 mg/L	2.51 NTU	273.7 mV	28.47 ft	400.00 ml/min
10/2/2024 3:13 PM	01:10:00	4.86 pH	22.19 °C	42.58 µS/cm	6.39 mg/L	2.90 NTU	287.3 mV	28.47 ft	400.00 ml/min
10/2/2024 3:18 PM	01:15:00	4.85 pH	22.20 °C	42.90 µS/cm	6.46 mg/L	2.16 NTU	328.6 mV	28.47 ft	400.00 ml/min
10/2/2024 3:23 PM	01:20:00	4.85 pH	22.35 °C	43.07 µS/cm	6.49 mg/L	1.39 NTU	452.3 mV	28.47 ft	400.00 ml/min
10/2/2024 3:28 PM	01:25:00	4.87 pH	22.29 °C	42.93 µS/cm	6.52 mg/L	1.85 NTU	583.4 mV	28.47 ft	400.00 ml/min
10/2/2024 3:33 PM	01:30:00	4.87 pH	22.36 °C	42.81 µS/cm	6.39 mg/L	2.55 NTU	685.0 mV	28.47 ft	400.00 ml/min
10/2/2024 3:38 PM	01:35:00	4.86 pH	22.29 °C	42.86 µS/cm	6.32 mg/L	1.89 NTU	764.2 mV	28.47 ft	400.00 ml/min
10/2/2024 3:43 PM	01:40:00	4.86 pH	22.29 °C	43.10 µS/cm	6.46 mg/L	1.72 NTU	681.4 mV	28.47 ft	400.00 ml/min
10/2/2024 3:48 PM	01:45:00	4.87 pH	22.25 °C	43.25 µS/cm	6.45 mg/L	2.15 NTU	873.7 mV	28.47 ft	400.00 ml/min
10/2/2024 3:53 PM	01:50:00	4.87 pH	22.13 °C	43.05 µS/cm	6.49 mg/L	2.08 NTU	890.8 mV	28.47 ft	400.00 ml/min
10/2/2024 3:58 PM	01:55:00	4.90 pH	22.18 °C	43.13 µS/cm	6.41 mg/L	2.00 NTU	761.1 mV	28.47 ft	400.00 ml/min
10/2/2024 4:03 PM	02:00:00	4.86 pH	22.16 °C	43.21 µS/cm	6.52 mg/L	1.41 NTU	788.1 mV	28.47 ft	400.00 ml/min
10/2/2024 4:08 PM	02:05:00	4.86 pH	22.11 °C	43.10 µS/cm	6.47 mg/L	2.08 NTU	767.8 mV	28.47 ft	400.00 ml/min
10/2/2024 4:13 PM	02:10:00	4.86 pH	22.29 °C	43.34 µS/cm	6.64 mg/L	1.92 NTU	677.6 mV	28.47 ft	400.00 ml/min
10/2/2024 4:18 PM	02:15:00	4.86 pH	22.25 °C	43.47 µS/cm	6.36 mg/L	1.68 NTU	714.0 mV	28.47 ft	400.00 ml/min
10/2/2024 4:23 PM	02:20:00	4.86 pH	22.11 °C	43.44 µS/cm	6.50 mg/L	2.88 NTU	681.1 mV	28.47 ft	400.00 ml/min
10/2/2024 4:28 PM	02:25:00	4.87 pH	22.02 °C	43.25 µS/cm	6.68 mg/L	1.49 NTU	659.5 mV	28.47 ft	400.00 ml/min
10/2/2024 4:33 PM	02:30:00	4.87 pH	21.98 °C	43.44 µS/cm	6.56 mg/L	1.33 NTU	639.2 mV	28.47 ft	400.00 ml/min
10/2/2024 4:38 PM	02:35:00	4.87 pH	21.98 °C	43.39 µS/cm	6.57 mg/L	1.26 NTU	621.0 mV	28.47 ft	400.00 ml/min
10/2/2024 4:43 PM	02:40:00	4.87 pH	21.91 °C	43.52 µS/cm	6.52 mg/L	1.08 NTU	537.0 mV	28.47 ft	400.00 ml/min
10/2/2024 4:48 PM	02:45:00	4.87 pH	21.93 °C	43.48 µS/cm	6.69 mg/L	1.06 NTU	571.1 mV	28.47 ft	400.00 ml/min
10/2/2024 4:53 PM	02:50:00	4.86 pH	21.98 °C	43.51 µS/cm	6.53 mg/L	0.95 NTU	545.9 mV	28.47 ft	400.00 ml/min
10/2/2024 4:58 PM	02:55:00	4.86 pH	21.93 °C	43.59 µS/cm	6.56 mg/L	1.23 NTU	522.9 mV	28.47 ft	400.00 ml/min
10/2/2024 5:03 PM	03:00:00	4.88 pH	21.75 °C	43.51 µS/cm	6.49 mg/L	1.87 NTU	509.0 mV	28.47 ft	400.00 ml/min
10/2/2024 5:08 PM	03:05:00	4.87 pH	21.83 °C	43.59 µS/cm	6.66 mg/L	1.41 NTU	498.6 mV	28.47 ft	400.00 ml/min
10/2/2024 5:13 PM	03:10:00	4.87 pH	21.84 °C	43.57 µS/cm	6.51 mg/L	1.06 NTU	492.5 mV	28.47 ft	400.00 ml/min

Samples

Sample ID:	Description:
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BAW-7

Sample time 1720

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 10/2/2024 10:12:05 AM

Project: Daniel CCR PZ-8

Operator Name: Keith Krisman

Location Name: Daniel CCR PZ-8 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 58.7 ft Total Depth: 68.7 ft Initial Depth to Water: 34.36 ft	Pump Type: BP Tubing Type: PE Pump Intake From TOC: 63.7 ft Estimated Total Volume Pumped: 38000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.08 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1055720
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Test Notes:

Weather Conditions:

Sunny 82 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/2/2024 10:12 AM	00:00	5.99 pH	23.74 °C	179.27 µS/cm	0.44 mg/L		50.7 mV	34.36 ft	400.00 ml/min
10/2/2024 10:17 AM	05:00	5.99 pH	23.61 °C	177.51 µS/cm	0.41 mg/L	10.60 NTU	50.2 mV	34.44 ft	400.00 ml/min
10/2/2024 10:22 AM	10:00	6.01 pH	23.62 °C	178.40 µS/cm	0.39 mg/L	8.99 NTU	46.4 mV	34.44 ft	400.00 ml/min
10/2/2024 10:27 AM	15:00	6.00 pH	23.56 °C	178.57 µS/cm	0.42 mg/L	7.55 NTU	45.7 mV	34.44 ft	400.00 ml/min
10/2/2024 10:32 AM	20:00	6.00 pH	23.55 °C	177.90 µS/cm	0.41 mg/L	5.88 NTU	44.8 mV	34.44 ft	400.00 ml/min
10/2/2024 10:37 AM	25:00	6.00 pH	23.59 °C	177.71 µS/cm	0.49 mg/L	7.22 NTU	43.8 mV	34.44 ft	400.00 ml/min
10/2/2024 10:42 AM	30:00	6.00 pH	23.56 °C	177.54 µS/cm	0.48 mg/L	5.29 NTU	44.2 mV	34.44 ft	400.00 ml/min
10/2/2024 10:47 AM	35:00	6.01 pH	23.58 °C	178.65 µS/cm	0.46 mg/L	4.38 NTU	41.8 mV	34.44 ft	400.00 ml/min
10/2/2024 10:52 AM	40:00	6.01 pH	23.57 °C	178.74 µS/cm	0.46 mg/L	3.66 NTU	41.2 mV	34.44 ft	400.00 ml/min
10/2/2024 10:57 AM	45:00	6.01 pH	23.55 °C	179.08 µS/cm	0.49 mg/L	3.93 NTU	40.5 mV	34.44 ft	400.00 ml/min
10/2/2024 11:02 AM	50:00	6.01 pH	23.58 °C	178.70 µS/cm	0.54 mg/L	3.88 NTU	40.9 mV	34.44 ft	400.00 ml/min
10/2/2024 11:07 AM	55:00	6.00 pH	23.61 °C	179.80 µS/cm	0.50 mg/L	3.95 NTU	41.3 mV	34.44 ft	400.00 ml/min
10/2/2024 11:12 AM	01:00:00	6.02 pH	23.61 °C	178.81 µS/cm	0.45 mg/L	2.97 NTU	38.6 mV	34.44 ft	400.00 ml/min

10/2/2024 11:17 AM	01:05:00	6.02 pH	23.61 °C	178.47 µS/cm	0.48 mg/L	3.00 NTU	38.1 mV	34.44 ft	400.00 ml/min
10/2/2024 11:22 AM	01:10:00	6.02 pH	23.61 °C	179.44 µS/cm	0.49 mg/L	3.65 NTU	37.5 mV	34.44 ft	400.00 ml/min
10/2/2024 11:27 AM	01:15:00	6.01 pH	23.61 °C	178.63 µS/cm	0.46 mg/L	2.57 NTU	37.0 mV	34.44 ft	400.00 ml/min
10/2/2024 11:32 AM	01:20:00	6.00 pH	23.61 °C	179.97 µS/cm	0.42 mg/L	2.77 NTU	37.1 mV	34.44 ft	400.00 ml/min
10/2/2024 11:37 AM	01:25:00	6.02 pH	23.65 °C	178.87 µS/cm	0.47 mg/L	2.69 NTU	35.6 mV	34.44 ft	400.00 ml/min
10/2/2024 11:42 AM	01:30:00	6.03 pH	23.66 °C	179.43 µS/cm	0.47 mg/L	2.65 NTU	35.0 mV	34.44 ft	400.00 ml/min
10/2/2024 11:47 AM	01:35:00	6.02 pH	23.66 °C	179.32 µS/cm	0.45 mg/L	2.24 NTU	34.6 mV	34.44 ft	400.00 ml/min

Samples

Sample ID:	Description:
PZ-8	Sample time 1150

Low-Flow Test Report:

Test Date / Time: 10/2/2024 12:44:40 PM

Project: Daniel CCR PZ-9

Operator Name: Keith Krisman

Location Name: Daniel CCR PZ-9 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 53.1 ft Total Depth: 63.1 ft Initial Depth to Water: 33.67 ft	Pump Type: BP Tubing Type: PE Pump Intake From TOC: 58.1 ft Estimated Total Volume Pumped: 14000 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.1 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1055720
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Test Notes:

Weather Conditions:

Sunny 87 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/2/2024 12:44 PM	00:00	6.19 pH	27.02 °C	208.22 µS/cm	3.10 mg/L		43.5 mV	33.67 ft	400.00 ml/min
10/2/2024 12:49 PM	05:00	6.11 pH	24.42 °C	218.58 µS/cm	0.47 mg/L	1.21 NTU	42.5 mV	33.77 ft	400.00 ml/min
10/2/2024 12:54 PM	10:00	6.13 pH	24.09 °C	217.76 µS/cm	0.34 mg/L	2.11 NTU	40.0 mV	33.77 ft	400.00 ml/min
10/2/2024 12:59 PM	15:00	6.13 pH	24.06 °C	218.18 µS/cm	0.26 mg/L	1.69 NTU	37.4 mV	33.77 ft	400.00 ml/min
10/2/2024 1:04 PM	20:00	6.13 pH	24.01 °C	217.68 µS/cm	0.19 mg/L	1.79 NTU	35.2 mV	33.77 ft	400.00 ml/min
10/2/2024 1:09 PM	25:00	6.14 pH	23.98 °C	217.43 µS/cm	0.16 mg/L	1.78 NTU	33.6 mV	33.77 ft	400.00 ml/min
10/2/2024 1:14 PM	30:00	6.13 pH	24.01 °C	218.11 µS/cm	0.14 mg/L	1.50 NTU	32.3 mV	33.77 ft	400.00 ml/min
10/2/2024 1:19 PM	35:00	6.14 pH	23.97 °C	218.13 µS/cm	0.13 mg/L	0.97 NTU	31.0 mV	33.77 ft	400.00 ml/min

Samples

Sample ID:	Description:
PZ-9	Sample time 1322
EB-03	Sample time 1345

Water Quality Instrument Calibration Form

Project/Site: Plant Daniel / Ash Pond Project #: _____ Field Personnel: Keith Krisman RDH Environmental

Water Quality Meter - Model/Serial #: Aqua Troll 400/ Serial # 1055720 Turbidimeter - Model/Serial #: Hach 2100Q/Serial # 18080C068795

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L)	Reading (mg/L)	Reading (%)	Pass or Fail
CAL ICV CCV		10/2/24	0717	23.2	8.546	8.95	99.83	P F
CAL ICV CCV		10/2/24	0718	23.1	8.562	8.98	99.87	P F
CAL ICV CCV		10/2/24	2050	25.5	8.19	8.16	99.86	P F

8.1 - 10 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
CAL ICV CCV	10/2/24/0702	9.76	P F
CAL ICV CCV	10/2/24/0703	9.72	P F
CAL ICV CCV	10/2/24/2045	9.81	P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
CAL ICV CCV		10/2/24	0711	1413	4601194	3-2025	1411	P F
CAL ICV CCV		10/2/24	0712	1413	4601194	3-2025	1413	P F
CAL ICV CCV		10/2/24	2041	1413	4601194	3-2025	1412	P F

11 - 40 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
CAL ICV CCV		10/2/24	0653	4.00	4600076	4-2026	4.03	P F
CAL ICV CCV		10/2/24	0654	7.00	4600526	7-2026	6.97	P F
CAL ICV CCV		10/2/24	0657	7.00	4600526	7-2026	7.00	P F
CAL ICV CCV		10/2/24	0659	4.00	4600076	4-2026	4.00	P F
CAL ICV CCV		10/2/24	2025	4.00	4600076	4-2026	3.99	P F
CAL ICV CCV		10/2/24	2028	7.00	4600526	7-2026	6.99	P F

41 - 100 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F

ORP	SOP WA	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
CAL ICV CCV		10/2/24	0701	228	24006903	12-2024	228	P F
CAL ICV CCV		10/2/24	0706	228	24006903	12-2024	228	P F
CAL ICV CCV		10/2/24	2033	228	24006903	12-2024	227	P F

>100 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F

Specific Conductance Probes Cleaned? (Yes) No Dissolved Oxygen membrane Changed? Yes No

1. See Table FS 2200-2 on the back of this form
 CAL - Initial Calibration
 ICV - Initial Calibration Verification
 CCV - Continuing Calibration Verification

Comments: _____

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration
 Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)
 Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)
 If parameter fails to calibrate within SOP acceptance criteria then append sample results with a 'J' qualifier

Lot# 44046
 Exp. 5-2025



ANALYTICAL REPORT

PREPARED FOR

Attn: Robert (Trey) Singleton
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Generated 10/30/2024 7:51:04 PM Revision 1

JOB DESCRIPTION

Plant Daniel Ash Pond B

JOB NUMBER

180-180875-1

Eurofins Pittsburgh

Job Notes

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PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization



Authorized for release by
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Revision 1



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Case Narrative

Client: Southern Company
Project: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Job ID: 180-180875-1

Eurofins Pittsburgh

Job Narrative 180-180875-1

103024 Revised report to include field pH at client request. This report replaces the report previously issued on 101724

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/4/2024 9:00 AM and 10/5/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.3°C, 1.6°C, 1.7°C and 2.2°C.

Receipt Exceptions

Lab received three out of the four coolers shipped. The following two samples BAW-4 and PZ-8. .BAW-4 (180-180875-10) and PZ-8 (180-180875-11) Samples received 10/5/24 at 0945. Analysis added and receipt date/time updated.

The Chain of Custody was received without any analyses selected.

HPLC/IC

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

Metals

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

General Chemistry

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

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
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
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

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Laboratory: Eurofins 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	06-28-25
California	State	2891	04-30-24 *
Connecticut	State	PH-0688	09-30-24 *
Florida	NELAP	E871008	06-30-25
Georgia	State	PA 02-00416	04-30-25
Illinois	NELAP	004375	07-31-25
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-25
Kentucky (WW)	State	KY98043	12-31-24
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-25
New Jersey	NELAP	PA005	06-30-25
New York	NELAP	11182	04-01-25
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-25
Pennsylvania	NELAP	02-00416	04-30-25
Rhode Island	State	LAO00362	01-01-25
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-25
US Fish & Wildlife	US Federal Programs	058448	04-30-25
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	05-31-25
Virginia	NELAP	10043	07-14-24 *
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-25

Laboratory: Eurofins Savannah

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

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-25
ANAB	Dept. of Defense ELAP	L2463	09-22-26
Arkansas (DW)	State	GA00006	06-30-25
Arkansas DEQ	State	88-00692	02-01-25
Florida	NELAP	E87052	06-30-25
Georgia	State	E87052	06-30-25
Georgia (DW)	State	803	06-30-25
Guam	State	24-05R	04-17-25
Hawaii	State	<cert No.>	06-30-25
Illinois	NELAP	200022	11-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	108138	06-30-24 *
Louisiana (All)	NELAP	30690	06-30-25
Louisiana (DW)	State	LA009	12-31-24
Maryland	State	250	12-31-24

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Laboratory: Eurofins Savannah (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
Michigan	State	9925	03-05-25
Mississippi	State	<cert No.>	06-30-25
Nebraska	State	NE-OS-7-04	06-30-25
New Mexico	State	GA00006	06-30-25
North Carolina (DW)	State	13701	07-31-25
North Carolina (WW/SW)	State	269	12-31-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24 *
Tennessee	State	TN02961	06-30-25
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24 *
USDA	US Federal Programs	P330-18-00313	04-04-27
Virginia	NELAP	460161	06-14-25
Wyoming	State	8TMS-L	06-30-25

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

Eurofins Pittsburgh

Sample Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-180875-1	FB-03	Water	10/02/24 11:30	10/04/24 09:00
180-180875-2	BAW-1	Water	10/02/24 12:50	10/04/24 09:00
180-180875-3	BAW-7	Water	10/02/24 17:20	10/04/24 09:00
180-180875-4	BAW-2A	Water	10/02/24 11:15	10/04/24 09:00
180-180875-5	BAW-3	Water	10/02/24 08:59	10/04/24 09:00
180-180875-6	DUP-05	Water	10/02/24 07:59	10/04/24 09:00
180-180875-7	EB-03	Water	10/02/24 13:45	10/04/24 09:00
180-180875-8	BAW-5	Water	10/02/24 15:30	10/04/24 09:00
180-180875-9	PZ-9	Water	10/02/24 13:22	10/04/24 09:00
180-180875-10	BAW-4	Water	10/02/24 09:18	10/05/24 09:45
180-180875-11	PZ-8	Water	10/02/24 11:50	10/05/24 09:45

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

Method Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	EET SAV
7470A	Mercury (CVAA)	SW846	EET SAV
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
Field Sampling	Field Sampling	EPA	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

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:

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

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Lab Chronicle

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: FB-03

Lab Sample ID: 180-180875-1

Date Collected: 10/02/24 11:30

Matrix: Water

Date Received: 10/04/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 21:18	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 19:02	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A		1			859296	10/11/24 17:16	BCB	EET SAV
Instrument ID: QuickTrace3										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-1

Lab Sample ID: 180-180875-2

Date Collected: 10/02/24 12:50

Matrix: Water

Date Received: 10/04/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 21:36	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 19:07	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A		1			859296	10/11/24 17:44	BCB	EET SAV
Instrument ID: QuickTrace3										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			483190	10/02/24 13:50	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-7

Lab Sample ID: 180-180875-3

Date Collected: 10/02/24 17:20

Matrix: Water

Date Received: 10/04/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/09/24 00:04	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 19:11	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A		1			859296	10/11/24 17:35	BCB	EET SAV
Instrument ID: QuickTrace3										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Instrument ID: NOEQUIP										

Eurofins Pittsburgh

Lab Chronicle

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: BAW-7
Date Collected: 10/02/24 17:20
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-3
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	Field Sampling		1			483190	10/02/24 18:20	FDS	EET PIT

Client Sample ID: BAW-2A
Date Collected: 10/02/24 11:15
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-4
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 9056A Instrument ID: INTEGRION		1	1 mL	1 mL	481230	10/09/24 00:22	M1D	EET PIT
Total Recoverable	Prep	3005A			25 mL	125 mL	858767	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			859079	10/10/24 21:45	BWR	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	858764	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			859028	10/10/24 23:35	BWR	EET SAV
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A Instrument ID: QuickTrace3		1			859296	10/11/24 17:39	BCB	EET SAV
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			483190	10/02/24 12:15	FDS	EET PIT

Client Sample ID: BAW-3
Date Collected: 10/02/24 08:59
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-5
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 9056A Instrument ID: INTEGRION		1	1 mL	1 mL	481230	10/09/24 03:27	M1D	EET PIT
Total Recoverable	Prep	3005A			25 mL	125 mL	858767	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			859079	10/10/24 22:46	BWR	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	858764	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			859028	10/10/24 23:19	BWR	EET SAV
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A Instrument ID: QuickTrace3		1			859296	10/11/24 16:35	BCB	EET SAV
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			483190	10/02/24 09:59	FDS	EET PIT

Lab Chronicle

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: DUP-05
Date Collected: 10/02/24 07:59
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-6
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 9056A		1	1 mL	1 mL	481230	10/08/24 23:09	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	125 mL	858767	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 22:14	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	858764	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 23:23	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A		1			859296	10/11/24 17:26	BCB	EET SAV
Instrument ID: QuickTrace3										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: EB-03
Date Collected: 10/02/24 13:45
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-7
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 9056A		1	1 mL	1 mL	481230	10/09/24 03:46	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	125 mL	858767	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 21:58	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	858764	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 23:11	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A		1			859296	10/11/24 17:37	BCB	EET SAV
Instrument ID: QuickTrace3										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-5
Date Collected: 10/02/24 15:30
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-8
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 9056A		1	1 mL	1 mL	481230	10/09/24 04:04	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	125 mL	858767	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 21:54	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	858764	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 23:27	BWR	EET SAV
Instrument ID: ICPMSC										

Eurofins Pittsburgh

Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: BAW-5
Date Collected: 10/02/24 15:30
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-8
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	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A		1			859296	10/11/24 17:33	BCB	EET SAV
Instrument ID: QuickTrace3										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			483190	10/02/24 16:30	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: PZ-9
Date Collected: 10/02/24 13:22
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-9
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 9056A		1	1 mL	1 mL	481230	10/09/24 06:32	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	125 mL	858767	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 22:10	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	858764	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 23:15	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A		1			859296	10/11/24 17:31	BCB	EET SAV
Instrument ID: QuickTrace3										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			483190	10/02/24 14:22	FDS	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: BAW-4
Date Collected: 10/02/24 09:18
Date Received: 10/05/24 09:45

Lab Sample ID: 180-180875-10
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 9056A		1	1 mL	1 mL	481230	10/09/24 06:51	M1D	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 18:30	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	859498	10/15/24 11:03	MG	EET SAV
Total/NA	Analysis	7470A		1			859714	10/16/24 09:46	BJB	EET SAV
Instrument ID: QuickTrace3										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: BAW-4

Date Collected: 10/02/24 09:18

Date Received: 10/05/24 09:45

Lab Sample ID: 180-180875-10

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	Field Sampling		1			483190	10/02/24 10:18	FDS	EET PIT

Client Sample ID: PZ-8

Date Collected: 10/02/24 11:50

Date Received: 10/05/24 09:45

Lab Sample ID: 180-180875-11

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 9056A Instrument ID: INTEGRION		1	1 mL	1 mL	481230	10/09/24 07:09	M1D	EET PIT
Total Recoverable	Prep	3005A			25 mL	125 mL	858767	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			859079	10/10/24 22:18	BWR	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	858764	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			859028	10/10/24 23:31	BWR	EET SAV
Total/NA	Prep	7470A			50 mL	50 mL	859033	10/11/24 10:19	MG	EET SAV
Total/NA	Analysis	7470A Instrument ID: QuickTrace3		1			859296	10/11/24 17:29	BCB	EET SAV
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	481171	10/07/24 11:36	EBA	EET PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			483190	10/02/24 12:50	FDS	EET PIT

Laboratory References:

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

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Analyst References:

Lab: EET PIT

Batch Type: Analysis

EBA = Elizabeth Arbster

FDS = Sampler Field

M1D = Maureen Donlin

Lab: EET SAV

Batch Type: Prep

MG = Michael Griffin

RR = Robert Rancourt

Batch Type: Analysis

BCB = Brian Bland

BJB = Brian Boyuk

BWR = Bryn Robertson

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: FB-03

Lab Sample ID: 180-180875-1

Date Collected: 10/02/24 11:30

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			10/08/24 21:18	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/08/24 21:18	1
Sulfate	<0.756		1.00	0.756	mg/L			10/08/24 21:18	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 19:02	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 19:02	1
Barium	<0.000890		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 19:02	1
Beryllium	0.000760	J	0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 19:02	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 19:02	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 19:02	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 19:02	1
Chromium	0.00167	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 19:02	1
Cobalt	<0.000220		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 19:02	1
Lead	0.000340	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 19:02	1
Lithium	<0.00200		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 19:02	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 19:02	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 19:02	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 19:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<10.0		10.0	10.0	mg/L			10/07/24 11:36	1

Client Sample ID: BAW-1

Lab Sample ID: 180-180875-2

Date Collected: 10/02/24 12:50

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.38		1.00	0.713	mg/L			10/08/24 21:36	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/08/24 21:36	1
Sulfate	1.79		1.00	0.756	mg/L			10/08/24 21:36	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 19:07	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 19:07	1
Barium	0.0399		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 19:07	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 19:07	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 19:07	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 19:07	1
Calcium	1.24		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 19:07	1
Chromium	0.00229		0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 19:07	1
Cobalt	0.00155		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 19:07	1
Lead	0.000350	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 19:07	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: BAW-1
Date Collected: 10/02/24 12:50
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-2
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.00200		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 19:07	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 19:07	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 19:07	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 19:07	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	28.0		10.0	10.0	mg/L			10/07/24 11:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.94				SU			10/02/24 13:50	1

Client Sample ID: BAW-7
Date Collected: 10/02/24 17:20
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-3
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.43		1.00	0.713	mg/L			10/09/24 00:04	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/09/24 00:04	1
Sulfate	1.61		1.00	0.756	mg/L			10/09/24 00:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 19:11	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 19:11	1
Barium	0.0264		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 19:11	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 19:11	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 19:11	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 19:11	1
Calcium	1.08		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 19:11	1
Chromium	0.00171	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 19:11	1
Cobalt	0.00256		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 19:11	1
Lead	0.000345	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 19:11	1
Lithium	<0.00200		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 19:11	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 19:11	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 19:11	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 19:11	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	33.0		10.0	10.0	mg/L			10/07/24 11:36	1

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Client Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: BAW-7

Date Collected: 10/02/24 17:20

Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-3

Matrix: Water

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.87				SU			10/02/24 18:20	1

Client Sample ID: BAW-2A

Date Collected: 10/02/24 11:15

Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-4

Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.7		1.00	0.713	mg/L			10/09/24 00:22	1
Fluoride	0.0284	J	0.100	0.0260	mg/L			10/09/24 00:22	1
Sulfate	6.73		1.00	0.756	mg/L			10/09/24 00:22	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 21:45	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 21:45	1
Barium	0.0322		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 23:35	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 21:45	1
Boron	0.0647	J	0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 21:45	1
Cadmium	0.0000850	J	0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 21:45	1
Calcium	0.681		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 21:45	1
Chromium	0.00173	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 21:45	1
Cobalt	0.000845		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 21:45	1
Lead	0.000320	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 21:45	1
Lithium	0.00485	J	0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 21:45	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 21:45	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 21:45	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 21:45	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	49.0		10.0	10.0	mg/L			10/07/24 11:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.95				SU			10/02/24 12:15	1

Client Sample ID: BAW-3

Date Collected: 10/02/24 08:59

Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-5

Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.35		1.00	0.713	mg/L			10/09/24 03:27	1
Fluoride	0.0260	J	0.100	0.0260	mg/L			10/09/24 03:27	1
Sulfate	7.63		1.00	0.756	mg/L			10/09/24 03:27	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: BAW-3

Lab Sample ID: 180-180875-5

Date Collected: 10/02/24 08:59

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 22:46	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 22:46	1
Barium	0.0407		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 23:19	1
Beryllium	0.000235	J	0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 22:46	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 22:46	1
Cadmium	0.000605	J	0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 22:46	1
Calcium	0.781		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 22:46	1
Chromium	0.00133	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 22:46	1
Cobalt	0.0105		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 22:46	1
Lead	0.000425	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 22:46	1
Lithium	0.00575		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 22:46	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 22:46	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 22:46	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 22:46	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 16:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	30.0		10.0	10.0	mg/L			10/07/24 11:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.52				SU			10/02/24 09:59	1

Client Sample ID: DUP-05

Lab Sample ID: 180-180875-6

Date Collected: 10/02/24 07:59

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.29		1.00	0.713	mg/L			10/08/24 23:09	1
Fluoride	0.0282	J	0.100	0.0260	mg/L			10/08/24 23:09	1
Sulfate	7.44		1.00	0.756	mg/L			10/08/24 23:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 22:14	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 22:14	1
Barium	0.0431		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 23:23	1
Beryllium	0.000230	J	0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 22:14	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 22:14	1
Cadmium	0.000505	J	0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 22:14	1
Calcium	0.800		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 22:14	1
Chromium	0.00145	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 22:14	1
Cobalt	0.0107		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 22:14	1
Lead	0.000390	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 22:14	1
Lithium	0.00441	J	0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 22:14	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 22:14	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: DUP-05

Lab Sample ID: 180-180875-6

Date Collected: 10/02/24 07:59

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 22:14	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 22:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	42.0		10.0	10.0	mg/L			10/07/24 11:36	1

Client Sample ID: EB-03

Lab Sample ID: 180-180875-7

Date Collected: 10/02/24 13:45

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			10/09/24 03:46	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/09/24 03:46	1
Sulfate	<0.756		1.00	0.756	mg/L			10/09/24 03:46	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 21:58	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 21:58	1
Barium	<0.000890		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 23:11	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 21:58	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 21:58	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 21:58	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 21:58	1
Chromium	0.00163	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 21:58	1
Cobalt	<0.000220		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 21:58	1
Lead	0.000315	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 21:58	1
Lithium	<0.00200		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 21:58	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 21:58	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 21:58	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 21:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<10.0		10.0	10.0	mg/L			10/07/24 11:36	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: BAW-5

Lab Sample ID: 180-180875-8

Date Collected: 10/02/24 15:30

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.7		1.00	0.713	mg/L			10/09/24 04:04	1
Fluoride	0.0865	J	0.100	0.0260	mg/L			10/09/24 04:04	1
Sulfate	40.1		1.00	0.756	mg/L			10/09/24 04:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 21:54	1
Arsenic	0.00414		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 21:54	1
Barium	0.110		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 23:27	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 21:54	1
Boron	0.751		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 21:54	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 21:54	1
Calcium	30.5		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 21:54	1
Chromium	0.00175	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 21:54	1
Cobalt	0.00176		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 21:54	1
Lead	0.000320	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 21:54	1
Lithium	0.0774		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 21:54	1
Molybdenum	0.00335	J	0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 21:54	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 21:54	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 21:54	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	195		10.0	10.0	mg/L			10/07/24 11:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.14				SU			10/02/24 16:30	1

Client Sample ID: PZ-9

Lab Sample ID: 180-180875-9

Date Collected: 10/02/24 13:22

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.97		1.00	0.713	mg/L			10/09/24 06:32	1
Fluoride	0.0861	J	0.100	0.0260	mg/L			10/09/24 06:32	1
Sulfate	24.6		1.00	0.756	mg/L			10/09/24 06:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 22:10	1
Arsenic	0.0173		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 22:10	1
Barium	0.0563		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 23:15	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 22:10	1
Boron	0.477		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 22:10	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 22:10	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: PZ-9

Lab Sample ID: 180-180875-9

Date Collected: 10/02/24 13:22

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	12.1		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 22:10	1
Chromium	0.00154	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 22:10	1
Cobalt	0.00307		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 22:10	1
Lead	0.000350	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 22:10	1
Lithium	0.0320		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 22:10	1
Molybdenum	0.0115		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 22:10	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 22:10	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 22:10	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	137		10.0	10.0	mg/L			10/07/24 11:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.14				SU			10/02/24 14:22	1

Client Sample ID: BAW-4

Lab Sample ID: 180-180875-10

Date Collected: 10/02/24 09:18

Matrix: Water

Date Received: 10/05/24 09:45

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.42		1.00	0.713	mg/L			10/09/24 06:51	1
Fluoride	0.0400	J	0.100	0.0260	mg/L			10/09/24 06:51	1
Sulfate	5.89		1.00	0.756	mg/L			10/09/24 06:51	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 18:30	1
Arsenic	0.00105		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 18:30	1
Barium	0.0174		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 18:30	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 18:30	1
Boron	0.0389	J	0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 18:30	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 18:30	1
Calcium	5.03		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 18:30	1
Chromium	0.00204		0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 18:30	1
Cobalt	0.00163		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 18:30	1
Lead	0.000300	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 18:30	1
Lithium	0.0119		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 18:30	1
Molybdenum	0.00108	J	0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 18:30	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 18:30	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 18:30	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/15/24 11:03	10/16/24 09:46	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Client Sample ID: BAW-4

Lab Sample ID: 180-180875-10

Date Collected: 10/02/24 09:18

Matrix: Water

Date Received: 10/05/24 09:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	40.0		10.0	10.0	mg/L			10/07/24 11:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.51				SU			10/02/24 10:18	1

Client Sample ID: PZ-8

Lab Sample ID: 180-180875-11

Date Collected: 10/02/24 11:50

Matrix: Water

Date Received: 10/05/24 09:45

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.83		1.00	0.713	mg/L			10/09/24 07:09	1
Fluoride	0.0642	J	0.100	0.0260	mg/L			10/09/24 07:09	1
Sulfate	19.0		1.00	0.756	mg/L			10/09/24 07:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 22:18	1
Arsenic	0.00353		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 22:18	1
Barium	0.0511		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 23:31	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 22:18	1
Boron	0.421		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 22:18	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 22:18	1
Calcium	13.7		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 22:18	1
Chromium	0.00160	J	0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 22:18	1
Cobalt	0.00256		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 22:18	1
Lead	0.000355	J B	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 22:18	1
Lithium	0.0589		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 22:18	1
Molybdenum	0.00213	J	0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 22:18	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 22:18	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 22:18	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	108		10.0	10.0	mg/L			10/07/24 11:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.02				SU			10/02/24 12:50	1

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-481230/42
Matrix: Water
Analysis Batch: 481230

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			10/08/24 22:32	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/08/24 22:32	1
Sulfate	<0.756		1.00	0.756	mg/L			10/08/24 22:32	1

Lab Sample ID: MB 180-481230/6
Matrix: Water
Analysis Batch: 481230

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			10/08/24 10:46	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/08/24 10:46	1
Sulfate	<0.756		1.00	0.756	mg/L			10/08/24 10:46	1

Lab Sample ID: LCS 180-481230/43
Matrix: Water
Analysis Batch: 481230

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	47.27		mg/L		95	80 - 120
Fluoride	2.50	2.407		mg/L		96	80 - 120
Sulfate	50.0	47.33		mg/L		95	80 - 120

Lab Sample ID: LCS 180-481230/7
Matrix: Water
Analysis Batch: 481230

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	46.72		mg/L		93	80 - 120
Fluoride	2.50	2.388		mg/L		96	80 - 120
Sulfate	50.0	46.72		mg/L		93	80 - 120

Lab Sample ID: 180-180875-6 MS
Matrix: Water
Analysis Batch: 481230

Client Sample ID: DUP-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.29		50.0	53.42		mg/L		96	80 - 120
Fluoride	0.0282	J	2.50	2.490		mg/L		98	80 - 120
Sulfate	7.44		50.0	56.21		mg/L		98	80 - 120

Lab Sample ID: 180-180875-6 MSD
Matrix: Water
Analysis Batch: 481230

Client Sample ID: DUP-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.29		50.0	53.45		mg/L		96	80 - 120	0	15
Fluoride	0.0282	J	2.50	2.485		mg/L		98	80 - 120	0	15
Sulfate	7.44		50.0	55.80		mg/L		97	80 - 120	1	15

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-858764/1-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 858764

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 22:59	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 22:59	1
Barium	<0.000890		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 22:59	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 22:59	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 22:59	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 22:59	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 22:59	1
Chromium	<0.00120		0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 22:59	1
Cobalt	<0.000220		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 22:59	1
Lead	0.0003500	J	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 22:59	1
Lithium	0.002125	J	0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 22:59	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 22:59	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 22:59	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 22:59	1

Lab Sample ID: LCS 680-858764/2-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 858764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec		
							Limits	RPD	Limit
Antimony	0.0500	0.05436		mg/L		109	80 - 120		
Arsenic	0.100	0.1067		mg/L		107	80 - 120		
Barium	0.100	0.1073		mg/L		107	80 - 120		
Beryllium	0.0500	0.05413		mg/L		108	80 - 120		
Boron	0.400	0.4173		mg/L		104	80 - 120		
Cadmium	0.0500	0.05399		mg/L		108	80 - 120		
Calcium	5.00	4.998		mg/L		100	80 - 120		
Chromium	0.100	0.1137		mg/L		114	80 - 120		
Cobalt	0.0500	0.05659		mg/L		113	80 - 120		
Lead	0.500	0.5352		mg/L		107	80 - 120		
Lithium	0.500	0.5164		mg/L		103	80 - 120		
Molybdenum	0.100	0.1116		mg/L		112	80 - 120		
Selenium	0.100	0.1053		mg/L		105	80 - 120		
Thallium	0.0500	0.05313		mg/L		106	80 - 120		

Lab Sample ID: LCSD 680-858764/3-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 858764

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec	RPD	Limit
							Limits	RPD	Limit
Antimony	0.0500	0.05386		mg/L		108	80 - 120	1	20
Arsenic	0.100	0.1058		mg/L		106	80 - 120	1	20
Barium	0.100	0.1064		mg/L		106	80 - 120	1	20
Beryllium	0.0500	0.05378		mg/L		108	80 - 120	1	20
Boron	0.400	0.4138		mg/L		103	80 - 120	1	20
Cadmium	0.0500	0.05476		mg/L		110	80 - 120	1	20
Calcium	5.00	5.245		mg/L		105	80 - 120	5	20
Chromium	0.100	0.1147		mg/L		115	80 - 120	1	20
Cobalt	0.0500	0.05661		mg/L		113	80 - 120	0	20

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

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

Lab Sample ID: LCSD 680-858764/3-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 858764

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.500	0.5321		mg/L		106	80 - 120	1	20
Lithium	0.500	0.5070		mg/L		101	80 - 120	2	20
Molybdenum	0.100	0.1102		mg/L		110	80 - 120	1	20
Selenium	0.100	0.1066		mg/L		107	80 - 120	1	20
Thallium	0.0500	0.05310		mg/L		106	80 - 120	0	20

Lab Sample ID: MB 680-858765/1-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 858765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 17:25	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 17:25	1
Barium	<0.000890		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 17:25	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 17:25	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 17:25	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 17:25	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 17:25	1
Chromium	<0.00120		0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 17:25	1
Cobalt	<0.000220		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 17:25	1
Lead	0.0002100	J	0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 17:25	1
Lithium	<0.00200		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 17:25	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 17:25	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 17:25	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 17:25	1

Lab Sample ID: LCS 680-858765/2-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 858765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.0500	0.05439		mg/L		109	80 - 120
Arsenic	0.100	0.1068		mg/L		107	80 - 120
Barium	0.100	0.1061		mg/L		106	80 - 120
Beryllium	0.0500	0.05317		mg/L		106	80 - 120
Boron	0.400	0.3907		mg/L		98	80 - 120
Cadmium	0.0500	0.05477		mg/L		110	80 - 120
Calcium	5.00	5.422		mg/L		108	80 - 120
Chromium	0.100	0.1178		mg/L		118	80 - 120
Cobalt	0.0500	0.05817		mg/L		116	80 - 120
Lead	0.500	0.5395		mg/L		108	80 - 120
Lithium	0.500	0.5257		mg/L		105	80 - 120
Molybdenum	0.100	0.1127		mg/L		113	80 - 120
Selenium	0.100	0.1055		mg/L		105	80 - 120
Thallium	0.0500	0.05279		mg/L		106	80 - 120

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

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

Lab Sample ID: LCSD 680-858765/3-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 858765

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.0500	0.05489		mg/L		110	80 - 120	1	20
Arsenic	0.100	0.1078		mg/L		108	80 - 120	1	20
Barium	0.100	0.1068		mg/L		107	80 - 120	1	20
Beryllium	0.0500	0.05087		mg/L		102	80 - 120	4	20
Boron	0.400	0.3790		mg/L		95	80 - 120	3	20
Cadmium	0.0500	0.05586		mg/L		112	80 - 120	2	20
Calcium	5.00	5.335		mg/L		107	80 - 120	2	20
Chromium	0.100	0.1176		mg/L		118	80 - 120	0	20
Cobalt	0.0500	0.05850		mg/L		117	80 - 120	1	20
Lead	0.500	0.5408		mg/L		108	80 - 120	0	20
Lithium	0.500	0.4836		mg/L		97	80 - 120	8	20
Molybdenum	0.100	0.1138		mg/L		114	80 - 120	1	20
Selenium	0.100	0.1045		mg/L		105	80 - 120	1	20
Thallium	0.0500	0.05318		mg/L		106	80 - 120	1	20

Lab Sample ID: MB 680-858767/1-A
Matrix: Water
Analysis Batch: 859079

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 858767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000340		0.00200	0.000340	mg/L		10/10/24 07:42	10/10/24 20:57	1
Arsenic	<0.000860		0.00100	0.000860	mg/L		10/10/24 07:42	10/10/24 20:57	1
Barium	<0.000890		0.0100	0.000890	mg/L		10/10/24 07:42	10/10/24 20:57	1
Beryllium	<0.000200		0.00100	0.000200	mg/L		10/10/24 07:42	10/10/24 20:57	1
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 20:57	1
Cadmium	<0.0000780		0.00100	0.0000780	mg/L		10/10/24 07:42	10/10/24 20:57	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 20:57	1
Chromium	<0.00120		0.00200	0.00120	mg/L		10/10/24 07:42	10/10/24 20:57	1
Cobalt	<0.000220		0.000500	0.000220	mg/L		10/10/24 07:42	10/10/24 20:57	1
Lead	0.0002800 J		0.00100	0.000210	mg/L		10/10/24 07:42	10/10/24 20:57	1
Lithium	<0.00200		0.00500	0.00200	mg/L		10/10/24 07:42	10/10/24 20:57	1
Molybdenum	<0.000860		0.00500	0.000860	mg/L		10/10/24 07:42	10/10/24 20:57	1
Selenium	<0.000990		0.00500	0.000990	mg/L		10/10/24 07:42	10/10/24 20:57	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/10/24 07:42	10/10/24 20:57	1

Lab Sample ID: LCS 680-858767/2-A
Matrix: Water
Analysis Batch: 859079

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 858767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.0500	0.05192		mg/L		104	80 - 120
Arsenic	0.100	0.1012		mg/L		101	80 - 120
Barium	0.100	0.1044		mg/L		104	80 - 120
Beryllium	0.0500	0.05056		mg/L		101	80 - 120
Boron	0.400	0.3959		mg/L		99	80 - 120
Cadmium	0.0500	0.05317		mg/L		106	80 - 120
Calcium	5.00	4.994		mg/L		100	80 - 120
Chromium	0.100	0.1090		mg/L		109	80 - 120
Cobalt	0.0500	0.05315		mg/L		106	80 - 120

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QC Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

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

Lab Sample ID: LCS 680-858767/2-A
 Matrix: Water
 Analysis Batch: 859079

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 858767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.500	0.5212		mg/L		104	80 - 120
Lithium	0.500	0.4857		mg/L		97	80 - 120
Molybdenum	0.100	0.1054		mg/L		105	80 - 120
Selenium	0.100	0.09767		mg/L		98	80 - 120
Thallium	0.0500	0.05273		mg/L		105	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-859033/1-A
 Matrix: Water
 Analysis Batch: 859296

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 859033

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/11/24 10:19	10/11/24 17:11	1

Lab Sample ID: LCS 680-859033/2-A
 Matrix: Water
 Analysis Batch: 859296

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 859033

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.002503		mg/L		100	80 - 120

Lab Sample ID: 180-180875-1 MS
 Matrix: Water
 Analysis Batch: 859296

Client Sample ID: FB-03
 Prep Type: Total/NA
 Prep Batch: 859033

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.0000800		0.00100	0.0009617		mg/L		96	80 - 120

Lab Sample ID: 180-180875-1 MSD
 Matrix: Water
 Analysis Batch: 859296

Client Sample ID: FB-03
 Prep Type: Total/NA
 Prep Batch: 859033

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.0000800		0.00100	0.0009831		mg/L		98	80 - 120	2	20

Lab Sample ID: MB 680-859498/1-A
 Matrix: Water
 Analysis Batch: 859714

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 859498

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0000800		0.000200	0.0000800	mg/L		10/15/24 11:03	10/16/24 09:13	1

Lab Sample ID: LCS 680-859498/2-A
 Matrix: Water
 Analysis Batch: 859714

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 859498

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.002372		mg/L		95	80 - 120

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QC Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

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

Lab Sample ID: MB 180-481171/1
Matrix: Water
Analysis Batch: 481171

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	<10.0		10.0	10.0	mg/L			10/07/24 11:36	1

Lab Sample ID: LCS 180-481171/2
Matrix: Water
Analysis Batch: 481171

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	721	702.0		mg/L		97	85 - 115

Lab Sample ID: 180-180875-1 DU
Matrix: Water
Analysis Batch: 481171

Client Sample ID: FB-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	<10.0		<10.0		mg/L		NC	10

Lab Sample ID: 180-180875-7 DU
Matrix: Water
Analysis Batch: 481171

Client Sample ID: EB-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	<10.0		<10.0		mg/L		NC	10

QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

HPLC/IC

Analysis Batch: 481230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-1	FB-03	Total/NA	Water	EPA 9056A	
180-180875-2	BAW-1	Total/NA	Water	EPA 9056A	
180-180875-3	BAW-7	Total/NA	Water	EPA 9056A	
180-180875-4	BAW-2A	Total/NA	Water	EPA 9056A	
180-180875-5	BAW-3	Total/NA	Water	EPA 9056A	
180-180875-6	DUP-05	Total/NA	Water	EPA 9056A	
180-180875-7	EB-03	Total/NA	Water	EPA 9056A	
180-180875-8	BAW-5	Total/NA	Water	EPA 9056A	
180-180875-9	PZ-9	Total/NA	Water	EPA 9056A	
180-180875-10	BAW-4	Total/NA	Water	EPA 9056A	
180-180875-11	PZ-8	Total/NA	Water	EPA 9056A	
MB 180-481230/42	Method Blank	Total/NA	Water	EPA 9056A	
MB 180-481230/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-481230/43	Lab Control Sample	Total/NA	Water	EPA 9056A	
LCS 180-481230/7	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-180875-6 MS	DUP-05	Total/NA	Water	EPA 9056A	
180-180875-6 MSD	DUP-05	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 858764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-4	BAW-2A	Total Recoverable	Water	3005A	
180-180875-5	BAW-3	Total Recoverable	Water	3005A	
180-180875-6	DUP-05	Total Recoverable	Water	3005A	
180-180875-7	EB-03	Total Recoverable	Water	3005A	
180-180875-8	BAW-5	Total Recoverable	Water	3005A	
180-180875-9	PZ-9	Total Recoverable	Water	3005A	
180-180875-11	PZ-8	Total Recoverable	Water	3005A	
MB 680-858764/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-858764/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 680-858764/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Prep Batch: 858765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-1	FB-03	Total Recoverable	Water	3005A	
180-180875-2	BAW-1	Total Recoverable	Water	3005A	
180-180875-3	BAW-7	Total Recoverable	Water	3005A	
180-180875-10	BAW-4	Total Recoverable	Water	3005A	
MB 680-858765/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-858765/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 680-858765/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Prep Batch: 858767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-4	BAW-2A	Total Recoverable	Water	3005A	
180-180875-5	BAW-3	Total Recoverable	Water	3005A	
180-180875-6	DUP-05	Total Recoverable	Water	3005A	
180-180875-7	EB-03	Total Recoverable	Water	3005A	
180-180875-8	BAW-5	Total Recoverable	Water	3005A	
180-180875-9	PZ-9	Total Recoverable	Water	3005A	

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QC Association Summary

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Metals (Continued)

Prep Batch: 858767 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-11	PZ-8	Total Recoverable	Water	3005A	
MB 680-858767/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-858767/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 859028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-1	FB-03	Total Recoverable	Water	6020B	858765
180-180875-2	BAW-1	Total Recoverable	Water	6020B	858765
180-180875-3	BAW-7	Total Recoverable	Water	6020B	858765
180-180875-4	BAW-2A	Total Recoverable	Water	6020B	858764
180-180875-5	BAW-3	Total Recoverable	Water	6020B	858764
180-180875-6	DUP-05	Total Recoverable	Water	6020B	858764
180-180875-7	EB-03	Total Recoverable	Water	6020B	858764
180-180875-8	BAW-5	Total Recoverable	Water	6020B	858764
180-180875-9	PZ-9	Total Recoverable	Water	6020B	858764
180-180875-10	BAW-4	Total Recoverable	Water	6020B	858765
180-180875-11	PZ-8	Total Recoverable	Water	6020B	858764
MB 680-858764/1-A	Method Blank	Total Recoverable	Water	6020B	858764
MB 680-858765/1-A	Method Blank	Total Recoverable	Water	6020B	858765
LCS 680-858764/2-A	Lab Control Sample	Total Recoverable	Water	6020B	858764
LCS 680-858765/2-A	Lab Control Sample	Total Recoverable	Water	6020B	858765
LCSD 680-858764/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	858764
LCSD 680-858765/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	858765

Prep Batch: 859033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-1	FB-03	Total/NA	Water	7470A	
180-180875-2	BAW-1	Total/NA	Water	7470A	
180-180875-3	BAW-7	Total/NA	Water	7470A	
180-180875-4	BAW-2A	Total/NA	Water	7470A	
180-180875-5	BAW-3	Total/NA	Water	7470A	
180-180875-6	DUP-05	Total/NA	Water	7470A	
180-180875-7	EB-03	Total/NA	Water	7470A	
180-180875-8	BAW-5	Total/NA	Water	7470A	
180-180875-9	PZ-9	Total/NA	Water	7470A	
180-180875-11	PZ-8	Total/NA	Water	7470A	
MB 680-859033/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-859033/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-180875-1 MS	FB-03	Total/NA	Water	7470A	
180-180875-1 MSD	FB-03	Total/NA	Water	7470A	

Analysis Batch: 859079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-4	BAW-2A	Total Recoverable	Water	6020B	858767
180-180875-5	BAW-3	Total Recoverable	Water	6020B	858767
180-180875-6	DUP-05	Total Recoverable	Water	6020B	858767
180-180875-7	EB-03	Total Recoverable	Water	6020B	858767
180-180875-8	BAW-5	Total Recoverable	Water	6020B	858767
180-180875-9	PZ-9	Total Recoverable	Water	6020B	858767
180-180875-11	PZ-8	Total Recoverable	Water	6020B	858767
MB 680-858767/1-A	Method Blank	Total Recoverable	Water	6020B	858767

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QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Metals (Continued)

Analysis Batch: 859079 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-858767/2-A	Lab Control Sample	Total Recoverable	Water	6020B	858767

Analysis Batch: 859296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-1	FB-03	Total/NA	Water	7470A	859033
180-180875-2	BAW-1	Total/NA	Water	7470A	859033
180-180875-3	BAW-7	Total/NA	Water	7470A	859033
180-180875-4	BAW-2A	Total/NA	Water	7470A	859033
180-180875-5	BAW-3	Total/NA	Water	7470A	859033
180-180875-6	DUP-05	Total/NA	Water	7470A	859033
180-180875-7	EB-03	Total/NA	Water	7470A	859033
180-180875-8	BAW-5	Total/NA	Water	7470A	859033
180-180875-9	PZ-9	Total/NA	Water	7470A	859033
180-180875-11	PZ-8	Total/NA	Water	7470A	859033
MB 680-859033/1-A	Method Blank	Total/NA	Water	7470A	859033
LCS 680-859033/2-A	Lab Control Sample	Total/NA	Water	7470A	859033
180-180875-1 MS	FB-03	Total/NA	Water	7470A	859033
180-180875-1 MSD	FB-03	Total/NA	Water	7470A	859033

Prep Batch: 859498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-10	BAW-4	Total/NA	Water	7470A	
MB 680-859498/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-859498/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 859714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-10	BAW-4	Total/NA	Water	7470A	859498
MB 680-859498/1-A	Method Blank	Total/NA	Water	7470A	859498
LCS 680-859498/2-A	Lab Control Sample	Total/NA	Water	7470A	859498

General Chemistry

Analysis Batch: 481171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-1	FB-03	Total/NA	Water	SM 2540C	
180-180875-2	BAW-1	Total/NA	Water	SM 2540C	
180-180875-3	BAW-7	Total/NA	Water	SM 2540C	
180-180875-4	BAW-2A	Total/NA	Water	SM 2540C	
180-180875-5	BAW-3	Total/NA	Water	SM 2540C	
180-180875-6	DUP-05	Total/NA	Water	SM 2540C	
180-180875-7	EB-03	Total/NA	Water	SM 2540C	
180-180875-8	BAW-5	Total/NA	Water	SM 2540C	
180-180875-9	PZ-9	Total/NA	Water	SM 2540C	
180-180875-10	BAW-4	Total/NA	Water	SM 2540C	
180-180875-11	PZ-8	Total/NA	Water	SM 2540C	
MB 180-481171/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-481171/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-180875-1 DU	FB-03	Total/NA	Water	SM 2540C	
180-180875-7 DU	EB-03	Total/NA	Water	SM 2540C	

Eurofins Pittsburgh

QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-1

Field Service / Mobile Lab

Analysis Batch: 483190

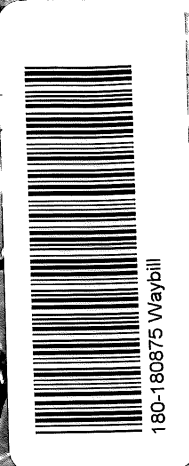
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-2	BAW-1	Total/NA	Water	Field Sampling	
180-180875-3	BAW-7	Total/NA	Water	Field Sampling	
180-180875-4	BAW-2A	Total/NA	Water	Field Sampling	
180-180875-5	BAW-3	Total/NA	Water	Field Sampling	
180-180875-8	BAW-5	Total/NA	Water	Field Sampling	
180-180875-9	PZ-9	Total/NA	Water	Field Sampling	
180-180875-10	BAW-4	Total/NA	Water	Field Sampling	
180-180875-11	PZ-8	Total/NA	Water	Field Sampling	

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Chain of Custody Record

Client Information		Sample: Todd Roberts / KRS/WH	Lab #11	Operator: Shall Brown	Carrier Tracking No(s)	COC No				
SOS Contacts		Phone	Brown, Shall	E-Mail		Page				
Company:			Shall Brown@eurolins.com			Job #				
Address: 3535 Colonnade Pkwy, Bldg S 530 EC		Due Date Requested:	Analysis Requested Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 6020B Custom 14 (App III and IV) 7470 Mercury 90656 Chloride Fluoride Sulfate Total Dissolved Solids Ra 226 Ra 228 and Combined Total Number of containers: _____							
City: Birmingham	State: ZS	TAT Requested (days):								
Alabama	PO #									
Phone: 205 992 6283	W/O #									
Email: SOS Contacts	Project #									
Project Name: Daniel Ash Pond B OCR	18020047									
Site: SSOV#										
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Empty Kit Relinquished by:		Date:					Time:		Method of Shipment:	
Relinquished by: Todd Roberts	Date/Time: 10/27/24	1400					Company: RWB Env	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:		Company:	Received by:	Date/Time:	Company:				
Relinquished by:	Date/Time:		Company:	Received by:	Date/Time:	Company:				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:								

**Look for
email
from Shali
for the COC**



Uncorrected mp 2.1 °C
Thermometer ID 25
CF 40.1 Initials PM
PT-WI-SR-001 effective 1/8/18

**Southern
only received
the
3 out of 4 coolers**



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ORIGIN.ID:PNSA (412) 963-2468

TESTAMERICA PITTSBURGH LAB
301 ALPHA DR

PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 03OCT24
ACTWGT: 73.00 LB
CAD: 6570466/ROSA2550
DIMS: 25x14x13 IN

BILL THIRD PARTY

Part # 152227 235 H008 09/25

TO EUROFINS TEST AMERICA
RDC PARK
301 ALPHA DR

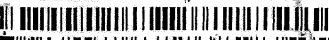
PITTSBURGH PA 15238

(412) 963-7068

REF:

INU:

DEPT:



Uncorrected temp

Thermometer ID 116

CF Oil Initials UA

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

FedEx
Express



REL#
3785346

3 of 4

MPS# 7789 9898 0528

Mstr# 7789 9898 0506

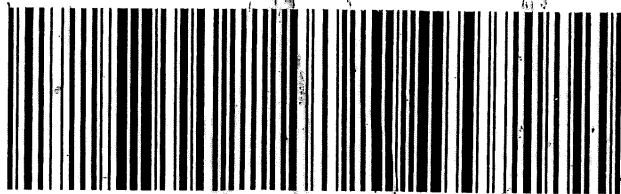
0201

FRI - 04 OCT 10:30A
PRIORITY OVERNIGHT

XS AGCA

152

PA-US



ORIGIN ID:PNSA (412) 963-2468

TESTAMERICA PITTSBURGH LAB
301 ALPHA DR

PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 03OCT24
ACTWGT: 74.05 LB
CAD: 6570466/ROSA2550
DIMS: 25x14x14 IN

BILL THIRD PARTY

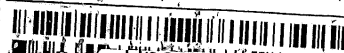
TO EUROFINS TEST AMERICA
RIDC PARK
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7068

REF:

DEPT:



Uncorrected temp
Thermometer ID 12 17

CF 0.1

Initials NR

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

FedEx
Express



REL#
3785346

4 of 4

MPS# 7789 9898 0539
0263

Mstr# 7789 9898 0506

0201

FRI - 04 OCT 10:30A
PRIORITY OVERNIGHT

XS AGCA

15238

PA-US PIT



Part # 150287 435 RB6 EXP 09/25

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1520 Airport Blvd Ste A
Pensacola, FL 32504
850.474.3796

October 3, 2024 1:56 PM
Receipt #: PWSKU0807206

FedEx Express \$285.26
FedEx Priority Overnight Estimated
778998980506
778998980517
778998980528
778998980539

Recipient Address
Eurofins Test America
RTOC Park
301 Alpha Dr
PITTSBURGH, PA 15238, US
412-963-7058
Scheduled Delivery Date: 10/04/2024
Pricing Option: Standard Rate
Package Information: Your Packaging
Additional Services:
No Signature Required
Total Weight: 289.15 lbs (S)
Total Declared Value: \$400
Total Pieces: 4

Pcs	Weight/pc (lbs.)	DV/pc (USD)	Dims. (in.)
1	73.25 (S)	\$100	25x14x14
1	68.85 (S)	\$100	25x14x13
1	73.00 (S)	\$100	25x14x13
1	74.05 (S)	\$100	25x14x14

Account Billed

Est. Express Subtotal \$285.26

Estimated Total \$285.26

Sender Account ending in *1804

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Eurofins Pittsburgh

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

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Brown, Shali		Carrier Tracking No(s):		COC No: 180-525433.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Shali.Brown@et.eurofinsus.com		State of Origin: Mississippi		Page: Page 1 of 2			
Company: Eurofins Environment Testing Southeast L				Accreditations Required (See note):				Job #: 180-180875-1			
Address: 5102 LaRoche Avenue,		Due Date Requested: 10/17/2024		Analysis Requested				Preservation Codes:			
City: Savannah		TAT Requested (days):									
State, Zip: GA, 31404		PO #:									
Phone: 912-354-7858(Tel) 912-352-0165(Fax)		WO #:									
Email:		Project #: 18020047									
Project Name: Plant Daniel Ash Pond B		SSOW#:		Other:							
Site:											
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, ST=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020BI3005A Custom 14 (Appill + App IV)	7470A/7470A_Prep Mercury (CVAA)	Total Number of containers	Special Instructions/Note:
				Preservation Code:		X	X				
FB-03 (180-180875-1)		10/2/24	11:30 Central	G	Water		X	X			2
BAW-1 (180-180875-2)		10/2/24	12:50 Central	G	Water		X	X			2
BAW-7 (180-180875-3)		10/2/24	17:20 Central	G	Water		X	X			2
BAW-2A (180-180875-4)		10/2/24	11:15 Central	G	Water		X	X			2
BAW-3 (180-180875-5)		10/2/24	08:59 Central	G	Water		X	X			2
DUP-05 (180-180875-6)		10/2/24	07:59 Central	G	Water		X	X			2
EB-03 (180-180875-7)		10/2/24	13:45 Central	G	Water		X	X			2
BAW-5 (180-180875-8)		10/2/24	15:30 Central	G	Water		X	X			2
PZ-9 (180-180875-9)		10/2/24	13:22 Central	G	Water		X	X			2
<p>Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our 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 Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.</p>											
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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: 10-8-24 1200		Company: EPA		Received by:		Date/Time: 10/09/24 0953		Company:
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: 12.5/12.5					



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-180875-1

Login Number: 180875

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Missing a cooler
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: 180-180875-1

Login Number: 180875

List Number: 3

Creator: Lincoln, Alyssa

List Source: Eurofins Savannah

List Creation: 10/09/24 02:20 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?	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.	N/A	
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	



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Robert (Trey) Singleton
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Generated 11/6/2024 6:49:49 PM

JOB DESCRIPTION

Plant Daniel Ash Pond B

JOB NUMBER

180-180875-2

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization



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11/6/2024 6:49:49 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031



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Case Narrative

Client: Southern Company
Project: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Job ID: 180-180875-2

Eurofins Pittsburgh

Job Narrative 180-180875-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/4/2024 9:00 AM and 10/5/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.3°C, 1.6°C, 1.7°C and 2.2°C.

Receipt Exceptions

The Chain of Custody was received without any analyses selected. A revised chain of custody was provide and is included in this report.

The lab received three out of the four coolers shipped. The following two samples BAW-4 and PZ-8 were not received therefore, no analysis was logged. BAW-4 (180-180875-10) and PZ-8 (180-180875-11) Missing cooler received 10/5/24 at 0945. Analysis added and receipt date/time updated.

Gas Flow Proportional Counter

Method 9320_Ra228: Radium-228 Prep Batch 160-683041:

The MDC for the following sample(s) is flagged as failing; The laboratory considers the detection goal (requested limit) met when rounding to the appropriate place value. BAW-2A (180-180875-4)

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

Rad

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Qualifiers

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

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Laboratory: Eurofins 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	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	12-31-24
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

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

Sample Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-180875-1	FB-03	Water	10/02/24 11:30	10/04/24 09:00
180-180875-2	BAW-1	Water	10/02/24 12:50	10/04/24 09:00
180-180875-3	BAW-7	Water	10/02/24 17:20	10/04/24 09:00
180-180875-4	BAW-2A	Water	10/02/24 11:15	10/04/24 09:00
180-180875-5	BAW-3	Water	10/02/24 08:59	10/04/24 09:00
180-180875-6	DUP-05	Water	10/02/24 07:59	10/04/24 09:00
180-180875-7	EB-03	Water	10/02/24 13:45	10/04/24 09:00
180-180875-8	BAW-5	Water	10/02/24 15:30	10/04/24 09:00
180-180875-9	PZ-9	Water	10/02/24 13:22	10/04/24 09:00
180-180875-10	BAW-4	Water	10/02/24 09:18	10/05/24 09:45
180-180875-11	PZ-8	Water	10/02/24 11:50	10/05/24 09:45

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Method Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

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

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

Lab Chronicle

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: FB-03

Lab Sample ID: 180-180875-1

Date Collected: 10/02/24 11:30

Matrix: Water

Date Received: 10/04/24 09:00

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			989.99 mL	1.0 g	683038	10/10/24 09:11	BCE	EET SL
Total/NA	Analysis	9315		1			686242	11/01/24 09:45	SWS	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			989.99 mL	1.0 g	683039	10/10/24 09:17	BCE	EET SL
Total/NA	Analysis	9320		1			685385	10/28/24 15:07	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/05/24 08:09	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-1

Lab Sample ID: 180-180875-2

Date Collected: 10/02/24 12:50

Matrix: Water

Date Received: 10/04/24 09:00

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			1020.31 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 17:53	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			1020.31 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685736	10/29/24 12:19	FLC	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/05/24 08:09	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-7

Lab Sample ID: 180-180875-3

Date Collected: 10/02/24 17:20

Matrix: Water

Date Received: 10/04/24 09:00

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			1008.07 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 17:53	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			1008.07 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:16	CMM	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/05/24 08:09	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-2A

Lab Sample ID: 180-180875-4

Date Collected: 10/02/24 11:15

Matrix: Water

Date Received: 10/04/24 09:00

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			999.43 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 22:01	CMM	EET SL
Instrument ID: GFPCPURPLE										

Eurofins Pittsburgh

Lab Chronicle

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: BAW-2A

Lab Sample ID: 180-180875-4

Date Collected: 10/02/24 11:15

Matrix: Water

Date Received: 10/04/24 09:00

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			999.43 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:16	CMM	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/05/24 08:09	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-3

Lab Sample ID: 180-180875-5

Date Collected: 10/02/24 08:59

Matrix: Water

Date Received: 10/04/24 09:00

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			986.83 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 22:01	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			986.83 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:16	CMM	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/05/24 08:09	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: DUP-05

Lab Sample ID: 180-180875-6

Date Collected: 10/02/24 07:59

Matrix: Water

Date Received: 10/04/24 09:00

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			1008.27 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 22:01	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			1008.27 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:16	CMM	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/05/24 08:09	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: EB-03

Lab Sample ID: 180-180875-7

Date Collected: 10/02/24 13:45

Matrix: Water

Date Received: 10/04/24 09:00

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			990.83 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 22:01	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			990.83 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:17	CMM	EET SL
Instrument ID: GFPCRED										

Lab Chronicle

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: EB-03
Date Collected: 10/02/24 13:45
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-7
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			686854	11/06/24 14:15	FLC	EET SL

Client Sample ID: BAW-5
Date Collected: 10/02/24 15:30
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-8
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			1016.28 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 22:01	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			1016.28 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:17	CMM	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/06/24 14:15	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: PZ-9
Date Collected: 10/02/24 13:22
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-9
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			987.05 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 22:01	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			987.05 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:18	CMM	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/06/24 14:15	FLC	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: BAW-4
Date Collected: 10/02/24 09:18
Date Received: 10/05/24 09:45

Lab Sample ID: 180-180875-10
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			994.03 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 22:02	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			994.03 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:18	CMM	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/06/24 14:15	FLC	EET SL
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: PZ-8

Lab Sample ID: 180-180875-11

Date Collected: 10/02/24 11:50

Matrix: Water

Date Received: 10/05/24 09:45

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			981.81 mL	1.0 g	683040	10/10/24 09:18	BCE	EET SL
Total/NA	Analysis	9315		1			686865	11/05/24 22:02	CMM	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			981.81 mL	1.0 g	683041	10/10/24 09:23	BCE	EET SL
Total/NA	Analysis	9320		1			685625	10/29/24 15:18	CMM	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			686854	11/06/24 14:15	FLC	EET SL
Instrument ID: NOEQUIP										

Laboratory References:

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

Analyst References:

Lab: EET SL

Batch Type: Prep

BCE = Benjamin Celeslie

Batch Type: Analysis

CMM = Chelsea Mazariegos

FLC = Fernando Cruz

SWS = Seth Stubblefield

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: FB-03

Lab Sample ID: 180-180875-1

Date Collected: 10/02/24 11:30

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0609	U	0.0947	0.0949	1.00	0.163	pCi/L	10/10/24 09:11	11/01/24 09:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.4		30 - 110					10/10/24 09:11	11/01/24 09:45	1

Method: SW846 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	0.433	0.433	1.00	0.784	pCi/L	10/10/24 09:17	10/28/24 15:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.4		30 - 110					10/10/24 09:17	10/28/24 15:07	1
Y Carrier	80.0		30 - 110					10/10/24 09:17	10/28/24 15:07	1

Method: TAL-STL 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	0.173	U	0.443	0.443	5.00	0.784	pCi/L		11/05/24 08:09	1

Client Sample ID: BAW-1

Lab Sample ID: 180-180875-2

Date Collected: 10/02/24 12:50

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.160		0.0980	0.0990	1.00	0.129	pCi/L	10/10/24 09:18	11/05/24 17:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.9		30 - 110					10/10/24 09:18	11/05/24 17:53	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.866		0.515	0.521	1.00	0.757	pCi/L	10/10/24 09:23	10/29/24 12:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.9		30 - 110					10/10/24 09:23	10/29/24 12:19	1
Y Carrier	82.2		30 - 110					10/10/24 09:23	10/29/24 12:19	1

Eurofins Pittsburgh

Client Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: BAW-1
 Date Collected: 10/02/24 12:50
 Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-2
 Matrix: Water

Method: TAL-STL 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	1.03		0.524	0.530	5.00	0.757	pCi/L		11/05/24 08:09	1

Client Sample ID: BAW-7
 Date Collected: 10/02/24 17:20
 Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-3
 Matrix: Water

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.241		0.119	0.120	1.00	0.151	pCi/L	10/10/24 09:18	11/05/24 17:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.0		30 - 110					10/10/24 09:18	11/05/24 17:53	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.572	U	0.490	0.493	1.00	0.760	pCi/L	10/10/24 09:23	10/29/24 15:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.0		30 - 110					10/10/24 09:23	10/29/24 15:16	1
Y Carrier	81.5		30 - 110					10/10/24 09:23	10/29/24 15:16	1

Method: TAL-STL 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	0.813		0.504	0.507	5.00	0.760	pCi/L		11/05/24 08:09	1

Client Sample ID: BAW-2A
 Date Collected: 10/02/24 11:15
 Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-4
 Matrix: Water

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.203		0.115	0.116	1.00	0.155	pCi/L	10/10/24 09:18	11/05/24 22:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.7		30 - 110					10/10/24 09:18	11/05/24 22:01	1

Client Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: BAW-2A

Lab Sample ID: 180-180875-4

Date Collected: 10/02/24 11:15

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.946	U G	0.669	0.675	1.00	1.02	pCi/L	10/10/24 09:23	10/29/24 15:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.7		30 - 110					10/10/24 09:23	10/29/24 15:16	1
Y Carrier	84.9		30 - 110					10/10/24 09:23	10/29/24 15:16	1

Method: TAL-STL 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	1.15		0.679	0.685	5.00	1.02	pCi/L		11/05/24 08:09	1

Client Sample ID: BAW-3

Lab Sample ID: 180-180875-5

Date Collected: 10/02/24 08:59

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.307		0.118	0.121	1.00	0.129	pCi/L	10/10/24 09:18	11/05/24 22:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					10/10/24 09:18	11/05/24 22:01	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.447	U	0.373	0.376	1.00	0.847	pCi/L	10/10/24 09:23	10/29/24 15:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					10/10/24 09:23	10/29/24 15:16	1
Y Carrier	81.1		30 - 110					10/10/24 09:23	10/29/24 15:16	1

Method: TAL-STL 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	-0.140	U	0.391	0.395	5.00	0.847	pCi/L		11/05/24 08:09	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: DUP-05
Date Collected: 10/02/24 07:59
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-6
Matrix: Water

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.177		0.0949	0.0962	1.00	0.120	pCi/L	10/10/24 09:18	11/05/24 22:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					10/10/24 09:18	11/05/24 22:01	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.403	U	0.532	0.533	1.00	0.887	pCi/L	10/10/24 09:23	10/29/24 15:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					10/10/24 09:23	10/29/24 15:16	1
Y Carrier	89.3		30 - 110					10/10/24 09:23	10/29/24 15:16	1

Method: TAL-STL 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	0.580	U	0.540	0.542	5.00	0.887	pCi/L		11/05/24 08:09	1

Client Sample ID: EB-03
Date Collected: 10/02/24 13:45
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-7
Matrix: Water

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0787	U	0.0717	0.0721	1.00	0.108	pCi/L	10/10/24 09:18	11/05/24 22:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					10/10/24 09:18	11/05/24 22:01	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.401	U	0.324	0.326	1.00	0.746	pCi/L	10/10/24 09:23	10/29/24 15:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					10/10/24 09:23	10/29/24 15:17	1
Y Carrier	87.9		30 - 110					10/10/24 09:23	10/29/24 15:17	1

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Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: EB-03
Date Collected: 10/02/24 13:45
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-7
Matrix: Water

Method: TAL-STL 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	-0.322	U	0.332	0.334	5.00	0.746	pCi/L		11/06/24 14:15	1

Client Sample ID: BAW-5
Date Collected: 10/02/24 15:30
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-8
Matrix: Water

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.332		0.124	0.127	1.00	0.127	pCi/L	10/10/24 09:18	11/05/24 22:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.5		30 - 110					10/10/24 09:18	11/05/24 22:01	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.892	U	0.640	0.645	1.00	0.973	pCi/L	10/10/24 09:23	10/29/24 15:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.5		30 - 110					10/10/24 09:23	10/29/24 15:17	1
Y Carrier	80.4		30 - 110					10/10/24 09:23	10/29/24 15:17	1

Method: TAL-STL 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		0.652	0.657	5.00	0.973	pCi/L		11/06/24 14:15	1

Client Sample ID: PZ-9
Date Collected: 10/02/24 13:22
Date Received: 10/04/24 09:00

Lab Sample ID: 180-180875-9
Matrix: Water

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.161		0.0953	0.0964	1.00	0.126	pCi/L	10/10/24 09:18	11/05/24 22:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					10/10/24 09:18	11/05/24 22:01	1

Client Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: PZ-9

Lab Sample ID: 180-180875-9

Date Collected: 10/02/24 13:22

Matrix: Water

Date Received: 10/04/24 09:00

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.135	U	0.482	0.482	1.00	0.924	pCi/L	10/10/24 09:23	10/29/24 15:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					10/10/24 09:23	10/29/24 15:18	1
Y Carrier	84.1		30 - 110					10/10/24 09:23	10/29/24 15:18	1

Method: TAL-STL 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	0.0261	U	0.491	0.492	5.00	0.924	pCi/L		11/06/24 14:15	1

Client Sample ID: BAW-4

Lab Sample ID: 180-180875-10

Date Collected: 10/02/24 09:18

Matrix: Water

Date Received: 10/05/24 09:45

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.124	U	0.0966	0.0972	1.00	0.144	pCi/L	10/10/24 09:18	11/05/24 22:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		30 - 110					10/10/24 09:18	11/05/24 22:02	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.235	U	0.408	0.409	1.00	0.832	pCi/L	10/10/24 09:23	10/29/24 15:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		30 - 110					10/10/24 09:23	10/29/24 15:18	1
Y Carrier	83.7		30 - 110					10/10/24 09:23	10/29/24 15:18	1

Method: TAL-STL 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	-0.111	U	0.419	0.420	5.00	0.832	pCi/L		11/06/24 14:15	1

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Client Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Client Sample ID: PZ-8

Lab Sample ID: 180-180875-11

Date Collected: 10/02/24 11:50

Matrix: Water

Date Received: 10/05/24 09:45

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.254		0.114	0.116	1.00	0.132	pCi/L	10/10/24 09:18	11/05/24 22:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110					10/10/24 09:18	11/05/24 22:02	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.287	U	0.466	0.466	1.00	0.798	pCi/L	10/10/24 09:23	10/29/24 15:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110					10/10/24 09:23	10/29/24 15:18	1
Y Carrier	81.5		30 - 110					10/10/24 09:23	10/29/24 15:18	1

Method: TAL-STL 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	0.542	U	0.480	0.480	5.00	0.798	pCi/L		11/06/24 14:15	1

QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-683038/1-A
Matrix: Water
Analysis Batch: 686236

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 683038

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04376	U	0.0758	0.0759	1.00	0.134	pCi/L	10/10/24 09:11	11/01/24 09:38	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		30 - 110					10/10/24 09:11	11/01/24 09:38	1

Lab Sample ID: LCS 160-683038/2-A
Matrix: Water
Analysis Batch: 686236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 683038

Analyte	LCS		Spike	LCS	Total	RL	MDC	Unit	%Rec	%Rec Limits
	Result	LCS Qualifier	Added	Result	Uncert. (2σ+/-)					
Radium-226			9.58	8.685	0.976	1.00	0.120	pCi/L	91	75 - 125
Carrier	LCS		Limits							
Ba Carrier	93.6		30 - 110							

Lab Sample ID: MB 160-683040/1-A
Matrix: Water
Analysis Batch: 686865

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 683040

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.008116	U	0.0673	0.0673	1.00	0.130	pCi/L	10/10/24 09:18	11/05/24 17:53	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		30 - 110					10/10/24 09:18	11/05/24 17:53	1

Lab Sample ID: LCS 160-683040/2-A
Matrix: Water
Analysis Batch: 686865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 683040

Analyte	LCS		Spike	LCS	Total	RL	MDC	Unit	%Rec	%Rec Limits
	Result	LCS Qualifier	Added	Result	Uncert. (2σ+/-)					
Radium-226			9.58	9.285	1.00	1.00	0.111	pCi/L	97	75 - 125
Carrier	LCS		Limits							
Ba Carrier	84.8		30 - 110							

Lab Sample ID: 180-180875-2 DU
Matrix: Water
Analysis Batch: 686865

Client Sample ID: BAW-1
Prep Type: Total/NA
Prep Batch: 683040

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.160		0.1556		0.100	1.00	0.136	pCi/L	0.02	1

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QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 180-180875-2 DU
Matrix: Water
Analysis Batch: 686865

Client Sample ID: BAW-1
Prep Type: Total/NA
Prep Batch: 683040

Carrier	<i>DU</i> %Yield	<i>DU</i> Qualifier	Limits
Ba Carrier	79.2		30 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-683039/1-A
Matrix: Water
Analysis Batch: 685385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 683039

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.1160	U	0.328	0.328	1.00	0.588	pCi/L	10/10/24 09:17	10/28/24 12:29	1
Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		30 - 110					10/10/24 09:17	10/28/24 12:29	1
Y Carrier	75.5		30 - 110					10/10/24 09:17	10/28/24 12:29	1

Lab Sample ID: LCS 160-683039/2-A
Matrix: Water
Analysis Batch: 685385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 683039

Analyte	LCS LCS		Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qual	Uncert. (2σ+/-)						
Radium-228			8.39	9.902		1.36	1.00	0.549	pCi/L	118	75 - 125	
Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits									
Ba Carrier	93.6		30 - 110									
Y Carrier	78.5		30 - 110									

Lab Sample ID: MB 160-683041/1-A
Matrix: Water
Analysis Batch: 685736

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 683041

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.1939	U	0.287	0.288	1.00	0.486	pCi/L	10/10/24 09:23	10/29/24 12:19	1
Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		30 - 110					10/10/24 09:23	10/29/24 12:19	1
Y Carrier	86.7		30 - 110					10/10/24 09:23	10/29/24 12:19	1

Lab Sample ID: LCS 160-683041/2-A
Matrix: Water
Analysis Batch: 685736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 683041

Analyte	LCS LCS		Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qual	Uncert. (2σ+/-)						
Radium-228			8.39	9.405		1.32	1.00	0.510	pCi/L	112	75 - 125	

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QC Sample Results

Client: Southern Company
 Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

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

Lab Sample ID: LCS 160-683041/2-A
Matrix: Water
Analysis Batch: 685736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 683041

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	84.8		30 - 110
Y Carrier	83.4		30 - 110

Lab Sample ID: 180-180875-2 DU
Matrix: Water
Analysis Batch: 685625

Client Sample ID: BAW-1
Prep Type: Total/NA
Prep Batch: 683041

Analyte	Sample Sample		DU DU		Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	Limit
	Result	Qual	Result	Qual						
Radium-228	0.866		0.2033	U	0.476	1.00	0.838	pCi/L	0.66	1

Carrier	DU DU		Limits
	%Yield	Qualifier	
Ba Carrier	79.2		30 - 110
Y Carrier	86.0		30 - 110

- 1
- 2
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- 13

QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel Ash Pond B

Job ID: 180-180875-2

Rad

Prep Batch: 683038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-1	FB-03	Total/NA	Water	PrecSep-21	
MB 160-683038/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-683038/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 683039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-1	FB-03	Total/NA	Water	PrecSep_0	
MB 160-683039/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-683039/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 683040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-2	BAW-1	Total/NA	Water	PrecSep-21	
180-180875-3	BAW-7	Total/NA	Water	PrecSep-21	
180-180875-4	BAW-2A	Total/NA	Water	PrecSep-21	
180-180875-5	BAW-3	Total/NA	Water	PrecSep-21	
180-180875-6	DUP-05	Total/NA	Water	PrecSep-21	
180-180875-7	EB-03	Total/NA	Water	PrecSep-21	
180-180875-8	BAW-5	Total/NA	Water	PrecSep-21	
180-180875-9	PZ-9	Total/NA	Water	PrecSep-21	
180-180875-10	BAW-4	Total/NA	Water	PrecSep-21	
180-180875-11	PZ-8	Total/NA	Water	PrecSep-21	
MB 160-683040/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-683040/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
180-180875-2 DU	BAW-1	Total/NA	Water	PrecSep-21	

Prep Batch: 683041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180875-2	BAW-1	Total/NA	Water	PrecSep_0	
180-180875-3	BAW-7	Total/NA	Water	PrecSep_0	
180-180875-4	BAW-2A	Total/NA	Water	PrecSep_0	
180-180875-5	BAW-3	Total/NA	Water	PrecSep_0	
180-180875-6	DUP-05	Total/NA	Water	PrecSep_0	
180-180875-7	EB-03	Total/NA	Water	PrecSep_0	
180-180875-8	BAW-5	Total/NA	Water	PrecSep_0	
180-180875-9	PZ-9	Total/NA	Water	PrecSep_0	
180-180875-10	BAW-4	Total/NA	Water	PrecSep_0	
180-180875-11	PZ-8	Total/NA	Water	PrecSep_0	
MB 160-683041/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-683041/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
180-180875-2 DU	BAW-1	Total/NA	Water	PrecSep_0	

Client Information		Lab PM		Sampler		Camer Tracking No(s)		COC No					
Client Contact: SCS Contacts		Brown, Shall		Vores / KATH / KRISMAN									
Company: SCS		E-Mail shall.brown@eurofinset.com		Phone 402-517-0342				Page					
Address 3535 Colonnade Pkwy Bin S 530 EC		Due Date Requested:		Total Dissolved Solids		Total Dissolved Solids		Job #					
City: Birmingham		TAT Requested (days):		90656 Chloride Fluoride Sulfate		90656 Chloride Fluoride Sulfate		Preservation Codes:					
State, Zip Alabama		PO #:		7470 Mercury		7470 Mercury		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 Other:					
Phone 205 992 6283		WO #:		6020B Custom 14 (App III and IV)		6020B Custom 14 (App III and IV)		M - Hexane N - None O - ASNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)					
Email		Project # 18020047		Perform MS/MSD (Yes or No)		Perform MS/MSD (Yes or No)		Special Instructions/Note:					
SCS Contacts		SSOW#:		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)		Total Number of containers					
Project Name Daniel Ash Pond B CCR				Ra 226 Ra 228 and Combined		Ra 226 Ra 228 and Combined							
Site:													
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Custom 14 (App III and IV)	7470 Mercury	90656 Chloride Fluoride Sulfate	Total Dissolved Solids	Ra 226 Ra 228 and Combined	Special Instructions/Note:
FB-03	20CT24	1130	G	W									
BAW-1	20CT24	1250	G	W									
BAW-7	20CT24	1720	G	W									
BAW-2A	20CT24	1115	G	W									
BAW-3	20CT24	0859	G	W									
DUP-05	20CT24	0759	G	W									
EB-03	20CT24	1345	G	W									
BAW-5	20CT24	1530	G	W									
PZ-9	20CT24	1322	G	W									
BAW-4	20CT24	0918	G	W									
PZ-8	20CT24	1150	G	W									



Chain of Custody Record

Client Information

Client Contact: **Todd Roberts**
SOS Contacts: **Roberts**

Company: **SOS**

Address: **3535 Colonnade Pkwy, Bldg S 530 EC**

City: **Birmingham**

State: **AL**

Zip: **35202**

Phone: **205 992 6283**

Email: **Project #**

SOS Contact: **18020047**

Project Name: **Daniel Ash Pond B OCR**

Site: **SSOV#**

Due Date Requested:
TAT Requested (days):

Lab PI#
Brown, Shali
E-Mail
shali.brown@eurofins.com

Carrier Tracking No(s)

Job #

Analysis Requested

<input checked="" type="checkbox"/>	Field Filtered Sample (Yes or No)
<input checked="" type="checkbox"/>	Perform MS/MSD (Yes or No)
	6020B Custom 14 (App III and IV)
	7470 Mercury
	90656 Chloride Fluoride Sulfate
	Total Dissolved Solids
	Ra 226 Ra 228 and Combined

Total Number of containers

Special Instructions/Note:

- Preservation Codes:
- A - HCL
 - B - NaOH
 - C - Zn Acetate
 - D - Nitric Acid
 - E - H₂SO₄
 - F - MeOH
 - G - Amchlor
 - H - Ascorbic Acid
 - I - Ice
 - J - DI Water
 - K - EDTA
 - L - EDA
 - Other:
- M - Hexane
 - N - None
 - O - AsHClO₂
 - P - Na₂CO₃
 - Q - Na₂SO₃
 - R - Na₂S₂O₃
 - S - H₂SO₄
 - T - TSP Dodecylhydrazine
 - U - Acetone
 - V - MCAA
 - W - pH 4.5
 - Z - other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (G=Comp, G=grab)	Matrix (In-water, Solid, Over-satd, Br/Treat, Aq/L)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
FB-03	2022	1130	G	W					6	
BAW-1	2022	1250	G	W					6	
BAW-7	2022	1720	G	W					6	
BAW-2A	2022	1115	G	W					6	
BAW-3	2022	0859	G	W					6	
DUP-05	2022	0759	G	W					6	
FB-03	2022	1345	G	W					6	
BAW-5	2022	1530	G	W					6	
PZ-9	2022	1322	G	W					6	
BAW-4	2022	0918	G	W					6	
PZ-8	2022	1150	G	W					6	

Possible Hazard Identification

Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

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

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: **Todd Roberts** Date/Time: **10/23/24 1400** Company: **ROB EMS**

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No.:

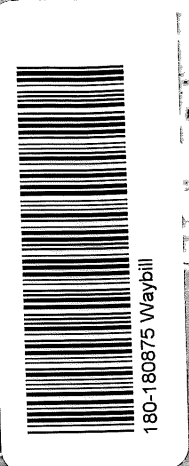
Received by: _____ Date/Time: _____ Company: _____

Received by: _____ Date/Time: _____ Company: _____

Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks:

**Look for
email
from Shali
for the COC**



Uncorrected mp 2.1 °C
Thermometer ID 25
CF 40.1 Initials PM
PT-WI-SR-001 effective 1/8/18

**Southern
only received
the
3 out of 4 coolers**



ORIGIN.ID:PNSA (412) 963-2468

TESTAMERICA PITTSBURGH LAB
301 ALPHA DR

PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 03OCT24
ACTWGT: 73.00 LB
CAD: 6570466/ROSA2550
DIMS: 25x14x13 IN
BILL THIRD PARTY

Part # 156207 235 H008 09/25

TO: **EUROFINS TEST AMERICA**
RDC PARK
301 ALPHA DR

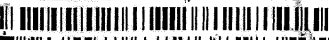
PITTSBURGH PA 15238

(412) 963-7068

REF:

INVT:

DEPT:



Uncorrected temp

Thermometer ID 116

CF Oil

Initials UA

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

FedEx
Express



REL#
3785346

3 of 4

MPS#

0263

7789 9898 0528

Mstr# 7789 9898 0506

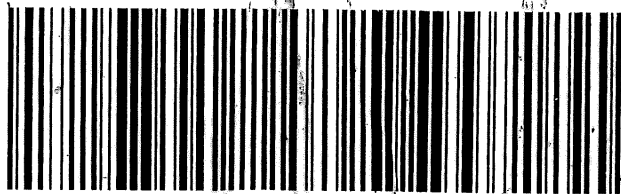
0201

FRI - 04 OCT 10:30A
PRIORITY OVERNIGHT

XS AGCA

152

PA-US



ORIGIN ID:PNSA (412) 963-2468
TESTAMERICA PITTSBURGH LAB
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 03OCT24
ACTWGT: 74.05 LB
CAD: 6570466/ROSA2550
DIMS: 25x14x14 IN
BILL THIRD PARTY

TO EUROFINS TEST AMERICA
RIDC PARK
301 ALPHA DR
PITTSBURGH PA 15238

(412) 963-7068 REF: DEPT:
INU: PO:

Uncorrected temp
Thermometer ID 1.2 17
CF -0.1 Initials MR
PT-WI-SR-001 effective 11/8/18



REL# 3785346

4 of 4
MPS# 7789 9898 0539
0263
Mstr# 7789 9898 0506

FRI - 04 OCT 10:30A
PRIORITY OVERNIGHT

XS AGCA

15238
PA-US PIT



Part # 150287 435 HBB EXP 09/25

- 1
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- 8
- 9
- 10
- 11
- 12
- 13



1520 Airport Blvd Ste A
Pensacola, FL 32504
850.474.3796

October 1, 2024 1:56 PM
Receipt #: PWSKU0807206

FedEx Express \$285.26
FedEx Priority Overnight Estimated
778998980506
778998980517
778998980528
778998980539

Recipient Address
Eurofins Test America
RTDC Park
301 Alpha Dr
PITTSBURGH, PA 15238, US
412-963-7058
Scheduled Delivery Date: 10/04/2024
Pricing Option: Standard Rate
Package Information: Your Packaging
Additional Services:
No Signature Required
Total Weight: 289.15 lbs (S)
Total Declared Value: \$400
Total Pieces: 4

Pcs	Weight/pc (lbs.)	DV/pc (USD)	Dims. (in.)
1	73.25 (S)	\$100	25x14x14
1	68.85 (S)	\$100	25x14x13
1	73.00 (S)	\$100	25x14x13
1	74.05 (S)	\$100	25x14x14

Account Billed

Est. Express Subtotal \$285.26

Estimated Total \$285.26

Sender Account ending in *1804

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Shipper Company:		TESTAMERICA PITTSBURGH LAB	
Name:		301 Alpha Dr	
Address:		PITTSBURGH	
Additional Address:		PA	
City:		15238	
State/Province:		US - UNITED STATES	
Postal:		4129632468	
Country/Territory:		US - UNITED STATES	
Shipper Phone:		4129632468	
Recipient Company:		Eurofins Test America	
Name:		301 Alpha Dr	
Address:		PITTSBURGH	
Additional Address:		PA	
City:		15238	
State/Province:		US - UNITED STATES	
Postal:		4129637058	
Country/Territory:		US - UNITED STATES	
Recipient Phone:		4129637058	

Part # 156148-434 MF

FedEx
MP SH 02763
7789 9898 0517

XS AGCA

AA
PRIORITY OVERNIGHT
15238
 PA-US
PIT



Uncorrected temp 1.5 °C
 Thermometer ID 25
 CF +0.1 Initials PM

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

406338-040ct 07:04 MEMH 57762/B264/5FES



180-180875 Waybill

RT 0
 00

Chain of Custody Record



Client Information (Sub Contract Lab)		Carrier Tracking No(s)	COC No. 180-525363.1								
Client Contact		Lab PM	Brown, Shali								
Shipping/Receiving		Phone	E-Mail: Shali.Brown@et.eurofins.com								
Company		State of Origin	Mississippi								
Test/America Laboratories, Inc.		Accreditations Required (See note)									
Address		Preservation Codes:									
13715 Rider Trail North,											
City: Earth City											
State, Zip											
MO, 63045											
Phone:											
314-298-8566(Tel) 314-298-8757(Fax)											
Email:											
Project Name:											
Plant Daniel Ash Pond B											
Site:											
Project #:		18020047									
SSOW#:											
Due Date Requested:		10/17/2024									
TAT Requested (days):											
PO #:											
WO #:											
Sample Identification - Client ID (Lab ID)		Analysis Requested									
Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=swab, A=air)	Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	9315_Ra226/PreSep_0 Standard Target List	9315_Ra226/PreSep_21 Radium 226	Ra226Ra228_GFPC	Total Number of Containers	Special Instructions/Note:
FB-03 (180-180875-1)	10/2/24	11:30 Central	G	Water	X	X	X	X	X	2	
BAW-1 (180-180875-2)	10/2/24	12:50 Central	G	Water	X	X	X	X	X	2	
BAW-7 (180-180875-3)	10/2/24	17:20 Central	G	Water	X	X	X	X	X	2	
BAW-2A (180-180875-4)	10/2/24	11:15 Central	G	Water	X	X	X	X	X	2	
BAW-3 (180-180875-5)	10/2/24	08:59 Central	G	Water	X	X	X	X	X	2	
DUP-05 (180-180875-6)	10/2/24	07:59 Central	G	Water	X	X	X	X	X	2	
EB-03 (180-180875-7)	10/2/24	13:45 Central	G	Water	X	X	X	X	X	2	
BAW-5 (180-180875-8)	10/2/24	15:30 Central	G	Water	X	X	X	X	X	2	
PZ-9 (180-180875-9)	10/2/24	13:22 Central	G	Water	X	X	X	X	X	2	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.</p>											
<p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested: I, II, III, IV, Other (specify) _____</p> <p>Primary Deliverable Rank: 2</p> <p>Empty Kit Relinquished by: _____ Date: _____</p> <p>Relinquished by: _____ Date: 10-23-24 17:00</p> <p>Relinquished by: _____ Date: _____</p> <p>Relinquished by: _____ Date: _____</p> <p>Custody Seals Intact: _____ Custody Seal No.: _____</p> <p> A Yes Δ No</p>											
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Special Instructions/QC Requirements:</p> <p>Time: _____ Method of Shipment: _____</p> <p>Received by: _____ Date/Time: _____ Company: _____</p> <p>Relinquished by: <i>M. Pinetta</i> Date/Time: OCT 08 2024 08:45 Company: _____</p> <p>Relinquished by: _____ Date/Time: _____ Company: _____</p> <p>Cooler Temperature(s) °C and Other Remarks: _____</p>											

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-180875-2

Login Number: 180875

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-180875-2

Login Number: 180875

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/08/24 01:30 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?	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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



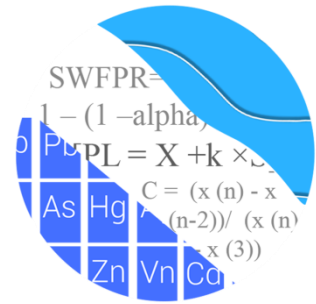
APPENDIX B

Statistical Analyses

GROUNDWATER STATS CONSULTING

May 8, 2024

Southern Company Services
Attn: Mr. Trey Singleton
3535 Colonnade Parkway
Birmingham, AL 35243



Re: Plant Daniel Bottom Ash Pond
2024 Annual Statistical Analysis – March 2024 Sample Event

Dear Mr. Singleton,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the March 2024 Groundwater Detection and Assessment Monitoring report for Mississippi Power Company's Plant Daniel Bottom Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at Daniel Bottom Ash Pond for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** BAW-1 and BAW-2A
- **Downgradient wells:** BAW-3, BAW-4, BAW-5, and BAW-7

Upgradient well BAW-2 was last sampled in October 2017 and has since been abandoned; however, data for this well are included to represent groundwater quality upgradient of the ash pond. Replacement upgradient well BAW-2A was first sampled in March 2018 and has since been sampled to supplement existing upgradient data for BAW-2.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager for Groundwater Stats Consulting.

The CCR program monitors the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follow this letter. For all constituents, a substitution of the most recent reporting limit is used for non-detect data. This generally gives the most conservative limit in each case.

Time series plots for Appendix III and IV parameters are provided for all wells and are used to evaluate concentrations over time. Additionally, box plots are included for all constituents at upgradient and downgradient wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graph. A summary of these values follows this letter. 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.

During the previous screening, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided with the screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance recommendations as discussed below.

Summary of Statistical Methods

Based on the evaluation for federal regulatory requirements, the following methods were selected for Appendix III constituents:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric prediction limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric prediction limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. In some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening Conducted in October 2017

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits. No suspected outliers were observed in any of the proposed background data at upgradient wells. When any values are identified as outliers, they are plotted in a lighter font on the time series graph.

Seasonality

No seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Test Evaluation

While trends may be visual, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed a couple statistically significant decreasing and increasing trends. All trends noted were relatively low in magnitude when compared to average concentrations; therefore, no adjustments were made to any of the data sets at that time.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA showed no variation for calcium, chloride, pH, sulfate, and TDS, making these parameters eligible for interwell methods. Boron and fluoride contained 100% non-detects and, therefore, could not be tested with the ANOVA. These parameters are also eligible for interwell methods since no variation is present. A summary table of the ANOVA results was included with the October 2017 screening.

Statistical Analysis of Appendix III Parameters – March 2024

Prior to constructing interwell prediction limits, data through the March 2024 sample event at upgradient wells were re-evaluated for outliers using visual screening. No additional outliers were suspected or flagged during this analysis. Tukey's outlier test had previously identified an outlier for calcium at well BAW-2 during the November 2019 statistical analysis; however, a similar measurement exists in replacement upgradient well BAW-2A; therefore, the measurement is not flagged as an outlier. A summary of flagged data follows this report. Additionally, any flagged values are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages.

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample strategy, were established for each of the Appendix III parameters using pooled historical upgradient well data through March 2024. The reported measurements at downgradient wells for the March 2024 sample event were compared to the interwell prediction limits to determine whether initial exceedances are present.

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 the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary. Complete graphical results of the prediction limits may be found following this letter. Exceedances were identified for the following well/constituent pairs:

- Boron: BAW-4 and BAW-5
- Calcium: BAW-4 and BAW-5
- Fluoride: BAW-5
- pH: BAW-3 (lower limit) and BAW-5 (upper limit)
- Sulfate: BAW-4 and BAW-5
- TDS: BAW-4 and BAW-5

Trend Test Evaluation

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable. Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of variability in groundwater that is assumed to be unrelated to practices at the site. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Calcium: BAW-4
- Sulfate: BAW-2A (upgradient) and BAW-4

Decreasing:

- Calcium: BAW-2 and BAW-2A (both upgradient)
- pH: BAW-2 (upgradient), BAW-3, and BAW-5
- Sulfate: BAW-1 (upgradient)

As mentioned above, upgradient well BAW-2 was abandoned but data from this well are still used for constructing interwell statistical limits.

Statistical Methods – Appendix IV Parameters

Appendix IV parameters are evaluated by statistically comparing the mean of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits) or site-specific limits that are based on upgradient groundwater quality. Site-specific background limits are determined using upper tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. The methods are described below.

Evaluation of Appendix IV Parameters – March 2024

For Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that have 100% non-detects do not require analysis.

Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. No additional values were flagged during this analysis. Tukey's outlier test had previously identified an outlier for lithium at upgradient well BAW-1 during the November 2019 statistical analysis, and this value remains flagged. A summary of flagged outliers follows this report.

Interwell Upper Tolerance Limits

Parametric upper tolerance limits were used to calculate background limits from pooled upgradient well data through March 2024 when data followed a normal distribution for Appendix IV parameters with a target of 95% confidence and 95% coverage to determine background limits. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were constructed. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples.

Groundwater Protection Standards

The interwell upper tolerance limits were compared to the Maximum Contaminant Levels (MCLs), CCR Rule-Specified levels, and background limits in the GWPS table following this letter to determine the highest limit for use as the GWPS in the Confidence Interval comparisons.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using all data through March 2024 for each of the Appendix IV parameters. The Sanitas software was used to calculate the confidence intervals, either parametric or nonparametric, as appropriate. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. Complete graphical results of the confidence interval follow this letter. An exceedance was identified for the following well/constituent pair:

- Lithium: BAW-5

Trend Test Evaluation – Appendix IV

When confidence interval exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 95% confidence level. Utilizing the 95% confidence level for trend tests readily identifies significant trends and is more sensitive than the 99% confidence level without drastically increasing the false negative rate. Upgradient wells are included in the trend analyses for all parameters found to exceed their confidence intervals in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of variability in groundwater which may be unrelated to practices at the site. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- None

Decreasing:

- Lithium: BAW-5

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for the Daniel Bottom Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Kristina Rayner
Senior Statistician



Andrew Collins
Project Manager

100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/2/2024 10:11 AM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Antimony (mg/L)
BAW-3, BAW-4, BAW-5, BAW-7

Arsenic (mg/L)
BAW-3

Beryllium (mg/L)
BAW-4, BAW-5

Cadmium (mg/L)
BAW-4, BAW-7

Molybdenum (mg/L)
BAW-3

Selenium (mg/L)
BAW-4

Thallium (mg/L)
BAW-4, BAW-5

Interwell Prediction Limits - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:26 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg.N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BAW-4	0.0928	n/a	3/21/2024	0.115	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-5	0.0928	n/a	3/20/2024	0.686	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BAW-4	1.881	n/a	3/21/2024	7.31	Yes	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Calcium (mg/L)	BAW-5	1.881	n/a	3/20/2024	28.9	Yes	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Fluoride (mg/L)	BAW-5	0.1	n/a	3/20/2024	0.11	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
pH (SU)	BAW-3	5.77	4.59	3/21/2024	4.39	Yes	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
pH (SU)	BAW-5	5.77	4.59	3/20/2024	6.2	Yes	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-4	7.68	n/a	3/21/2024	12.1	Yes	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-5	7.68	n/a	3/20/2024	30	Yes	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BAW-4	57.17	n/a	3/21/2024	64	Yes	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-5	57.17	n/a	3/20/2024	164	Yes	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:26 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BAW-3	0.0928	n/a	3/21/2024	0.08ND	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-4	0.0928	n/a	3/21/2024	0.115	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-5	0.0928	n/a	3/20/2024	0.686	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-7	0.0928	n/a	3/21/2024	0.08ND	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BAW-3	1.881	n/a	3/21/2024	0.818	No	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Calcium (mg/L)	BAW-4	1.881	n/a	3/21/2024	7.31	Yes	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Calcium (mg/L)	BAW-5	1.881	n/a	3/20/2024	28.9	Yes	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Calcium (mg/L)	BAW-7	1.881	n/a	3/21/2024	1.38	No	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Chloride (mg/L)	BAW-3	16.4	n/a	3/21/2024	5.21	No	47	n/a	n/a	0	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-4	16.4	n/a	3/21/2024	8.17	No	47	n/a	n/a	0	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-5	16.4	n/a	3/20/2024	9	No	47	n/a	n/a	0	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-7	16.4	n/a	3/21/2024	8.37	No	47	n/a	n/a	0	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BAW-3	0.1	n/a	3/21/2024	0.0537J	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-4	0.1	n/a	3/21/2024	0.0578J	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-5	0.1	n/a	3/20/2024	0.11	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-7	0.1	n/a	3/21/2024	0.0292J	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
pH (SU)	BAW-3	5.77	4.59	3/21/2024	4.39	Yes	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
pH (SU)	BAW-4	5.77	4.59	3/21/2024	5.47	No	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
pH (SU)	BAW-5	5.77	4.59	3/20/2024	6.2	Yes	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
pH (SU)	BAW-7	5.77	4.59	3/21/2024	4.89	No	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-3	7.68	n/a	3/21/2024	7.6	No	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-4	7.68	n/a	3/21/2024	12.1	Yes	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-5	7.68	n/a	3/20/2024	30	Yes	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-7	7.68	n/a	3/21/2024	1.66	No	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BAW-3	57.17	n/a	3/21/2024	31	No	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-4	57.17	n/a	3/21/2024	64	Yes	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-5	57.17	n/a	3/20/2024	164	Yes	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-7	57.17	n/a	3/21/2024	40	No	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:20 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	BAW-2 (bg)	-0.5725	-31	-25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2A (bg)	-0.05023	-55	-53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-4	0.3488	139	111	Yes	25	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2 (bg)	-0.5393	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
pH (SU)	BAW-3	-0.06553	-182	-105	Yes	24	0	n/a	n/a	0.01	NP
pH (SU)	BAW-5	-0.05237	-152	-105	Yes	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-1 (bg)	-0.4138	-121	-105	Yes	24	45.83	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2A (bg)	0.9245	56	48	Yes	14	7.143	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-4	0.3988	165	105	Yes	24	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:20 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BAW-1 (bg)	0	6	111	No	25	96	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-2 (bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-2A (bg)	-0.002126	-39	-53	No	15	53.33	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-4	0.007426	108	111	No	25	36	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-5	0.0151	61	111	No	25	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-1 (bg)	0.02243	73	111	No	25	4	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2 (bg)	-0.5725	-31	-25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2A (bg)	-0.05023	-55	-53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-4	0.3488	139	111	Yes	25	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-5	0.7643	38	111	No	25	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	BAW-1 (bg)	0	-49	-111	No	25	88	n/a	n/a	0.01	NP
Fluoride (mg/L)	BAW-2 (bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Fluoride (mg/L)	BAW-2A (bg)	0	-34	-53	No	15	66.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	BAW-5	0.0009981	39	111	No	25	4	n/a	n/a	0.01	NP
pH (SU)	BAW-1 (bg)	-0.01122	-40	-105	No	24	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2 (bg)	-0.5393	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2A (bg)	-0.02024	-21	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	BAW-3	-0.06553	-182	-105	Yes	24	0	n/a	n/a	0.01	NP
pH (SU)	BAW-5	-0.05237	-152	-105	Yes	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-1 (bg)	-0.4138	-121	-105	Yes	24	45.83	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2 (bg)	0	-11	-25	No	9	77.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2A (bg)	0.9245	56	48	Yes	14	7.143	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-4	0.3988	165	105	Yes	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-5	0.8287	80	105	No	24	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-1 (bg)	1.364	92	105	No	24	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-2 (bg)	-5.236	-4	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-2A (bg)	1.336	17	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-4	2.234	50	105	No	24	4.167	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-5	6.434	58	105	No	24	0	n/a	n/a	0.01	NP

Upper Tolerance Limits

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:09 AM

Constituent	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.002	n/a	41	n/a	n/a	97.56	n/a	n/a	0.1221	NP Inter(NDs)
Arsenic (mg/L)	0.001	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter(NDs)
Barium (mg/L)	0.0512	n/a	47	n/a	n/a	2.128	n/a	n/a	0.08974	NP Inter(normality)
Beryllium (mg/L)	0.001	n/a	43	n/a	n/a	97.67	n/a	n/a	0.1102	NP Inter(NDs)
Cadmium (mg/L)	0.001	n/a	47	n/a	n/a	97.87	n/a	n/a	0.08974	NP Inter(NDs)
Chromium (mg/L)	0.00286	n/a	45	n/a	n/a	91.11	n/a	n/a	0.09944	NP Inter(NDs)
Cobalt (mg/L)	0.001707	n/a	47	0.02914	0.00585	6.383	None	sqrt(x)	0.05	Inter
Combined Radium 226 + 228 (pCi/L)	2.5	n/a	47	n/a	n/a	4.255	n/a	n/a	0.08974	NP Inter(normality)
Fluoride (mg/L)	0.1	n/a	49	n/a	n/a	83.67	n/a	n/a	0.08099	NP Inter(NDs)
Lead (mg/L)	0.001	n/a	45	n/a	n/a	100	n/a	n/a	0.09944	NP Inter(NDs)
Lithium (mg/L)	0.00505	n/a	46	n/a	n/a	67.39	n/a	n/a	0.09447	NP Inter(NDs)
Mercury (mg/L)	0.0002	n/a	39	n/a	n/a	89.74	n/a	n/a	0.1353	NP Inter(NDs)
Molybdenum (mg/L)	0.005	n/a	43	n/a	n/a	90.7	n/a	n/a	0.1102	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	43	n/a	n/a	86.05	n/a	n/a	0.1102	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	43	n/a	n/a	95.35	n/a	n/a	0.1102	NP Inter(NDs)

PLANT DANIEL BOTTOM ASH 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		0.001	0.01
Barium, Total (mg/L)	2		0.051	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		0.0029	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0017	0.006
Combined Radium, Total (pCi/L)	5		2.5	5
Fluoride, Total (mg/L)	4		0.1	4
Lead, Total (mg/L)	0.015		0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.0051	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

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

Confidence Interval Summary Table - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:13 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig. N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-5	0.1837	0.1377	0.04	Yes 24	0.1535	0.05393	0	None	x^2	0.01	Param.

Confidence Interval Summary Table - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:13 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	BAW-4	0.001525	0.0007639	0.01	No	24	0.001516	0.001274	16.67	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	BAW-5	0.004662	0.002135	0.01	No	24	0.003876	0.003196	0	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	BAW-7	0.001	0.00052	0.01	No	24	0.0009592	0.0001384	91.67	None	No	0.01	NP (NDs)
Barium (mg/L)	BAW-3	0.03274	0.02393	2	No	24	0.02833	0.008638	0	None	No	0.01	Param.
Barium (mg/L)	BAW-4	0.0223	0.0091	2	No	24	0.0142	0.007611	0	None	No	0.01	NP (normality)
Barium (mg/L)	BAW-5	0.055	0.041	2	No	24	0.05227	0.01909	0	None	No	0.01	NP (normality)
Barium (mg/L)	BAW-7	0.02	0.0117	2	No	24	0.01873	0.01745	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	BAW-3	0.001	0.000225	0.004	No	22	0.0009295	0.000228	90.91	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BAW-7	0.001	0.000185	0.004	No	22	0.000963	0.0001738	95.45	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BAW-3	0.0008494	0.0005588	0.005	No	24	0.0007041	0.0002848	4.167	None	No	0.01	Param.
Cadmium (mg/L)	BAW-5	0.001	0.000155	0.005	No	24	0.0009648	0.0001725	95.83	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-3	0.003	0.00165	0.1	No	23	0.002772	0.003566	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-4	0.002	0.0015	0.1	No	23	0.001917	0.0002289	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-5	0.0024	0.0012	0.1	No	23	0.002113	0.0006573	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-7	0.00206	0.002	0.1	No	23	0.002003	0.00001251	95.65	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BAW-3	0.006845	0.005147	0.006	No	24	0.005996	0.001664	0	None	No	0.01	Param.
Cobalt (mg/L)	BAW-4	0.00144	0.00107	0.006	No	24	0.001255	0.0003628	0	None	No	0.01	Param.
Cobalt (mg/L)	BAW-5	0.000802	0.0005	0.006	No	24	0.000711	0.0005099	70.83	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BAW-7	0.00112	0.00071	0.006	No	24	0.00119	0.0009895	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-3	0.884	0.27	5	No	24	0.6381	0.6789	8.333	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-4	0.7165	0.1361	5	No	24	0.6056	0.7719	12.5	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAW-5	0.9408	0.4066	5	No	23	0.7426	0.5912	4.348	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAW-7	1.014	0.333	5	No	24	0.7977	0.7902	12.5	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BAW-3	0.1	0.0537	4	No	25	0.09274	0.0204	88	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BAW-4	0.0578	0.04	4	No	25	0.0572	0.0254	24	None	No	0.01	NP (normality)
Fluoride (mg/L)	BAW-5	0.07424	0.05336	4	No	25	0.06687	0.02828	4	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BAW-7	0.1	0.0415	4	No	25	0.09189	0.02253	88	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-3	0.001	0.000322	0.015	No	23	0.0007143	0.000375	60.87	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-4	0.001	0.00042	0.015	No	23	0.0008763	0.0002803	82.61	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-5	0.001	0.000152	0.015	No	23	0.0009631	0.0001768	95.65	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-7	0.001	0.000129	0.015	No	23	0.0009621	0.0001816	95.65	None	No	0.01	NP (NDs)
Lithium (mg/L)	BAW-3	0.005	0.00322	0.04	No	24	0.004271	0.001255	58.33	None	No	0.01	NP (NDs)
Lithium (mg/L)	BAW-4	0.02574	0.0176	0.04	No	24	0.02167	0.007973	0	None	No	0.01	Param.
Lithium (mg/L)	BAW-5	0.1837	0.1377	0.04	Yes	24	0.1535	0.05393	0	None	x^2	0.01	Param.
Lithium (mg/L)	BAW-7	0.005	0.0037	0.04	No	24	0.004956	0.002231	50	None	No	0.01	NP (normality)
Mercury (mg/L)	BAW-3	0.000497	0.000133	0.002	No	20	0.0002022	0.00007642	80	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-4	0.0002	0.000135	0.002	No	20	0.0001869	0.00003389	85	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-5	0.0002	0.000134	0.002	No	20	0.0001904	0.00003111	90	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-7	0.000235	0.000151	0.002	No	20	0.00024	0.0002284	75	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BAW-4	0.005	0.00109	0.1	No	22	0.003809	0.001845	68.18	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BAW-5	0.003809	0.001686	0.1	No	22	0.006402	0.005683	27.27	Kaplan-Meier	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	BAW-7	0.005	0.0038	0.1	No	22	0.004945	0.0002558	95.45	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-3	0.005	0.00079	0.05	No	22	0.003563	0.002157	68.18	None	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-5	0.005	0.00033	0.05	No	22	0.004788	0.0009956	95.45	None	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-7	0.005	0.0021	0.05	No	22	0.004013	0.001895	77.27	None	No	0.01	NP (NDs)
Thallium (mg/L)	BAW-3	0.001	0.000276	0.002	No	22	0.0008461	0.0003358	81.82	None	No	0.01	NP (NDs)
Thallium (mg/L)	BAW-7	0.001	0.000153	0.002	No	22	0.0009615	0.0001806	95.45	None	No	0.01	NP (NDs)

Appendix IV Trend Tests - Confidence Interval Exceedances - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:16 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-5	-0.01541	-126	-81	Yes	24	0	n/a	n/a	0.05	NP

Appendix IV Trend Tests - Confidence Interval Exceedances - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:16 AM

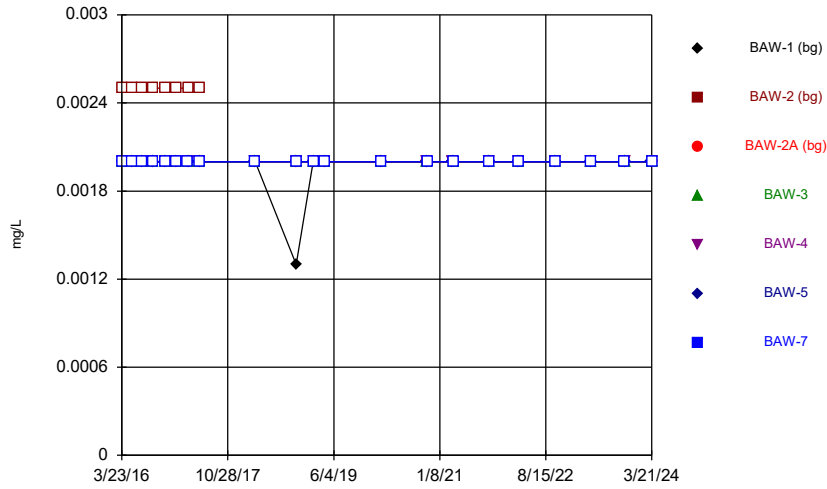
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-1 (bg)	0	-14	-76	No	23	65.22	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-2 (bg)	0	0	17	No	8	100	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-2A (bg)	0	-1	-41	No	15	53.33	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-5	-0.01541	-126	-81	Yes	24	0	n/a	n/a	0.05	NP

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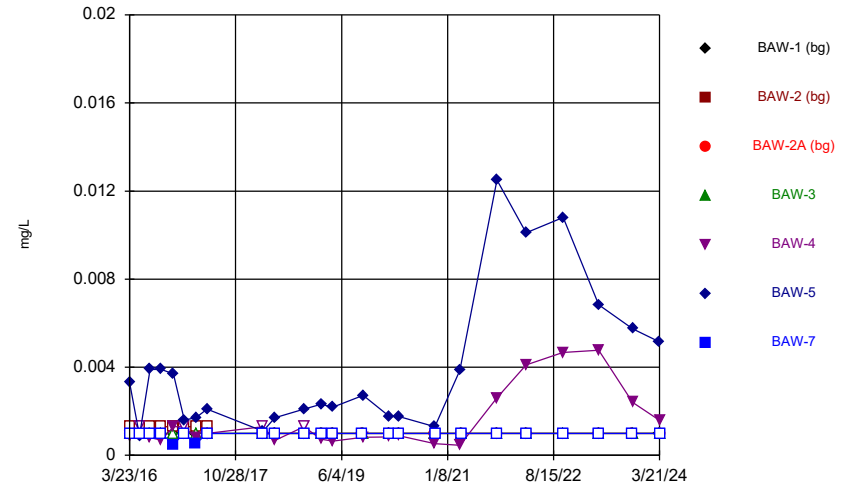
Time Series

Time Series



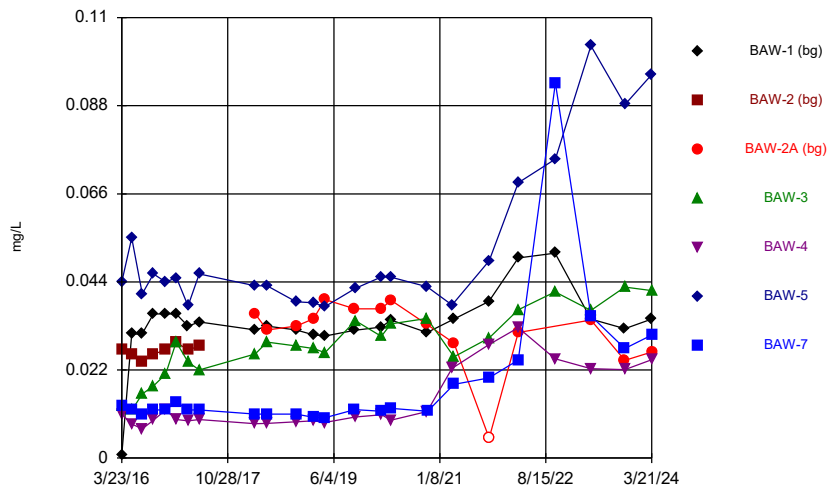
Constituent: Antimony Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



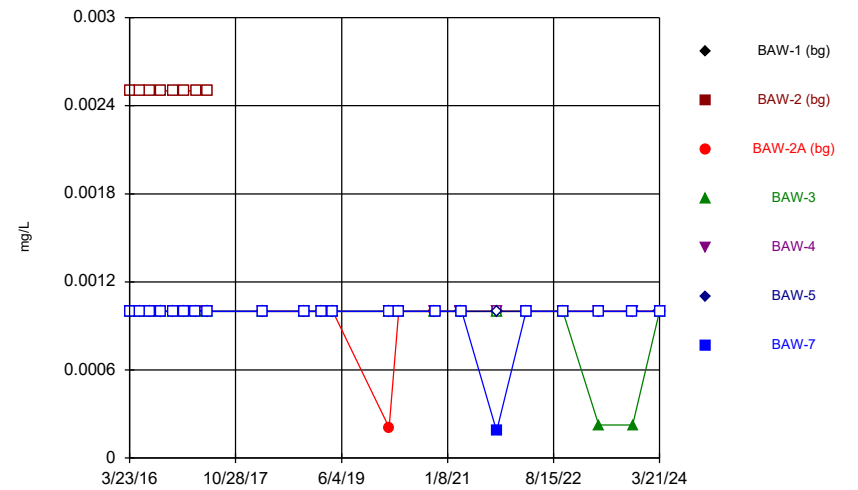
Constituent: Arsenic Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



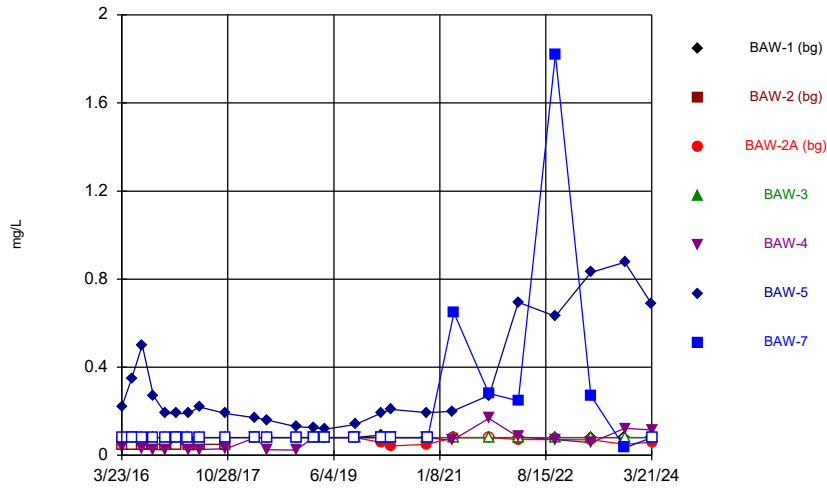
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



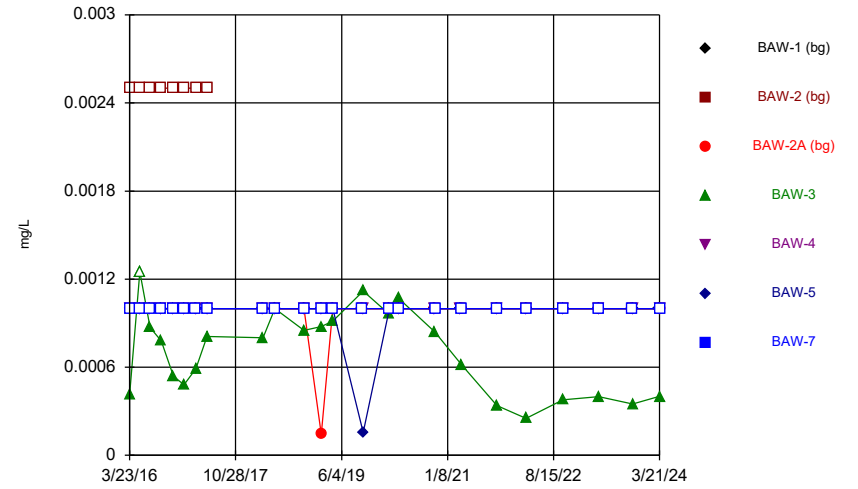
Constituent: Beryllium Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



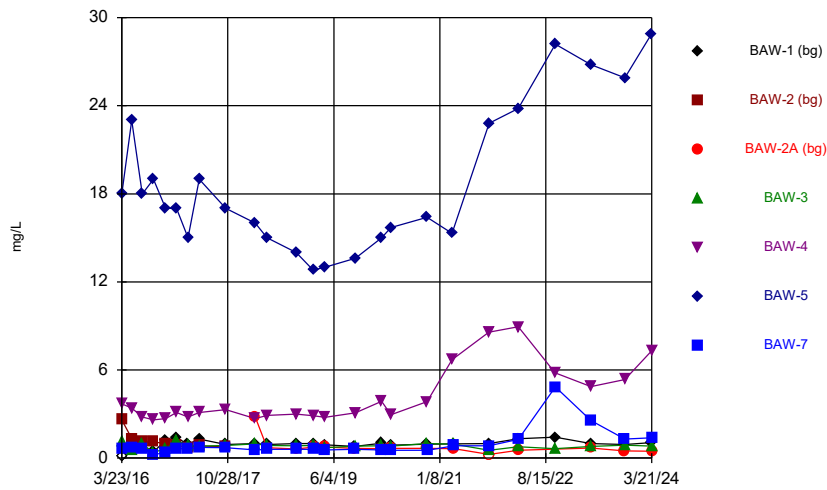
Constituent: Boron Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



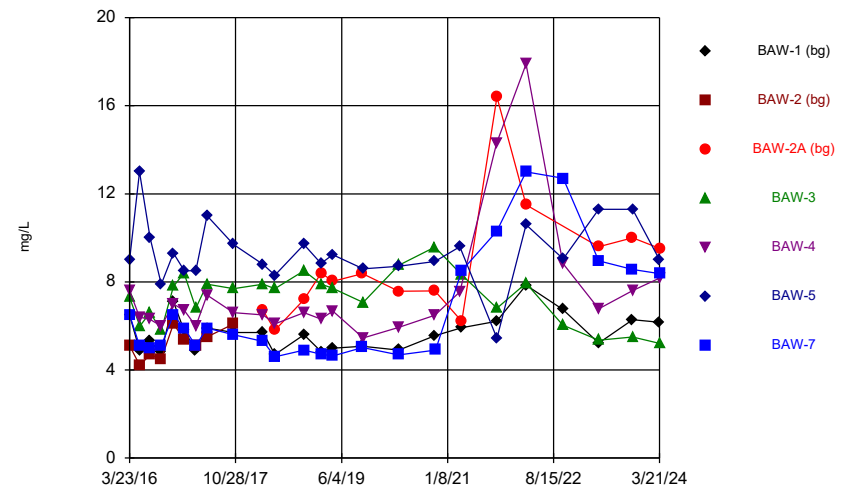
Constituent: Cadmium Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



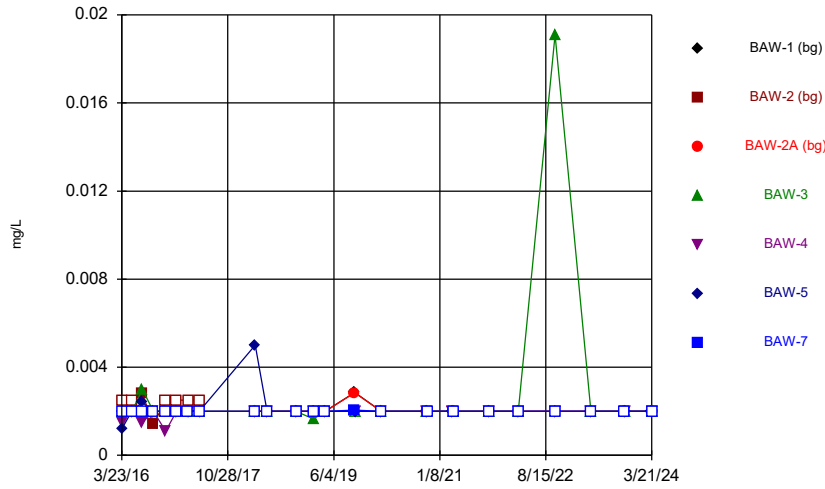
Constituent: Calcium Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



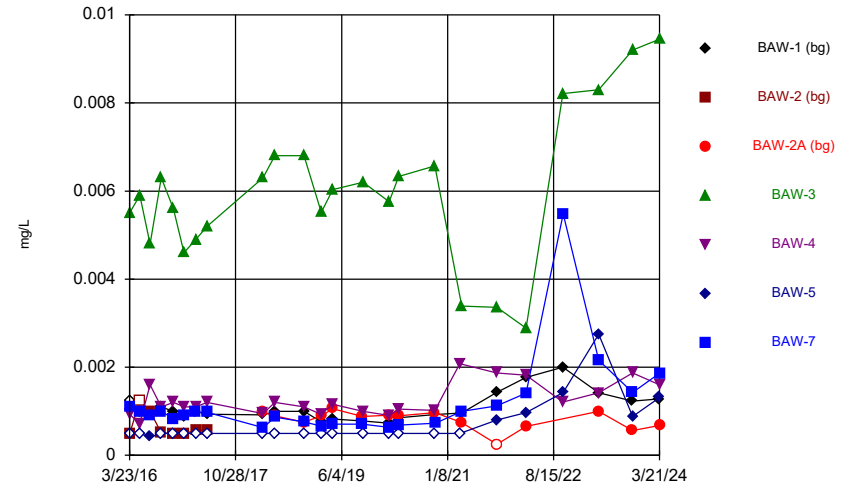
Constituent: Chloride Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



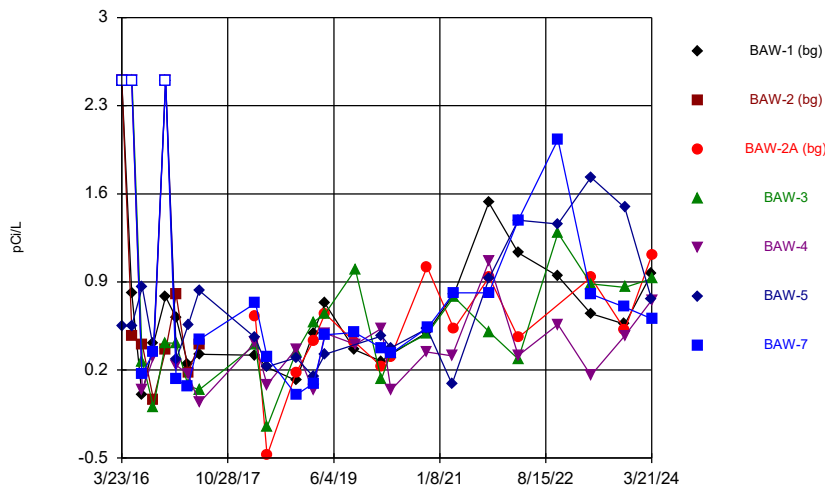
Constituent: Chromium Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



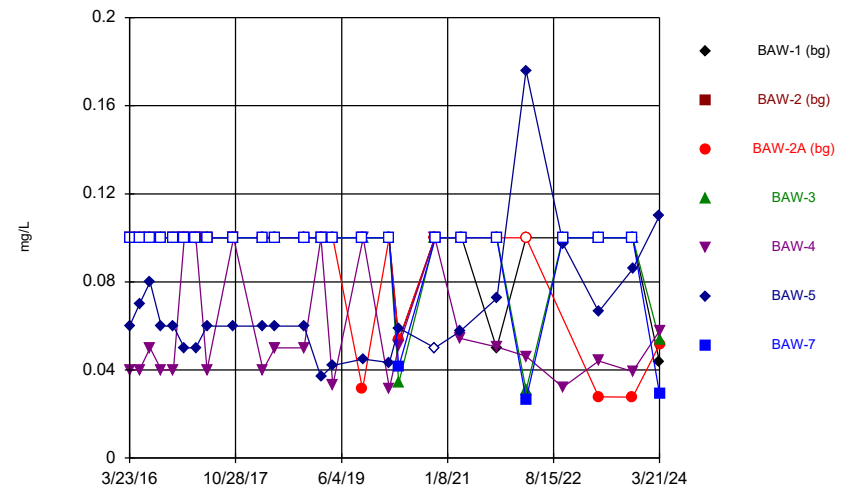
Constituent: Cobalt Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



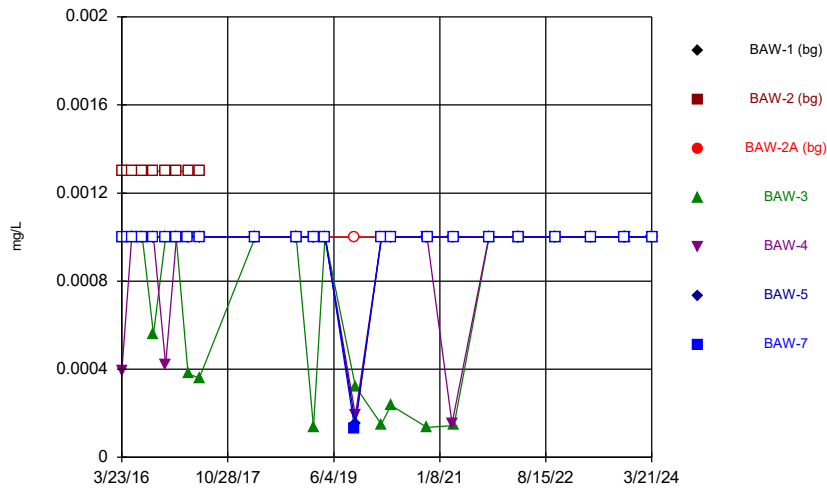
Constituent: Combined Radium 226 + 228 Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



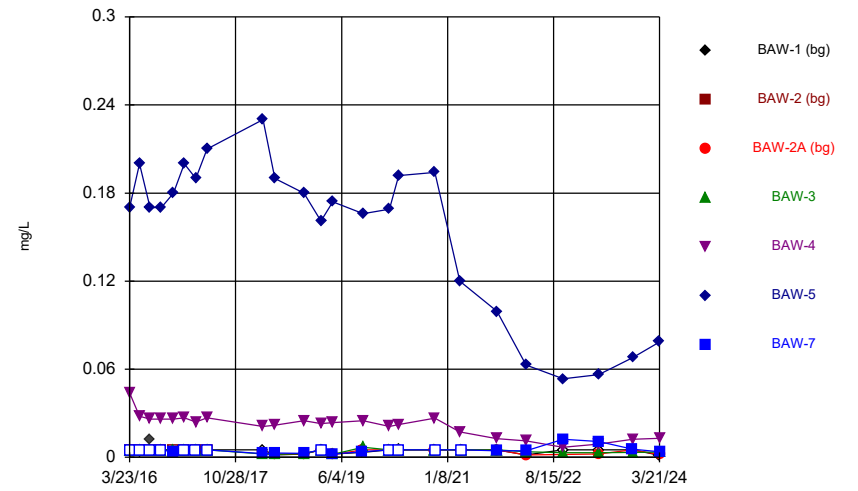
Constituent: Fluoride Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



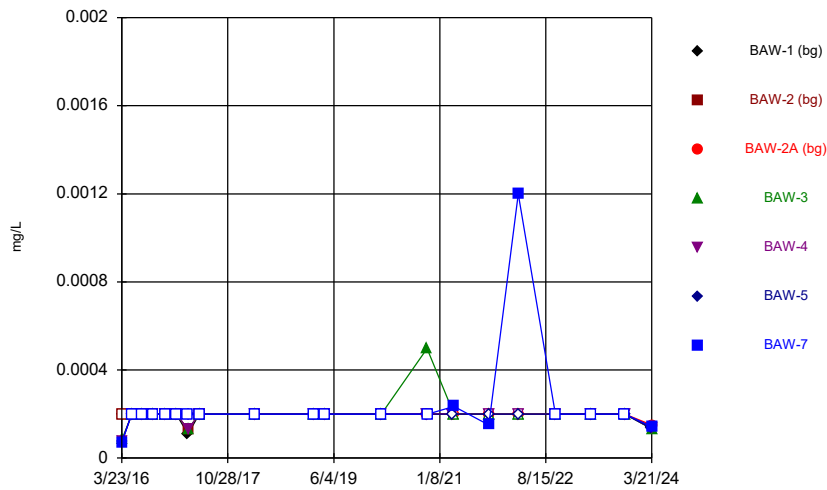
Constituent: Lead Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



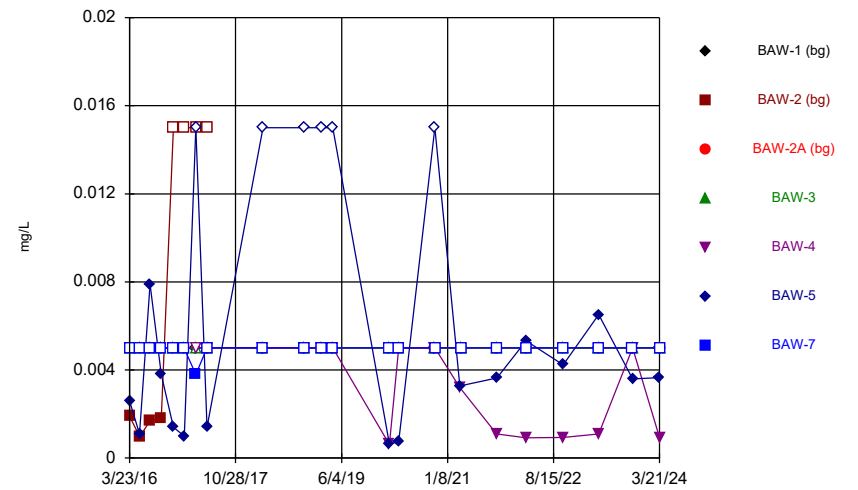
Constituent: Lithium Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



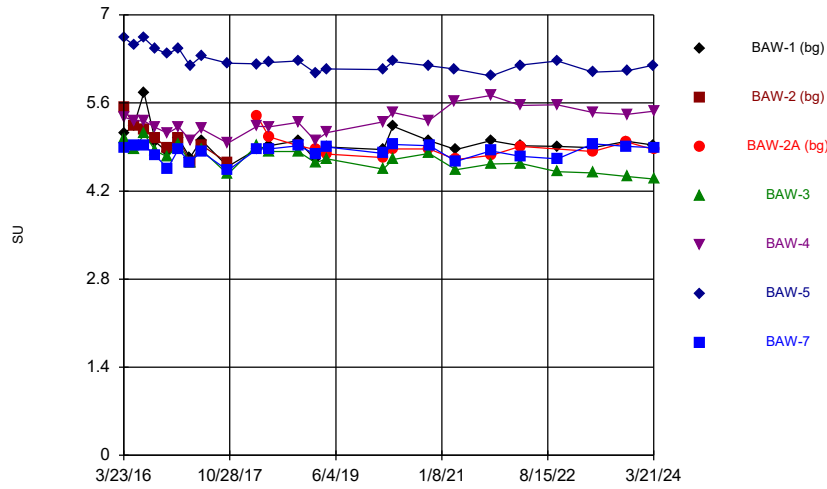
Constituent: Mercury Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



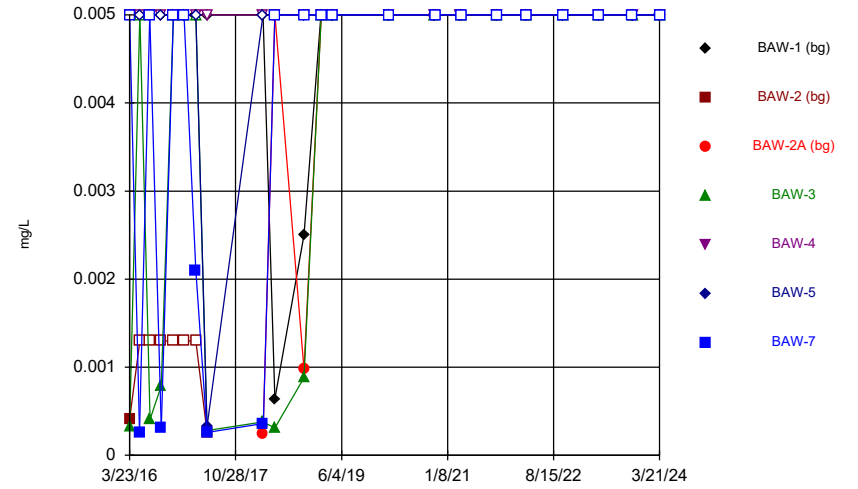
Constituent: Molybdenum Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



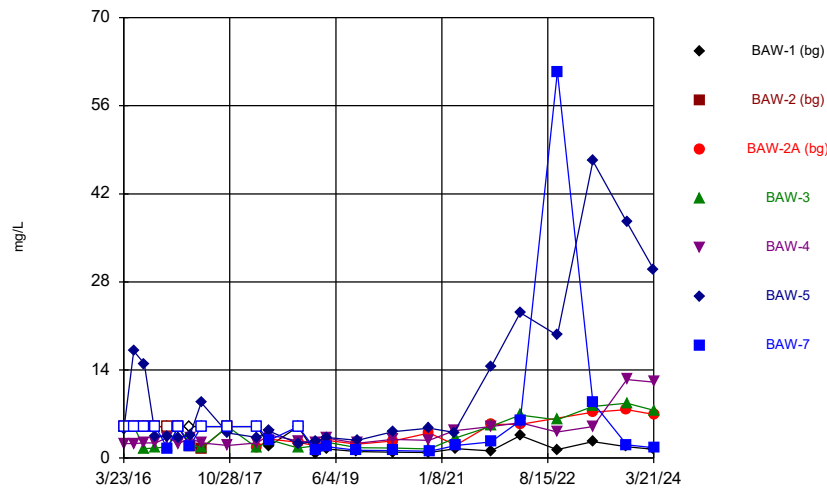
Constituent: pH Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



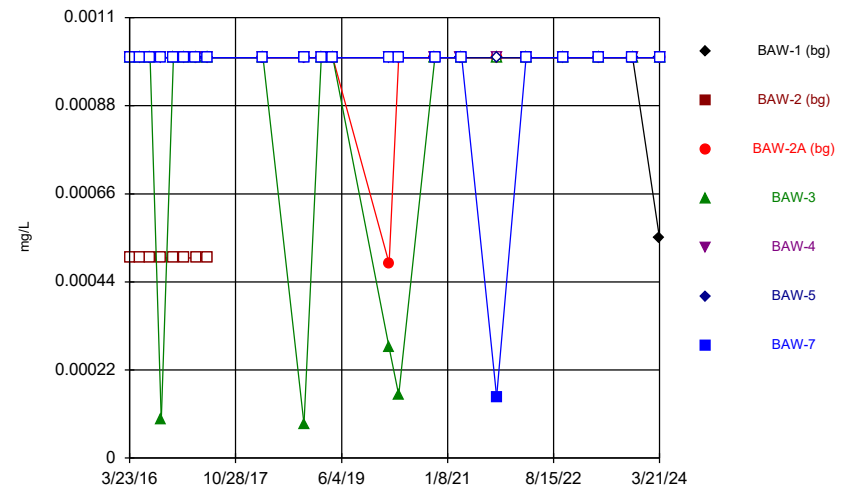
Constituent: Selenium Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



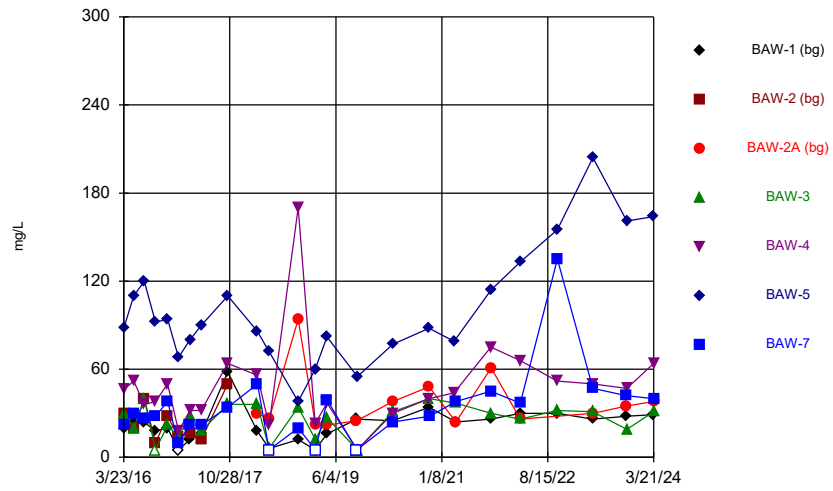
Constituent: Sulfate Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



Constituent: Thallium Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/2/2024 10:22 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.002	<0.0025		<0.002	<0.002	<0.002	<0.002
5/17/2016	<0.002				<0.002	<0.002	<0.002
5/18/2016		<0.0025		<0.002			
7/12/2016	<0.002						<0.002
7/13/2016		<0.0025		<0.002	<0.002	<0.002	
9/13/2016	<0.002					<0.002	<0.002
9/14/2016		<0.0025		<0.002	<0.002		
11/19/2016	<0.002	<0.0025		<0.002	<0.002	<0.002	<0.002
1/17/2017	<0.002	<0.0025		<0.002			<0.002
1/18/2017					<0.002	<0.002	
3/22/2017	<0.002						<0.002
3/23/2017		<0.0025		<0.002	<0.002	<0.002	
5/24/2017	<0.002	<0.0025		<0.002	<0.002	<0.002	<0.002
3/28/2018	<0.002		<0.002	<0.002	<0.002	<0.002	
3/29/2018							<0.002
11/8/2018	0.0013 (J)			<0.002	<0.002		
11/9/2018			<0.002			<0.002	<0.002
2/11/2019	<0.002				<0.002	<0.002	
2/12/2019			<0.002	<0.002			<0.002
4/17/2019	<0.002		<0.002	<0.002	<0.002	<0.002	
4/18/2019							<0.002
2/21/2020	<0.002		<0.002	<0.002			<0.002
2/22/2020					<0.002	<0.002	
10/30/2020	<0.002		<0.002	<0.002	<0.002	<0.002	
11/2/2020							<0.002
3/17/2021					<0.002	<0.002	
3/26/2021	<0.002		<0.002	<0.002			<0.002
10/5/2021	<0.002				<0.002		<0.002
10/6/2021			<0.002	<0.002		<0.002	
3/16/2022	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
10/5/2022	<0.002			<0.002	<0.002		
10/6/2022						<0.002	<0.002
4/20/2023	<0.002		<0.002	<0.002			
4/21/2023					<0.002	<0.002	<0.002
10/24/2023	<0.002		<0.002				<0.002
10/25/2023				<0.002	<0.002	<0.002	
3/20/2024	<0.002					<0.002	
3/21/2024			<0.002	<0.002	<0.002		<0.002

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.001	<0.0013		<0.001	0.00087 (J)	0.0033	<0.001
5/17/2016	<0.001				<0.0013	0.00089 (J)	<0.001
5/18/2016		<0.0013		<0.001			
7/12/2016	<0.001						<0.001
7/13/2016		<0.0013		<0.001	0.00081 (J)	0.0039	
9/13/2016	<0.001					0.0039	<0.001
9/14/2016		<0.0013		<0.001	0.00069 (J)		
11/19/2016	<0.001	<0.0013		<0.001	0.0013	0.0037	0.0005 (J)
1/17/2017	<0.001	<0.0013		<0.001			<0.001
1/18/2017					<0.0013	0.0016	
3/22/2017	<0.001						0.00052 (J)
3/23/2017		<0.0013		<0.001	0.00078 (J)	0.0017	
5/24/2017	<0.001	<0.0013		<0.001	0.001 (J)	0.0021	<0.001
3/28/2018	<0.001		<0.001	<0.001	<0.0013	0.0011 (J)	
3/29/2018							<0.001
6/2/2018	<0.001		<0.001	<0.001	0.00068 (J)	0.0017	<0.001
11/8/2018	<0.001			<0.001	<0.0013		
11/9/2018			<0.001			0.0021	<0.001
2/11/2019	<0.001				0.000737 (J)	0.00232	
2/12/2019			<0.001	<0.001			<0.001
4/17/2019	<0.001		<0.001	<0.001	0.000645 (J)	0.00218	
4/18/2019							<0.001
9/27/2019	<0.001		<0.001				<0.001
9/30/2019				<0.001	0.000821 (J)	0.00272	
2/21/2020	<0.001		<0.001	<0.001			<0.001
2/22/2020					0.000837 (J)	0.00177	
4/14/2020	<0.001		<0.001	<0.001	0.000896 (J)	0.00177	<0.001
10/30/2020	<0.001		<0.001	<0.001	0.000529 (J)	0.0013	
11/2/2020							<0.001
3/17/2021					0.000454 (J)	0.00385	
3/26/2021	<0.001		<0.001	<0.001			<0.001
10/5/2021	<0.001				0.00259		<0.001
10/6/2021			<0.001	<0.001		0.0125	
3/16/2022	<0.001		<0.001	<0.001	0.00411	0.0101	<0.001
10/5/2022	<0.001			<0.001	0.00467		
10/6/2022						0.0108	<0.001
4/20/2023	<0.001		<0.001	<0.001			
4/21/2023					0.00477	0.00683	<0.001
10/24/2023	<0.001		<0.001				<0.001
10/25/2023				<0.001	0.00241	0.00575	
3/20/2024	<0.001					0.00515	
3/21/2024			<0.001	<0.001	0.00159		<0.001

Time Series

Constituent: Barium (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	0.00084 (J)	0.027		0.013	0.011	0.044	0.013
5/17/2016	0.031				0.0085	0.055	0.012
5/18/2016		0.026		0.012			
7/12/2016	0.031						0.011
7/13/2016		0.024		0.016	0.0073	0.041	
9/13/2016	0.036					0.046	0.012
9/14/2016		0.026		0.018	0.0095		
11/19/2016	0.036	0.027		0.021	0.012	0.044	0.012
1/17/2017	0.036	0.029		0.029			0.014
1/18/2017					0.0096	0.045	
3/22/2017	0.033						0.012
3/23/2017		0.027		0.024	0.0093	0.038	
5/24/2017	0.034	0.028		0.022	0.0096	0.046	0.012
3/28/2018	0.032		0.036	0.026	0.0086	0.043	
3/29/2018							0.011
6/2/2018	0.033		0.032	0.029	0.0087	0.043	0.011
11/8/2018	0.032			0.028	0.0091		
11/9/2018			0.033			0.039	0.011
2/11/2019	0.0308				0.00931	0.0388	
2/12/2019			0.0348	0.0274			0.0102
4/17/2019	0.0305		0.0396	0.0263	0.00888	0.0378	
4/18/2019							0.0101
9/27/2019	0.0319		0.0373				0.0121
9/30/2019				0.0343	0.0103	0.0424	
2/21/2020	0.0327		0.0373	0.0304			0.0117
2/22/2020					0.0108	0.0453	
4/14/2020	0.0345		0.0394	0.0335	0.00949 (J)	0.0452	0.0124
10/30/2020	0.0314		0.0334	0.0349	0.0116	0.0428	
11/2/2020							0.0117
3/17/2021					0.0224	0.0382	
3/26/2021	0.0347		0.0287	0.0253			0.0184
10/5/2021	0.0391				0.0283		0.02
10/6/2021			<0.01	0.03		0.0493	
3/16/2022	0.05		0.0314	0.037	0.0326	0.0688	0.0245
10/5/2022	0.0512			0.0415	0.0248		
10/6/2022						0.0747	0.0937
4/20/2023	0.0347		0.0345	0.0369			
4/21/2023					0.0223	0.103	0.0355
10/24/2023	0.0323		0.0244				0.0274
10/25/2023				0.0427	0.0221	0.0883	
3/20/2024	0.0347					0.0958	
3/21/2024			0.0265	0.0418	0.0246		0.0307

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.001	<0.0025		<0.001	<0.001	<0.001	<0.001
5/17/2016	<0.001				<0.001	<0.001	<0.001
5/18/2016		<0.0025		<0.001			
7/12/2016	<0.001						<0.001
7/13/2016		<0.0025		<0.001	<0.001	<0.001	
9/13/2016	<0.001					<0.001	<0.001
9/14/2016		<0.0025		<0.001	<0.001		
11/19/2016	<0.001	<0.0025		<0.001	<0.001	<0.001	<0.001
1/17/2017	<0.001	<0.0025		<0.001			<0.001
1/18/2017					<0.001	<0.001	
3/22/2017	<0.001						<0.001
3/23/2017		<0.0025		<0.001	<0.001	<0.001	
5/24/2017	<0.001	<0.0025		<0.001	<0.001	<0.001	<0.001
3/28/2018	<0.001		<0.001	<0.001	<0.001	<0.001	
3/29/2018							<0.001
11/8/2018	<0.001			<0.001	<0.001		
11/9/2018			<0.001			<0.001	<0.001
2/11/2019	<0.001				<0.001	<0.001	
2/12/2019			<0.001	<0.001			<0.001
4/17/2019	<0.001		<0.001	<0.001	<0.001	<0.001	
4/18/2019							<0.001
2/21/2020	<0.001		0.000207 (J)	<0.001			<0.001
2/22/2020					<0.001	<0.001	
4/14/2020	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
10/30/2020	<0.001		<0.001	<0.001	<0.001	<0.001	
11/2/2020							<0.001
3/17/2021					<0.001	<0.001	
3/26/2021	<0.001		<0.001	<0.001			<0.001
10/5/2021	<0.001				<0.001		0.000185 (J)
10/6/2021			<0.001	<0.001		<0.001	
3/16/2022	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
10/5/2022	<0.001			<0.001	<0.001		
10/6/2022						<0.001	<0.001
4/20/2023	<0.001		<0.001	0.000225 (J)			
4/21/2023					<0.001	<0.001	<0.001
10/24/2023	<0.001		<0.001				<0.001
10/25/2023				0.000225 (J)	<0.001	<0.001	
3/20/2024	<0.001					<0.001	
3/21/2024			<0.001	<0.001	<0.001		<0.001

Time Series

Constituent: Boron (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.08	<0.05		<0.08	0.037 (J)	0.22	<0.08
5/17/2016	<0.08				<0.08	0.35	<0.08
5/18/2016		<0.05		<0.08			
7/12/2016	<0.08						<0.08
7/13/2016		<0.05		<0.08	0.032 (J)	0.5	
9/13/2016	<0.08					0.27	<0.08
9/14/2016		<0.05		<0.08	0.027 (J)		
11/19/2016	<0.08	<0.05		<0.08	0.024 (J)	0.19	<0.08
1/17/2017	<0.08	<0.05		<0.08			<0.08
1/18/2017					<0.08	0.19	
3/22/2017	<0.08						<0.08
3/23/2017		<0.05		<0.08	0.024 (J)	0.19	
5/24/2017	<0.08	<0.05		<0.08	0.027 (J)	0.22	<0.08
10/16/2017	<0.08	<0.05		<0.08	0.03 (J)	0.19	<0.08
3/28/2018	<0.08		<0.08	<0.08	<0.08	0.17	
3/29/2018							<0.08
6/2/2018	<0.08		<0.08	<0.08	0.025 (J)	0.16	<0.08
11/8/2018	<0.08			<0.08	0.024 (J)		
11/9/2018			<0.08			0.13	<0.08
2/11/2019	<0.08				<0.08	0.126	
2/12/2019			<0.08	<0.08			<0.08
4/17/2019	<0.08		<0.08	<0.08	<0.08	0.118	
4/18/2019							<0.08
9/27/2019	<0.08		<0.08				<0.08
9/30/2019				<0.08	<0.08	0.14	
2/21/2020	0.0928		0.0589 (J)	<0.08			<0.08
2/22/2020					<0.08	0.193	
4/14/2020	<0.08		0.0424 (J)	<0.08	<0.08	0.209	<0.08
10/30/2020	<0.08		0.0495 (J)	<0.08	<0.08	0.194	
11/2/2020							<0.08
3/17/2021					0.0673 (J)	0.2	
3/26/2021	<0.08		<0.08	<0.08			0.647
10/5/2021	<0.08				0.168		0.281
10/6/2021			<0.08	<0.08		0.272	
3/16/2022	<0.08		0.0717 (J)	<0.08	0.084	0.695	0.247
10/5/2022	<0.08			<0.08	0.0714 (J)		
10/6/2022						0.631	1.82
4/20/2023	<0.08		0.0711 (J)	<0.08			
4/21/2023					0.058 (J)	0.831	0.271
10/24/2023	<0.08		0.0502 (J)				0.0336 (J)
10/25/2023				<0.08	0.122	0.877	
3/20/2024	<0.08					0.686	
3/21/2024			0.0604 (J)	<0.08	0.115		<0.08

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.001	<0.0025		0.00041 (J)	<0.001	<0.001	<0.001
5/17/2016	<0.001				<0.001	<0.001	<0.001
5/18/2016		<0.0025		<0.0025			
7/12/2016	<0.001						<0.001
7/13/2016		<0.0025		0.00087 (J)	<0.001	<0.001	
9/13/2016	<0.001					<0.001	<0.001
9/14/2016		<0.0025		0.00078 (J)	<0.001		
11/19/2016	<0.001	<0.0025		0.00054 (J)	<0.001	<0.001	<0.001
1/17/2017	<0.001	<0.0025		0.00048 (J)			<0.001
1/18/2017					<0.001	<0.001	
3/22/2017	<0.001						<0.001
3/23/2017		<0.0025		0.00059 (J)	<0.001	<0.001	
5/24/2017	<0.001	<0.0025		0.00081 (J)	<0.001	<0.001	<0.001
3/28/2018	<0.001		<0.001	0.0008 (J)	<0.001	<0.001	
3/29/2018							<0.001
6/2/2018	<0.001		<0.001	0.001 (J)	<0.001	<0.001	<0.001
11/8/2018	<0.001			0.00085 (J)	<0.001		
11/9/2018			<0.001			<0.001	<0.001
2/11/2019	<0.001				<0.001	<0.001	
2/12/2019			0.000143 (J)	0.000877 (J)			<0.001
4/17/2019	<0.001		<0.001	0.000915 (J)	<0.001	<0.001	
4/18/2019							<0.001
9/27/2019	<0.001		<0.001				<0.001
9/30/2019				0.00112 (J)	<0.001	0.000155 (J)	
2/21/2020	<0.001		<0.001	0.000962 (J)			<0.001
2/22/2020					<0.001	<0.001	
4/14/2020	<0.001		<0.001	0.00107 (J)	<0.001	<0.001	<0.001
10/30/2020	<0.001		<0.001	0.00084 (J)	<0.001	<0.001	
11/2/2020							<0.001
3/17/2021					<0.001	<0.001	
3/26/2021	<0.001		<0.001	0.000615 (J)			<0.001
10/5/2021	<0.001				<0.001		<0.001
10/6/2021			<0.001	0.000338 (J)		<0.001	
3/16/2022	<0.001		<0.001	0.000252 (J)	<0.001	<0.001	<0.001
10/5/2022	<0.001			0.000379 (J)	<0.001		
10/6/2022						<0.001	<0.001
4/20/2023	<0.001		<0.001	0.0004 (J)			
4/21/2023					<0.001	<0.001	<0.001
10/24/2023	<0.001		<0.001				<0.001
10/25/2023				0.00035 (J)	<0.001	<0.001	
3/20/2024	<0.001					<0.001	
3/21/2024			<0.001	0.000401 (J)	<0.001		<0.001

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.25	2.6		1.1	3.7	18	0.65
5/17/2016	0.84				3.4	23	0.68
5/18/2016		1.3		0.56			
7/12/2016	0.79						0.62
7/13/2016		1.1		0.95	2.8	18	
9/13/2016	0.42					19	0.25
9/14/2016		1.1		0.4	2.6		
11/19/2016	1.2	1		0.62	2.7	17	0.36
1/17/2017	1.4	0.87		1.2			0.66
1/18/2017					3.1	17	
3/22/2017	0.95						0.65
3/23/2017		0.74		0.87	2.8	15	
5/24/2017	1.3	0.84		0.81	3.1	19	0.72
10/16/2017	0.93	0.76		0.86	3.3	17	0.7
3/28/2018	1		2.8	0.97	2.7	16	
3/29/2018							0.55
6/2/2018	0.93		0.71	0.86	2.9	15	0.6
11/8/2018	1			0.84	3		
11/9/2018			0.61			14	0.59
2/11/2019	1				2.88	12.8	
2/12/2019			0.757	0.856			0.608
4/17/2019	0.893		0.755	0.711	2.77	13	
4/18/2019							0.55
9/27/2019	0.8		0.663				0.598
9/30/2019				0.826	3.08	13.6	
2/21/2020	1.02		0.648	0.841			0.552
2/22/2020					3.86	15	
4/14/2020	0.887		0.67	0.811	2.95	15.7	0.532
10/30/2020	0.945		0.672	1	3.84	16.4	
11/2/2020							0.535
3/17/2021					6.69	15.3	
3/26/2021	0.965		0.644	0.937			0.848
10/5/2021	0.996				8.57		0.829
10/6/2021			<0.5	0.532		22.8	
3/16/2022	1.32		0.539	0.78	8.94	23.8	1.28
10/5/2022	1.42			0.647	5.81		
10/6/2022						28.2	4.84
4/20/2023	0.996		0.685	0.789			
4/21/2023					4.87	26.8	2.56
10/24/2023	0.918		0.498 (J)				1.3
10/25/2023				0.875	5.35	25.9	
3/20/2024	1.05					28.9	
3/21/2024			0.469 (J)	0.818	7.31		1.38

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	6.5	5.1		7.3	7.6	9	6.5
5/17/2016	4.9				6.4	13	5.1
5/18/2016		4.2		6			
7/12/2016	5.3						5
7/13/2016		4.7		6.6	6.3	10	
9/13/2016	4.8 (F1)					7.9	5.1
9/14/2016		4.5		5.8	6		
11/19/2016	7.1	6.1		7.8	7	9.3	6.5
1/17/2017	5.8	5.4		8.4			5.9
1/18/2017					6.7	8.5	
3/22/2017	4.9						5.1
3/23/2017		5.1		6.8	6	8.5	
5/24/2017	5.9	5.5		7.9	7.4	11	5.9
10/16/2017	5.7	6.1		7.7	6.6	9.7	5.6
3/28/2018	5.7		6.7	7.9	6.5	8.8	
3/29/2018							5.3
6/2/2018	4.7		5.8	7.7	6.1	8.3	4.6
11/8/2018	5.6			8.5	6.6		
11/9/2018			7.2			9.7	4.9
2/11/2019	4.84				6.31	8.84	
2/12/2019			8.4	7.89			4.72
4/17/2019	4.99		8.03	7.71	6.68	9.24	
4/18/2019							4.64
9/27/2019	5.08		8.37				5.02
9/30/2019				7.07	5.45	8.59	
4/14/2020	4.91		7.57	8.75	5.93	8.71	4.68
10/30/2020	5.55		7.59	9.58	6.49	8.93	
11/2/2020							4.91
3/17/2021					7.55	9.6	
3/26/2021	5.92		6.21	8.32			8.5
10/5/2021	6.21				14.3		10.3
10/6/2021			16.4	6.8		5.44	
3/16/2022	7.85		11.5	7.94	17.9	10.6	13
10/5/2022	6.75			6.04	8.84		
10/6/2022						9.04	12.7
4/20/2023	5.22		9.6	5.36			
4/21/2023					6.78	11.3	8.95
10/24/2023	6.29		10				8.57
10/25/2023				5.5	7.6	11.3	
3/20/2024	6.17					9	
3/21/2024			9.52	5.21	8.17		8.37

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.002	<0.0025		<0.002	0.0015 (J)	0.0012 (J)	<0.002
5/17/2016	<0.002				<0.002	<0.002	<0.002
5/18/2016		<0.0025		<0.002			
7/12/2016	<0.002						<0.002
7/13/2016		0.0028		0.003	0.0015 (J)	0.0024 (J)	
9/13/2016	<0.002					<0.002	<0.002
9/14/2016		0.0014 (J)		<0.002	<0.002		
11/19/2016	<0.002	<0.0025		<0.002	0.0011 (J)	<0.002	<0.002
1/17/2017	<0.002	<0.0025		<0.002			<0.002
1/18/2017					<0.002	<0.002	
3/22/2017	<0.002						<0.002
3/23/2017		<0.0025		<0.002	<0.002	<0.002	
5/24/2017	<0.002	<0.0025		<0.002	<0.002	<0.002	<0.002
3/28/2018	<0.002		<0.002	<0.002	<0.002	0.005	
3/29/2018							<0.002
6/2/2018	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
11/8/2018	<0.002			<0.002	<0.002		
11/9/2018			<0.002			<0.002	<0.002
2/11/2019	<0.002				<0.002	<0.002	
2/12/2019			<0.002	0.00165 (J)			<0.002
4/17/2019	<0.002		<0.002	<0.002	<0.002	<0.002	
4/18/2019							<0.002
9/27/2019	0.00286		0.00284				0.00206 (J)
9/30/2019				<0.002	<0.002	<0.002	
2/21/2020	<0.002		<0.002	<0.002			<0.002
2/22/2020					<0.002	<0.002	
10/30/2020	<0.002		<0.002	<0.002	<0.002	<0.002	
11/2/2020							<0.002
3/17/2021					<0.002	<0.002	
3/26/2021	<0.002		<0.002	<0.002			<0.002
10/5/2021	<0.002				<0.002		<0.002
10/6/2021			<0.002	<0.002		<0.002	
3/16/2022	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
10/5/2022	<0.002			0.0191	<0.002		
10/6/2022						<0.002	<0.002
4/20/2023	<0.002		<0.002	<0.002			
4/21/2023					<0.002	<0.002	<0.002
10/24/2023	<0.002		<0.002				<0.002
10/25/2023				<0.002	<0.002	<0.002	
3/20/2024	<0.002					<0.002	
3/21/2024			<0.002	<0.002	<0.002		<0.002

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.0025	0.00048 (J)		0.0055	0.00094 (J)	<0.0005	0.0011 (J)
5/17/2016	0.00099 (J)				0.0007 (J)	<0.0005	0.001 (J)
5/18/2016		<0.0025		0.0059			
7/12/2016	0.00093 (J)						0.00091 (J)
7/13/2016		0.001 (J)		0.0048	0.0016 (J)	0.00042 (J)	
9/13/2016	0.0011 (J)					<0.0005	0.001 (J)
9/14/2016		0.00051 (J)		0.0063	0.0011 (J)		
11/19/2016	0.001 (J)	0.0005 (J)		0.0056	0.0012 (J)	<0.0005	0.00083 (J)
1/17/2017	0.00088 (J)	0.00049 (J)		0.0046			0.00091 (J)
1/18/2017					0.0011 (J)	<0.0005	
3/22/2017	0.001 (J)						0.00098 (J)
3/23/2017		0.00057 (J)		0.0049	0.0011 (J)	<0.0005	
5/24/2017	0.00093 (J)	0.00057 (J)		0.0052	0.0012 (J)	<0.0005	0.00098 (J)
3/28/2018	0.00092 (J)		0.00098 (J)	0.0063	0.00095 (J)	<0.0005	
3/29/2018							0.00063 (J)
6/2/2018	0.001 (J)		0.0009 (J)	0.0068	0.0012 (J)	<0.0005	0.00087 (J)
11/8/2018	0.001 (J)			0.0068	0.0011 (J)		
11/9/2018			0.00075 (J)			<0.0005	0.00076 (J)
2/11/2019	0.000768 (J)				0.00093 (J)	<0.0005	
2/12/2019			0.000896 (J)	0.00552			0.000661 (J)
4/17/2019	0.000825 (J)		0.00106 (J)	0.00603	0.00116 (J)	<0.0005	
4/18/2019							0.000705 (J)
9/27/2019	0.000783 (J)		0.000885 (J)				0.00071 (J)
9/30/2019				0.0062	0.001 (J)	<0.0005	
2/21/2020	0.00073 (J)		0.000909 (J)	0.00576			0.000634 (J)
2/22/2020					0.000907 (J)	<0.0005	
4/14/2020	0.000853 (J)		0.000899 (J)	0.00633	0.00105 (J)	<0.0005	0.000684 (J)
10/30/2020	0.000924 (J)		0.000972 (J)	0.00657	0.00102 (J)	<0.0005	
11/2/2020							0.000729 (J)
3/17/2021					0.00208	<0.0005	
3/26/2021	0.000961		0.000744	0.00339			0.000995
10/5/2021	0.00143				0.00187		0.00112
10/6/2021			<0.0005	0.00336		0.000802	
3/16/2022	0.00177		0.000658	0.00289	0.00182	0.000967	0.00141
10/5/2022	0.002			0.00821	0.00121		
10/6/2022						0.00143	0.00548
4/20/2023	0.00142		0.000995	0.0083			
4/21/2023					0.00142	0.00275	0.00216
10/24/2023	0.00123		0.000565				0.00143
10/25/2023				0.0092	0.00187	0.000885	
3/20/2024	0.00128					0.00131	
3/21/2024			0.000677	0.00945	0.0016		0.00186

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<5	<5		<5	<5	0.549	<5
5/17/2016	0.813				<5	0.551	<5
5/18/2016		0.471		<5			
7/12/2016	-0.00163 (U)						0.165 (U)
7/13/2016		0.401		0.27 (U)	0.0365 (U)	0.859	
9/13/2016	0.41 (U)					0.367 (U)	0.341 (U)
9/14/2016		-0.033 (U)		-0.0909 (U)	0.3 (U)		
11/19/2016	0.783	0.358		0.416	<5 (U)	<5 (U)	<5 (U)
1/17/2017	0.613	0.799		0.412 (U)			0.124 (U)
1/18/2017					0.235 (U)	0.289 (U)	
3/22/2017	0.241 (U)						0.0719 (U)
3/23/2017		0.182 (U)		0.0761 (U)	0.168 (U)	0.554	
5/24/2017	0.325	0.404		0.0415 (U)	-0.0607 (U)	0.831	0.441
3/28/2018	0.318 (U)		0.629	0.398	0.42	0.458	
3/29/2018							0.731
6/2/2018	0.222 (U)		-0.478 (U)	-0.253 (U)	0.0844 (U)	0.226 (U)	0.303 (U)
11/8/2018	0.117 (U)			0.343 (U)	0.367 (U)		
11/9/2018			0.179 (U)			0.298 (U)	0.00226 (U)
2/11/2019	0.493				0.0402 (U)	0.15 (U)	
2/12/2019			0.432	0.581			0.094 (U)
4/17/2019	0.729		0.648	0.646	0.493	0.326 (U)	
4/18/2019							0.48
9/27/2019	0.36 (U)		0.422 (U)				0.497
9/30/2019				1	0.404		
2/21/2020	0.268 (U)		0.23 (U)	0.126 (U)			0.375
2/22/2020					0.53	0.47	
4/14/2020	0.324 (U)		0.307 (U)	0.338	0.0408 (U)	0.376 (U)	0.329 (U)
10/30/2020	0.497		1.02	0.485	0.344	0.528	
11/2/2020							0.535
3/17/2021					0.312 (U)	0.0889 (U)	
3/26/2021	0.804		0.526	0.78			0.813
10/5/2021	1.53				1.06		0.814
10/6/2021			0.937	0.503		0.931	
3/16/2022	1.13		0.458	0.286 (U)	0.314 (U)	1.39	1.39
10/21/2022	0.946			1.29	0.562 (U)	1.36	2.03
4/20/2023	0.647		0.935	0.884			
4/21/2023					0.158 (U)	1.73	0.802
10/24/2023	0.563		0.521				0.7
10/25/2023				0.857	0.472 (U)	1.49	
3/20/2024	0.968					0.758	
3/21/2024			1.11	0.926	0.754		0.606

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.1	<0.1		<0.1	0.04 (J)	0.06 (J)	<0.1
5/17/2016	<0.1				0.04 (J)	0.07 (J)	<0.1
5/18/2016		<0.1		<0.1			
7/12/2016	<0.1						<0.1
7/13/2016		<0.1		<0.1	0.05 (J)	0.08 (J)	
9/13/2016	<0.1					0.06 (J)	<0.1
9/14/2016		<0.1		<0.1	0.04 (J)		
11/19/2016	<0.1	<0.1		<0.1	0.04 (J)	0.06 (J)	<0.1
1/17/2017	<0.1	<0.1		<0.1			<0.1
1/18/2017					<0.1	0.05 (J)	
3/22/2017	<0.1						<0.1
3/23/2017		<0.1		<0.1	<0.1	0.05 (J)	
5/24/2017	<0.1	<0.1		<0.1	0.04 (J)	0.06 (J)	<0.1 (D)
10/16/2017	<0.1	<0.1		<0.1	<0.1	0.06 (J)	<0.1
3/28/2018	<0.1		<0.1	<0.1	0.04 (J)	0.06 (J)	
3/29/2018							<0.1
6/2/2018	<0.1		<0.1	<0.1	0.05 (J)	0.06 (J)	<0.1
11/8/2018	<0.1			<0.1	0.05 (J)		
11/9/2018			<0.1			0.06 (J)	<0.1
2/11/2019	<0.1				<0.1	0.0368 (J)	
2/12/2019			<0.1	<0.1			<0.1
4/17/2019	<0.1		<0.1	<0.1	0.033 (J)	0.0421 (J)	
4/18/2019							<0.1
9/27/2019	<0.1		0.0313 (J)				<0.1
9/30/2019				<0.1	<0.1	0.045 (J)	
2/21/2020	<0.1		<0.1	<0.1			<0.1
2/22/2020					0.0317 (J)	0.0434 (J)	
4/14/2020	0.0532 (J)		0.0537 (J)	0.034 (J)	0.0508 (J)	0.059 (J)	0.0415 (J)
10/30/2020	<0.1		<0.1	<0.1	<0.1	<0.1	
11/2/2020							<0.1
3/17/2021					0.0544 (J)	0.0575 (J)	
3/26/2021	<0.1		<0.1	<0.1			<0.1
10/5/2021	0.0499 (J)				0.0505 (J)		<0.1
10/6/2021			<0.1	<0.1		0.0725 (J)	
3/16/2022	<0.1		<0.1	0.0307 (J)	0.0462 (J)	0.176	0.0266 (J)
10/5/2022	<0.1			<0.1	0.0322 (J)		
10/6/2022						0.0972 (J)	<0.1
4/20/2023	<0.1		0.0278 (J)	<0.1			
4/21/2023					0.0441 (J)	0.0665 (J)	<0.1
10/24/2023	<0.1		0.0276 (J)				<0.1
10/25/2023				<0.1	0.0393 (J)	0.0858 (J)	
3/20/2024	0.0436 (J)					0.11	
3/21/2024			0.0515 (J)	0.0537 (J)	0.0578 (J)		0.0292 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.001	<0.0013		<0.001	0.00039 (J)	<0.001	<0.001
5/17/2016	<0.001				<0.001	<0.001	<0.001
5/18/2016		<0.0013		<0.001			
7/12/2016	<0.001						<0.001
7/13/2016		<0.0013		<0.001	<0.001	<0.001	
9/13/2016	<0.001					<0.001	<0.001
9/14/2016		<0.0013		0.00056 (J)	<0.001		
11/19/2016	<0.001	<0.0013		<0.001	0.00042 (J)	<0.001	<0.001
1/17/2017	<0.001	<0.0013		<0.001			<0.001
1/18/2017					<0.001	<0.001	
3/22/2017	<0.001						<0.001
3/23/2017		<0.0013		0.00038 (J)	<0.001	<0.001	
5/24/2017	<0.001	<0.0013		0.00036 (J)	<0.001	<0.001	<0.001
3/28/2018	<0.001		<0.001	<0.001	<0.001	<0.001	
3/29/2018							<0.001
11/8/2018	<0.001			<0.001	<0.001		
11/9/2018			<0.001			<0.001	<0.001
2/11/2019	<0.001				<0.001	<0.001	
2/12/2019			<0.001	0.000139 (J)			<0.001
4/17/2019	<0.001		<0.001	<0.001	<0.001	<0.001	
4/18/2019							<0.001
9/27/2019	<0.001		<0.001				0.000129 (J)
9/30/2019				0.000322 (J)	0.000191 (J)	0.000152 (J)	
2/21/2020	<0.001		<0.001	0.00015 (J)			<0.001
2/22/2020					<0.001	<0.001	
4/14/2020	<0.001		<0.001	0.000236 (J)	<0.001	<0.001	<0.001
10/30/2020	<0.001		<0.001	0.000136 (J)	<0.001	<0.001	
11/2/2020							<0.001
3/17/2021					0.000153 (J)	<0.001	
3/26/2021	<0.001		<0.001	0.000145 (J)			<0.001
10/5/2021	<0.001				<0.001		<0.001
10/6/2021			<0.001	<0.001		<0.001	
3/16/2022	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
10/5/2022	<0.001			<0.001	<0.001		
10/6/2022						<0.001	<0.001
4/20/2023	<0.001		<0.001	<0.001			
4/21/2023					<0.001	<0.001	<0.001
10/24/2023	<0.001		<0.001				<0.001
10/25/2023				<0.001	<0.001	<0.001	
3/20/2024	<0.001					<0.001	
3/21/2024			<0.001	<0.001	<0.001		<0.001

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.005	<0.005		<0.005	0.044	0.17	<0.005
5/17/2016	0.0037 (J)				0.028	0.2	<0.005
5/18/2016		<0.005		<0.005			
7/12/2016	0.012 (o)						<0.005
7/13/2016		<0.005		<0.005	0.026	0.17	
9/13/2016	<0.005					0.17	<0.005
9/14/2016		<0.005		<0.005	0.026		
11/19/2016	<0.005	<0.005		<0.005	0.026	0.18	0.0035 (J)
1/17/2017	<0.005	<0.005		<0.005			<0.005
1/18/2017					0.027	0.2	
3/22/2017	<0.005						<0.005
3/23/2017		<0.005		<0.005	0.024	0.19	
5/24/2017	<0.005	<0.005		<0.005	0.027	0.21	<0.005
3/28/2018	<0.005		0.0026 (J)	0.0023 (J)	0.021	0.23	
3/29/2018							0.0026 (J)
6/2/2018	0.0017 (J)		0.0021 (J)	0.002 (J)	0.022	0.19	0.0029 (J)
11/8/2018	0.0023 (J)			0.0024 (J)	0.025		
11/9/2018			0.0024 (J)			0.18	0.0027 (J)
2/11/2019	<0.005				0.0229	0.161	
2/12/2019			<0.005	<0.005			<0.005
4/17/2019	0.00229 (J)		0.00191 (J)	0.00197 (J)	0.0236	0.174	
4/18/2019							0.00238 (J)
9/27/2019	0.00346 (J)		<0.005				0.00375 (J)
9/30/2019				0.00687	0.0249	0.166	
2/21/2020	<0.005		<0.005	<0.005			<0.005
2/22/2020					0.0211	0.169	
4/14/2020	0.00505		<0.005	<0.005	0.0224	0.192	<0.005
10/30/2020	<0.005		<0.005	<0.005	0.0267	0.194	
11/2/2020							<0.005
3/17/2021					0.0174	0.12	
3/26/2021	<0.005		<0.005	<0.005			<0.005
10/5/2021	<0.005				0.0127		0.0045 (J)
10/6/2021			<0.005	<0.005		0.0994	
3/16/2022	0.00171 (J)		0.00165 (J)	0.0038 (J)	0.0112	0.0629	0.00437 (J)
10/5/2022	<0.005			0.00322 (J)	0.00676		
10/6/2022						0.0534	0.0123
4/20/2023	<0.005		0.00235 (J)	0.00309 (J)			
4/21/2023					0.0091	0.0564	0.0107
10/24/2023	<0.005		<0.005				0.00555
10/25/2023				0.0033 (J)	0.0123	0.0679	
3/20/2024	0.00133 (J)					0.0786	
3/21/2024			0.00174 (J)	0.00355 (J)	0.013		0.0037 (J)

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.0002	<0.0002		8.4E-05 (JB)	7.3E-05 (JB)	7.4E-05 (JB)	7.1E-05 (JB)
5/17/2016	<0.0002				<0.0002	<0.0002	<0.0002
5/18/2016		<0.0002		<0.0002			
7/12/2016	<0.0002						<0.0002
7/13/2016		<0.0002		<0.0002	<0.0002	<0.0002	
9/13/2016	<0.0002					<0.0002	<0.0002
9/14/2016		<0.0002		<0.0002	<0.0002		
11/19/2016	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
1/17/2017	<0.0002	<0.0002		<0.0002			<0.0002
1/18/2017					<0.0002	<0.0002	
3/22/2017	0.00011 (J)						<0.0002
3/23/2017		0.00013 (J)		0.00013 (J)	0.00013 (J)	<0.0002	
5/24/2017	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
3/28/2018	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	
3/29/2018							<0.0002
2/11/2019	<0.0002				<0.0002	<0.0002	
2/12/2019			<0.0002	<0.0002			<0.0002
4/17/2019	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	
4/18/2019							<0.0002
2/21/2020	<0.0002		<0.0002	<0.0002			<0.0002
2/22/2020					<0.0002	<0.0002	
10/30/2020	<0.0002		<0.0002	0.000497	<0.0002	<0.0002	
11/2/2020							<0.0002
3/17/2021					<0.0002	<0.0002	
3/26/2021	<0.0002		<0.0002	<0.0002			0.000235
10/5/2021	<0.0002				<0.0002		0.000151 (J)
10/6/2021			<0.0002	<0.0002		<0.0002	
3/16/2022	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	0.0012
10/5/2022	<0.0002			<0.0002	<0.0002		
10/6/2022						<0.0002	<0.0002
4/20/2023	<0.0002		<0.0002	<0.0002			
4/21/2023					<0.0002	<0.0002	<0.0002
10/24/2023	<0.0002		<0.0002				<0.0002
10/25/2023				<0.0002	<0.0002	<0.0002	
3/20/2024	0.000141 (J)					0.000134 (J)	
3/21/2024			0.00015 (J)	0.000133 (J)	0.000135 (J)		0.000143 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.005	0.0019 (J)		<0.005	<0.005	0.0026 (J)	<0.005
5/17/2016	<0.005				<0.005	0.0011 (J)	<0.005
5/18/2016		0.00096 (J)		<0.005			
7/12/2016	<0.005						<0.005
7/13/2016		0.0017 (J)		<0.005	<0.005	0.0079 (J)	
9/13/2016	<0.005					0.0038 (J)	<0.005
9/14/2016		0.0018 (J)		<0.005	<0.005		
11/19/2016	<0.005	<0.015		<0.005	<0.005	0.0014 (J)	<0.005
1/17/2017	<0.005	<0.015		<0.005			<0.005
1/18/2017					<0.005	0.001 (J)	
3/22/2017	<0.005						0.0038 (J)
3/23/2017		<0.015		<0.005	<0.005	<0.015	
5/24/2017	<0.005	<0.015		<0.005	<0.005	0.0014 (J)	<0.005
3/28/2018	<0.005		<0.005	<0.005	<0.005	<0.015	
3/29/2018							<0.005
11/8/2018	<0.005			<0.005	<0.005		
11/9/2018			<0.005			<0.015	<0.005
2/11/2019	<0.005				<0.005	<0.015	
2/12/2019			<0.005	<0.005			<0.005
4/17/2019	<0.005		<0.005	<0.005	<0.005	<0.015	
4/18/2019							<0.005
2/21/2020	<0.005		<0.005	<0.005			<0.005
2/22/2020					0.000616 (J)	0.000627 (J)	
4/14/2020	<0.005		<0.005	<0.005	<0.005	0.000747 (J)	<0.005
10/30/2020	<0.005		<0.005	<0.005	<0.005	<0.015	
11/2/2020							<0.005
3/17/2021					0.0032 (J)	0.00328 (J)	
3/26/2021	<0.005		<0.005	<0.005			<0.005
10/5/2021	<0.005				0.00109 (J)		<0.005
10/6/2021			<0.005	<0.005		0.00364 (J)	
3/16/2022	<0.005		<0.005	<0.005	0.000916 (J)	0.00533	<0.005
10/5/2022	<0.005			<0.005	0.000939 (J)		
10/6/2022						0.00424 (J)	<0.005
4/20/2023	<0.005		<0.005	<0.005			
4/21/2023					0.00109 (J)	0.00651	<0.005
10/24/2023	<0.005		<0.005				<0.005
10/25/2023				<0.005	<0.005	0.0036 (J)	
3/20/2024	<0.005					0.00366 (J)	
3/21/2024			<0.005	<0.005	0.000937 (J)		<0.005

Time Series

Constituent: pH (SU) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	5.12	5.52		5.05	5.38	6.64	4.89
5/17/2016	5.23				5.32	6.52	4.92
5/18/2016		5.24		4.86			
7/12/2016	5.77						4.93
7/13/2016		5.17		5.11	5.31	6.63	
9/13/2016	4.98					6.46	4.76
9/14/2016		5.04		4.84	5.21		
11/19/2016	4.82	4.88		4.74	5.12	6.38	4.56
1/17/2017	5.04	5.04		4.95			4.86
1/18/2017					5.22	6.47	
3/22/2017	4.73						4.66
3/23/2017		4.66		4.66	5.01	6.19	
5/24/2017	5.01	4.93		4.86	5.19	6.34	4.83
10/16/2017	4.59	4.65		4.47	4.96	6.23	4.53
3/28/2018	4.87		5.39	4.93	5.23	6.22	
3/29/2018							4.87
6/2/2018	4.92		5.06	4.83	5.22	6.24	4.87
11/8/2018	5			4.83	5.29		
11/9/2018			4.92			6.27	4.92
2/11/2019	4.7				5	6.08	
2/12/2019			4.86	4.65			4.79
4/17/2019	4.9		4.79	4.71	5.13	6.14	
4/18/2019							4.9
2/21/2020	4.86		4.73	4.55			4.8
2/22/2020					5.3	6.13	
4/14/2020	5.23		4.87	4.7	5.45	6.26	4.94
10/30/2020	5		4.87	4.8	5.32	6.19	
11/2/2020							4.92
3/17/2021					5.62	6.14	
3/26/2021	4.86		4.7	4.54			4.67
10/5/2021	5				5.72		4.84
10/6/2021			4.77	4.63		6.03	
3/16/2022	4.92		4.91	4.64	5.56	6.2	4.75
10/5/2022	4.91			4.51	5.57		
10/6/2022						6.27	4.71
4/20/2023	4.89		4.83	4.49			
4/21/2023					5.45	6.09	4.95
10/24/2023	4.99		4.98				4.91
10/25/2023				4.43	5.42	6.11	
3/20/2024	4.93					6.2	
3/21/2024			4.86	4.39	5.47		4.89

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.005	0.00041 (J)		0.00033 (J)	<0.005	<0.005	<0.005
5/17/2016	<0.005				<0.005	<0.005	0.00026 (J)
5/18/2016		<0.0013		<0.005			
7/12/2016	<0.005						<0.005
7/13/2016		<0.0013		0.00041 (J)	<0.005	<0.005	
9/13/2016	<0.005					<0.005	0.00031 (J)
9/14/2016		<0.0013		0.00079 (J)	<0.005		
11/19/2016	<0.005	<0.0013		<0.005	<0.005	<0.005	<0.005
1/17/2017	<0.005	<0.0013		<0.005			<0.005
1/18/2017					<0.005	<0.005	
3/22/2017	<0.005						0.0021
3/23/2017		<0.0013		<0.005	<0.005	<0.005	
5/24/2017	<0.005	0.00026 (J)		0.00028 (J)	<0.005	0.00033 (J)	0.00026 (J)
3/28/2018	<0.005		0.00024 (J)	0.00038 (J)	<0.005	<0.005	
3/29/2018							0.00036 (J)
6/2/2018	0.00064 (J)		<0.005	0.00031 (J)	<0.005	<0.005	<0.005
11/8/2018	0.0025			0.00088 (J)	<0.005		
11/9/2018			0.00098 (J)			<0.005	<0.005
2/11/2019	<0.005				<0.005	<0.005	
2/12/2019			<0.005	<0.005			<0.005
4/17/2019	<0.005		<0.005	<0.005	<0.005	<0.005	
4/18/2019							<0.005
2/21/2020	<0.005		<0.005	<0.005			<0.005
2/22/2020					<0.005	<0.005	
10/30/2020	<0.005		<0.005	<0.005	<0.005	<0.005	
11/2/2020							<0.005
3/17/2021					<0.005	<0.005	
3/26/2021	<0.005		<0.005	<0.005			<0.005
10/5/2021	<0.005				<0.005		<0.005
10/6/2021			<0.005	<0.005		<0.005	
3/16/2022	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
10/5/2022	<0.005			<0.005	<0.005		
10/6/2022						<0.005	<0.005
4/20/2023	<0.005		<0.005	<0.005			
4/21/2023					<0.005	<0.005	<0.005
10/24/2023	<0.005		<0.005				<0.005
10/25/2023				<0.005	<0.005	<0.005	
3/20/2024	<0.005					<0.005	
3/21/2024			<0.005	<0.005	<0.005		<0.005

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<5	<5		<5	2.3 (J)	4.5 (J)	<5
5/17/2016	<5				2.3 (J)	17	<5
5/18/2016		<5		<5			
7/12/2016	<5						<5
7/13/2016		<5		1.5 (J)	2.4 (J)	15	
9/13/2016	<5					3.4 (J)	<5
9/14/2016		<5		1.6 (J)	2.4 (J)		
11/19/2016	<5	<5		1.8 (J)	3.3 (J)	3.5 (J)	1.5 (J)
1/17/2017	<5	<5		<5			<5
1/18/2017					2.3 (J)	3.2 (J)	
3/22/2017	<5						1.9 (J)
3/23/2017		1.8 (J)		2.3 (J)	3.2 (J)	3.7 (J)	
5/24/2017	<5	1.5 (J)		1.6 (J)	2.4 (J)	8.8	<5
10/16/2017	<5	<5		<5	2 (J)	4 (J)	<5
3/28/2018	<5		1.7 (J)	1.6 (J)	2.4 (J)	3.3 (J)	
3/29/2018							<5
6/2/2018	1.9 (J)		3 (J)	2.9 (J)	3.7 (J)	4.3 (J)	2.8 (J)
11/8/2018	<5			1.6 (J)	2.7 (J)		
11/9/2018			<5			2.3 (J)	<5
2/11/2019	0.774 (J)				2.5	2.64	
2/12/2019			1.97	1.97			1.35
4/17/2019	1.43		2.82	2.5	3.15	3.27	
4/18/2019							1.82
9/27/2019	1.03		2.19				1.22
9/30/2019				1.64	2.34	2.82	
4/14/2020	0.928 (J)		2.71	1.62	2.99	4.2	1.18
10/30/2020	0.91 (J)		3.97	1.44	2.84	4.76	
11/2/2020							1.08
3/17/2021					4.35	4.07	
3/26/2021	1.49		2.04	3.25			2
10/5/2021	1.13				5.02		2.55
10/6/2021			5.37	5.07		14.5	
3/16/2022	3.6		5.37	6.85	5.64	23.1	5.93
10/5/2022	1.34			6.07	4.12		
10/6/2022						19.5	61.4
4/20/2023	2.6		7.32	8.2			
4/21/2023					5	47.2	8.82
10/24/2023	1.8		7.68				2.11
10/25/2023				8.72	12.5	37.5	
3/20/2024	1.41					30	
3/21/2024			6.92	7.6	12.1		1.66

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.001	<0.0005		<0.001	<0.001	<0.001	<0.001
5/17/2016	<0.001				<0.001	<0.001	<0.001
5/18/2016		<0.0005		<0.001			
7/12/2016	<0.001						<0.001
7/13/2016		<0.0005		<0.001	<0.001	<0.001	
9/13/2016	<0.001					<0.001	<0.001
9/14/2016		<0.0005		9.5E-05 (J)	<0.001		
11/19/2016	<0.001	<0.0005		<0.001	<0.001	<0.001	<0.001
1/17/2017	<0.001	<0.0005		<0.001			<0.001
1/18/2017					<0.001	<0.001	
3/22/2017	<0.001						<0.001
3/23/2017		<0.0005		<0.001	<0.001	<0.001	
5/24/2017	<0.001	<0.0005		<0.001	<0.001	<0.001	<0.001
3/28/2018	<0.001		<0.001	<0.001	<0.001	<0.001	
3/29/2018							<0.001
11/8/2018	<0.001			8.5E-05 (J)	<0.001		
11/9/2018			<0.001			<0.001	<0.001
2/11/2019	<0.001				<0.001	<0.001	
2/12/2019			<0.001	<0.001			<0.001
4/17/2019	<0.001		<0.001	<0.001	<0.001	<0.001	
4/18/2019							<0.001
2/21/2020	<0.001		0.000486 (J)	0.000276 (J)			<0.001
2/22/2020					<0.001	<0.001	
4/14/2020	<0.001		<0.001	0.000158 (J)	<0.001	<0.001	<0.001
10/30/2020	<0.001		<0.001	<0.001	<0.001	<0.001	
11/2/2020							<0.001
3/17/2021					<0.001	<0.001	
3/26/2021	<0.001		<0.001	<0.001			<0.001
10/5/2021	<0.001				<0.001		0.000153 (J)
10/6/2021			<0.001	<0.001		<0.001	
3/16/2022	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
10/5/2022	<0.001			<0.001	<0.001		
10/6/2022						<0.001	<0.001
4/20/2023	<0.001		<0.001	<0.001			
4/21/2023					<0.001	<0.001	<0.001
10/24/2023	<0.001		<0.001				<0.001
10/25/2023				<0.001	<0.001	<0.001	
3/20/2024	0.000549 (J)					<0.001	
3/21/2024			<0.001	<0.001	<0.001		<0.001

Time Series

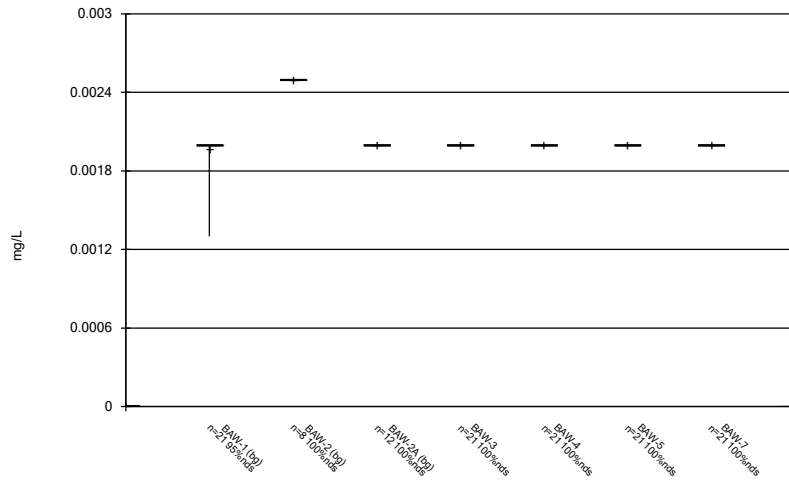
Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/2/2024 10:23 AM View: Descriptive

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	20	30		30	46	88	22
5/17/2016	24				52	110	30
5/18/2016		20		20			
7/12/2016	24						26
7/13/2016		40		40	36	120	
9/13/2016	18					92	28
9/14/2016		10		<10	38		
11/19/2016	20	28		22	50	94	38
1/17/2017	<10	14		14			10
1/18/2017					18	68	
3/22/2017	12						22
3/23/2017		16		28	32	80	
5/24/2017	16 (D)	12		18	32	90	22
10/16/2017	58	50		36	64	110	34
3/28/2018	18		30	36	56	86	
3/29/2018							50
6/2/2018	6		26	6	22	72	<10
11/8/2018	12			34	170		
11/9/2018			94			38	20
2/11/2019	<10				23	60	
2/12/2019			22	12			<10
4/17/2019	16		22	27	37	82	
4/18/2019							39
9/27/2019	26		25				<10
9/30/2019				<10	<10	55	
4/14/2020	25		38	31	30	77	24
10/30/2020	34		48	40	40	88	
11/2/2020							28
3/17/2021					44	79	
3/26/2021	24		24	37			38
10/5/2021	26				75		45
10/6/2021			61	30		114	
3/16/2022	30		26	26	66	133	37
10/5/2022	30			32	52		
10/6/2022						155	135
4/20/2023	26		30	31			
4/21/2023					50	204	47
10/24/2023	28		35				42
10/25/2023				19	47	161	
3/20/2024	29					164	
3/21/2024			38	31	64		40

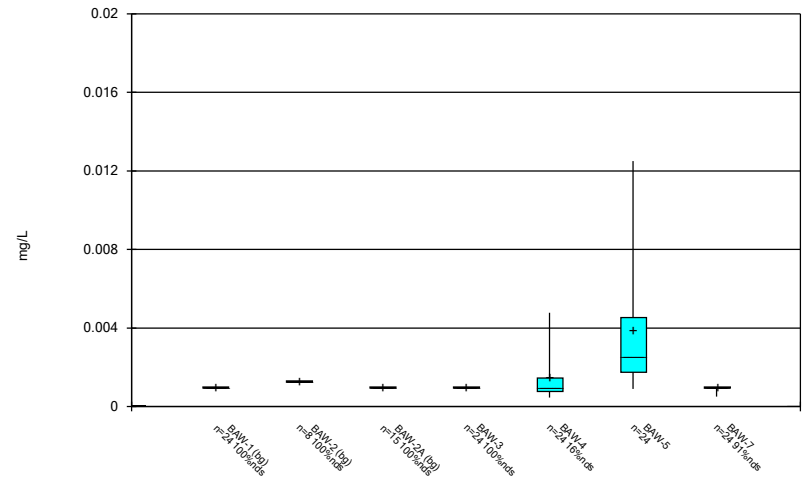
Box Plots

Box & Whiskers Plot



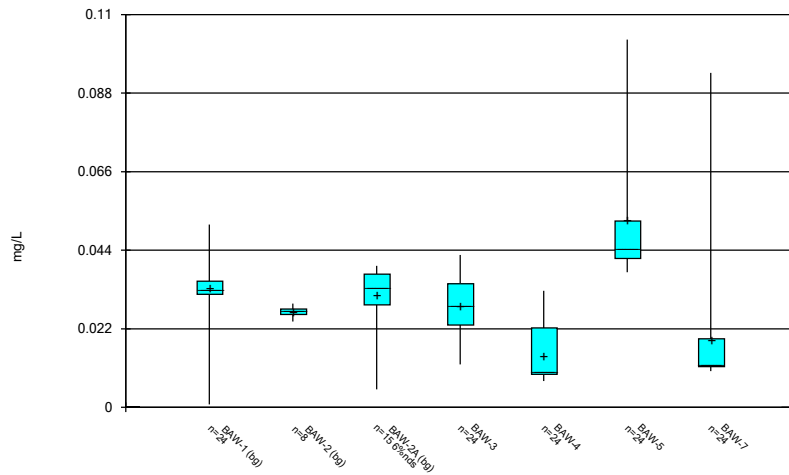
Constituent: Antimony Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



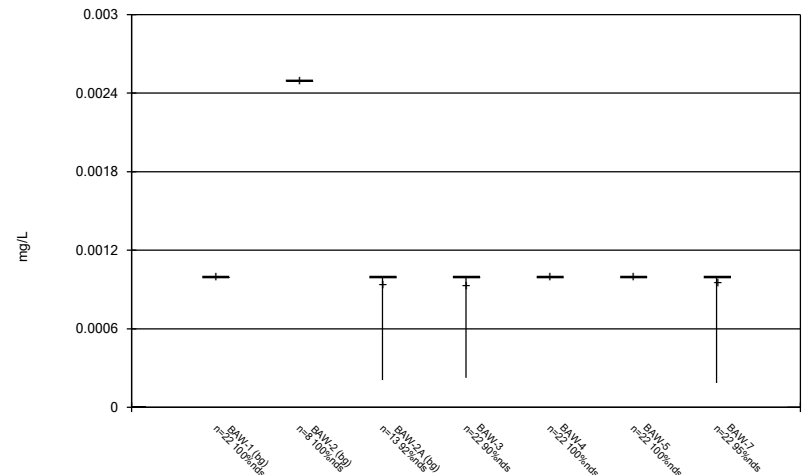
Constituent: Arsenic Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



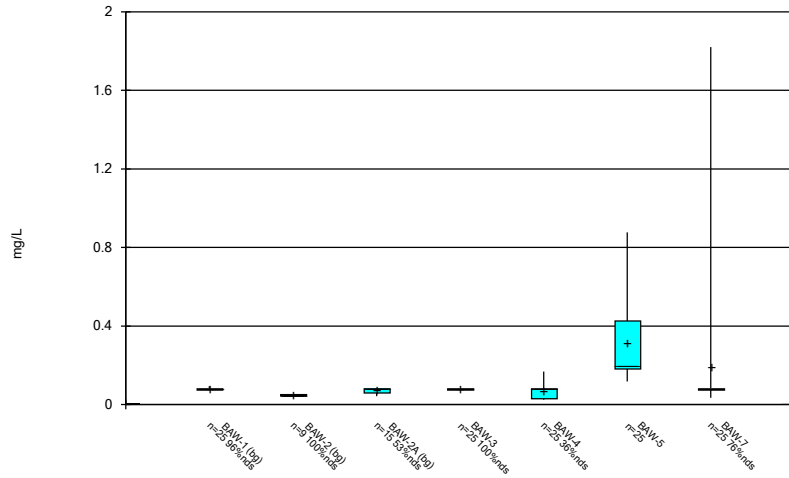
Constituent: Barium Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



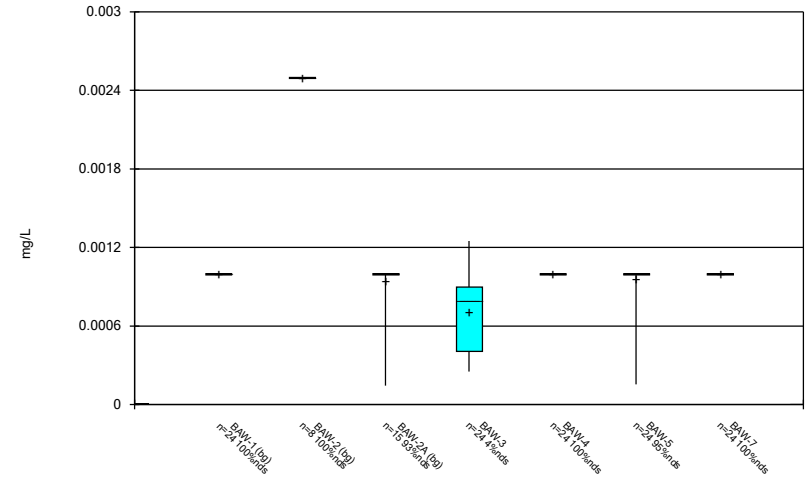
Constituent: Beryllium Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



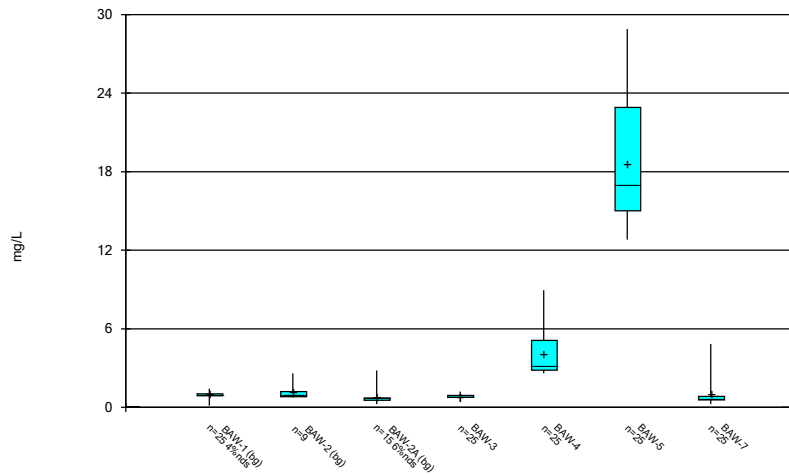
Constituent: Boron Analysis Run 5/2/2024 10:23 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



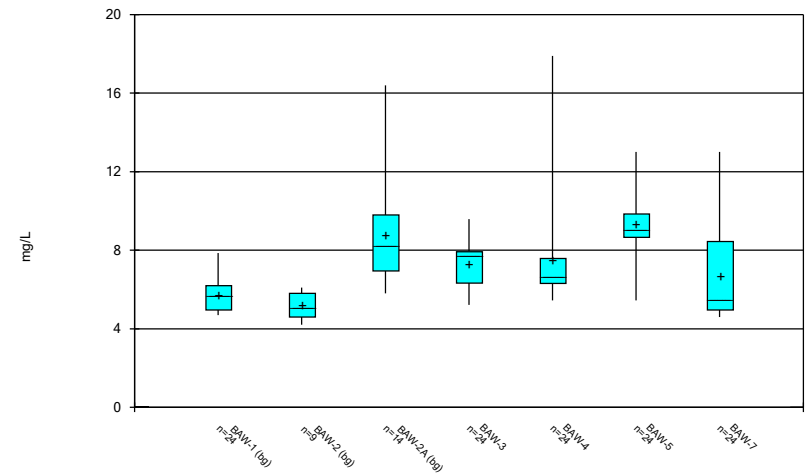
Constituent: Cadmium Analysis Run 5/2/2024 10:23 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



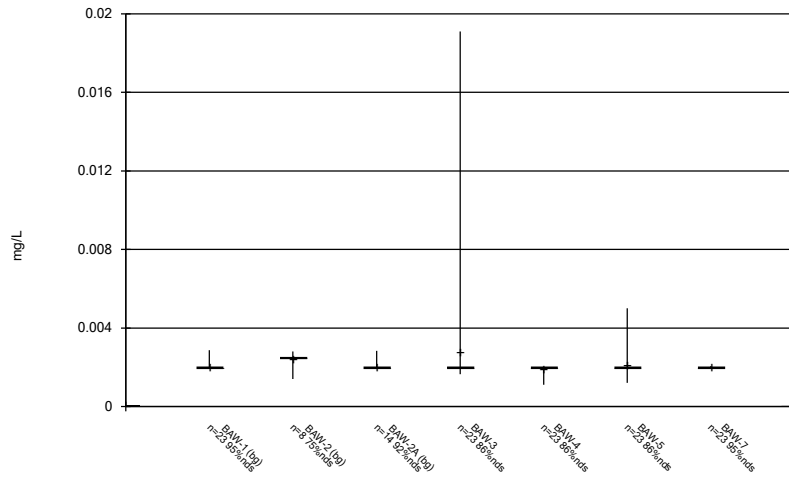
Constituent: Calcium Analysis Run 5/2/2024 10:23 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



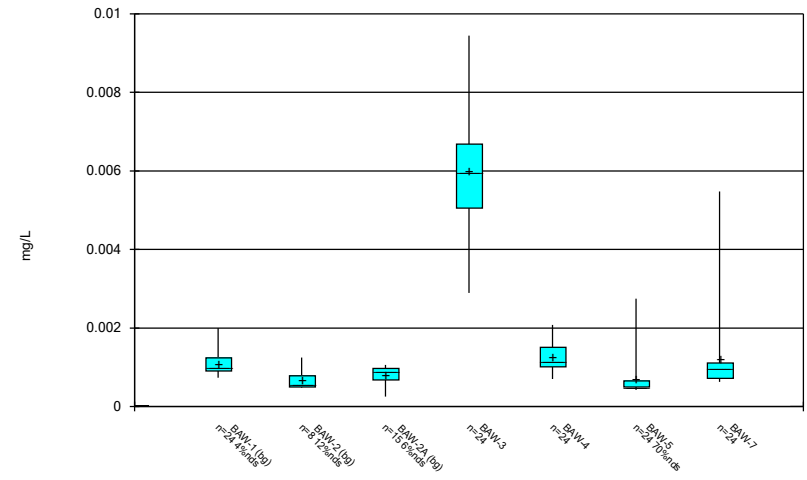
Constituent: Chloride Analysis Run 5/2/2024 10:23 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



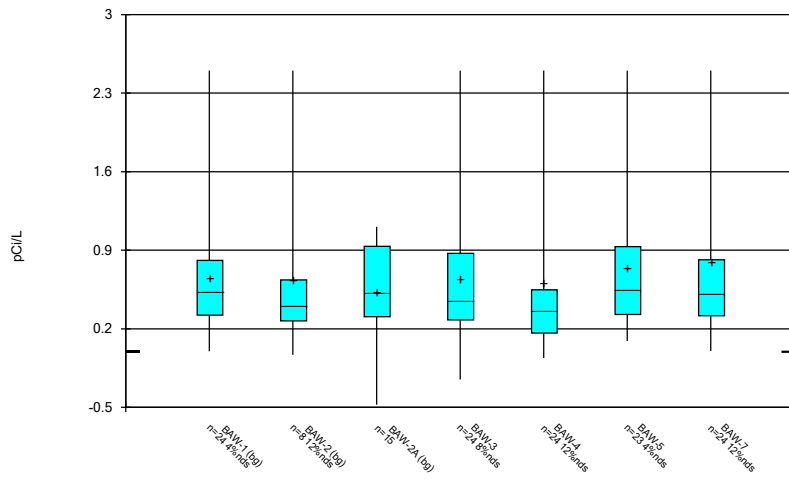
Constituent: Chromium Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



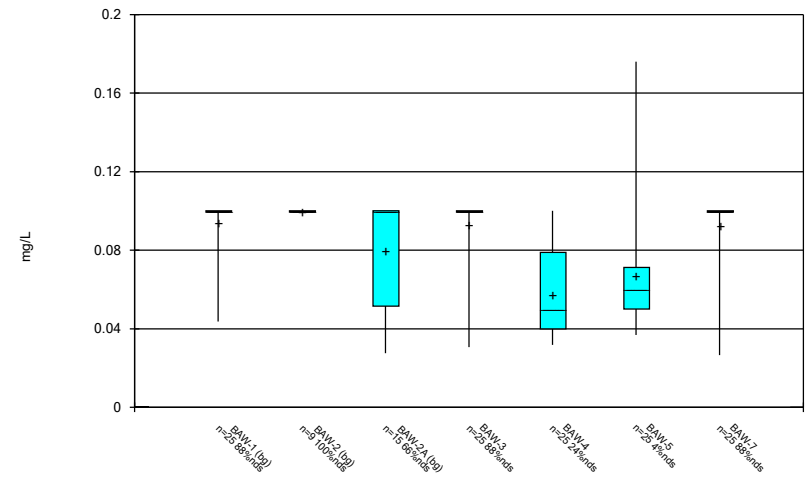
Constituent: Cobalt Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



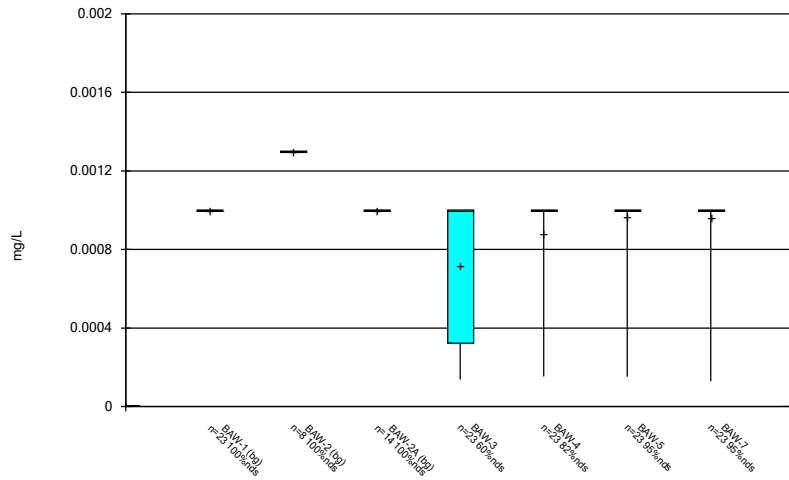
Constituent: Combined Radium 226 + 228 Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



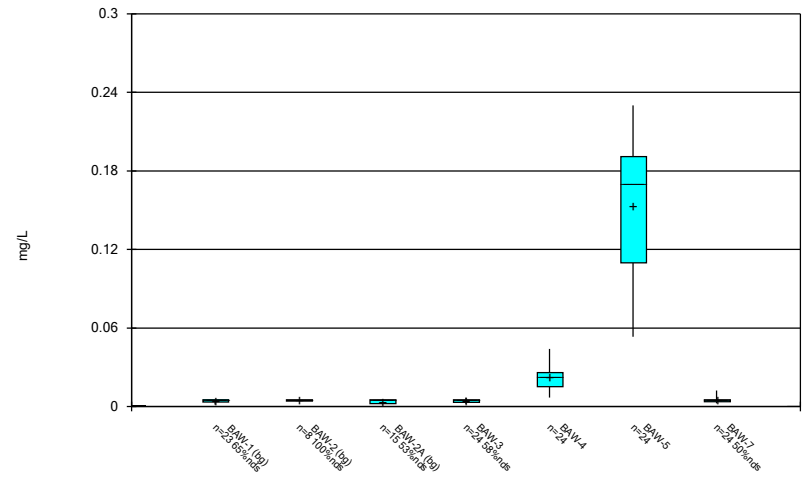
Constituent: Fluoride Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



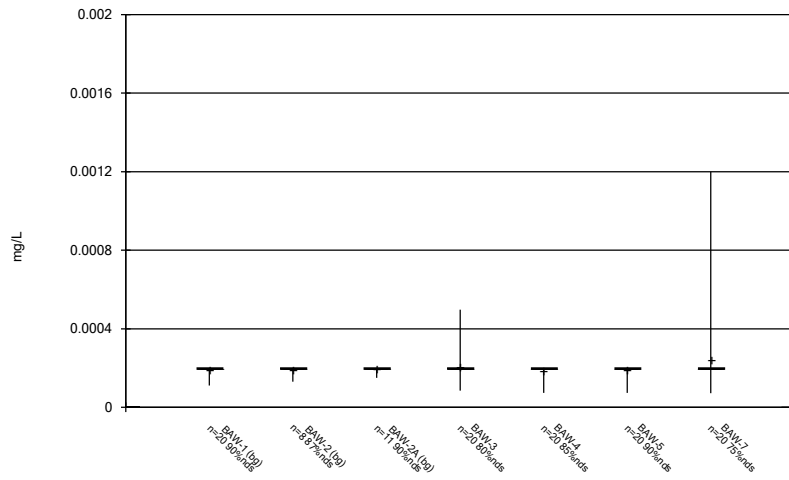
Constituent: Lead Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



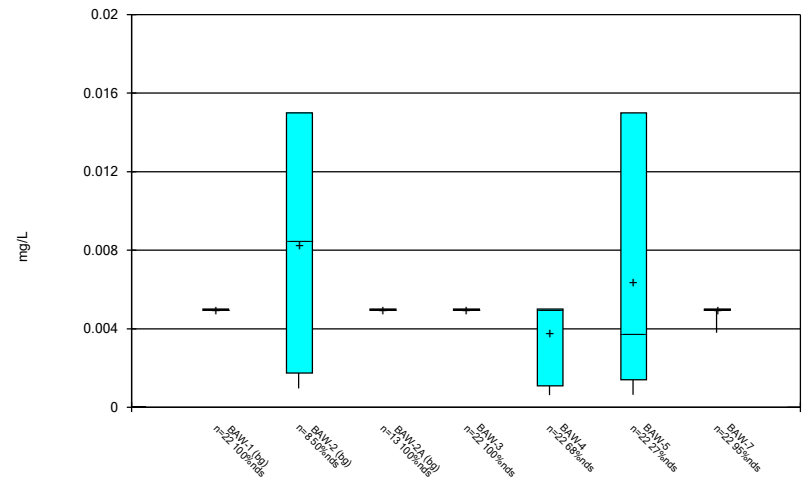
Constituent: Lithium Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



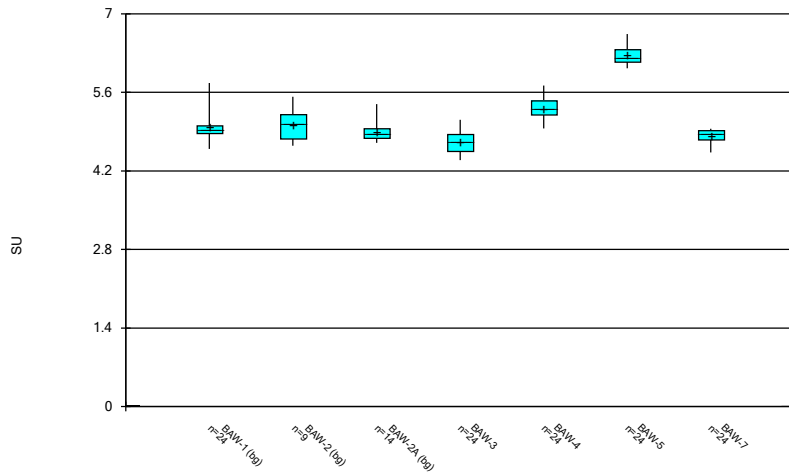
Constituent: Mercury Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



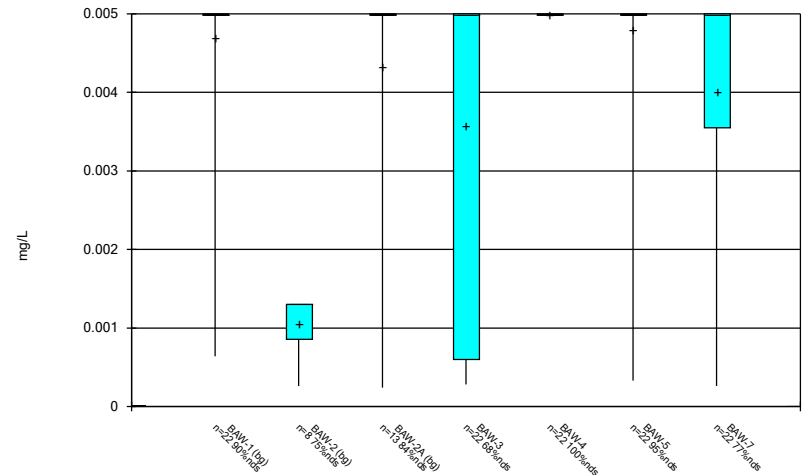
Constituent: Molybdenum Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



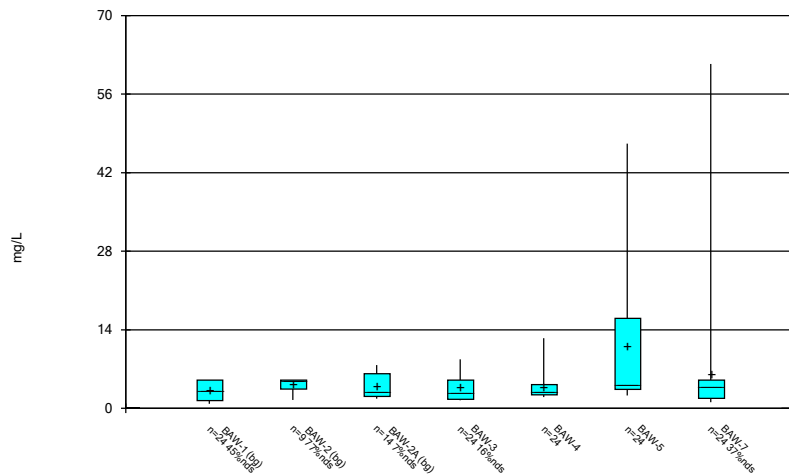
Constituent: pH Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



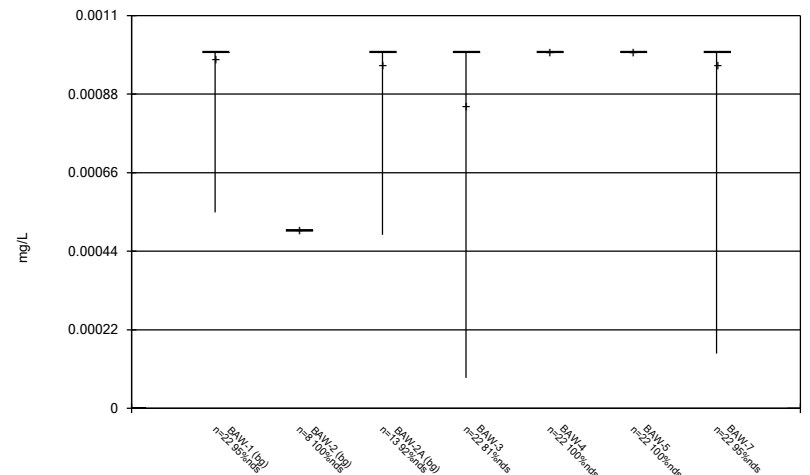
Constituent: Selenium Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



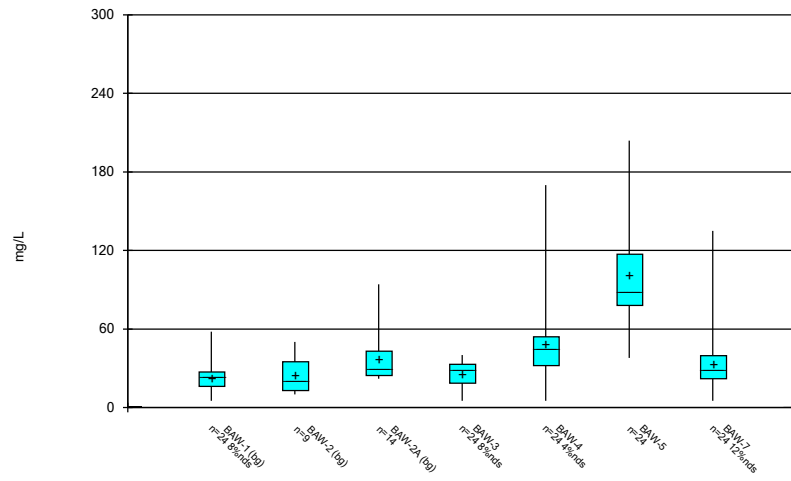
Constituent: Sulfate Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/2/2024 10:23 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/2/2024 10:23 AM View: Descriptive
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Outlier Summary

Outlier Summary

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:24 AM

BAW-1 Lithium (mg/L)

7/12/2016 0.012 (o)

Prediction Limits - Interwell

Interwell Prediction Limits - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:26 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg.N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BAW-4	0.0928	n/a	3/21/2024	0.115	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-5	0.0928	n/a	3/20/2024	0.686	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BAW-4	1.881	n/a	3/21/2024	7.31	Yes	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Calcium (mg/L)	BAW-5	1.881	n/a	3/20/2024	28.9	Yes	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Fluoride (mg/L)	BAW-5	0.1	n/a	3/20/2024	0.11	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
pH (SU)	BAW-3	5.77	4.59	3/21/2024	4.39	Yes	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
pH (SU)	BAW-5	5.77	4.59	3/20/2024	6.2	Yes	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-4	7.68	n/a	3/21/2024	12.1	Yes	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-5	7.68	n/a	3/20/2024	30	Yes	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BAW-4	57.17	n/a	3/21/2024	64	Yes	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-5	57.17	n/a	3/20/2024	164	Yes	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2

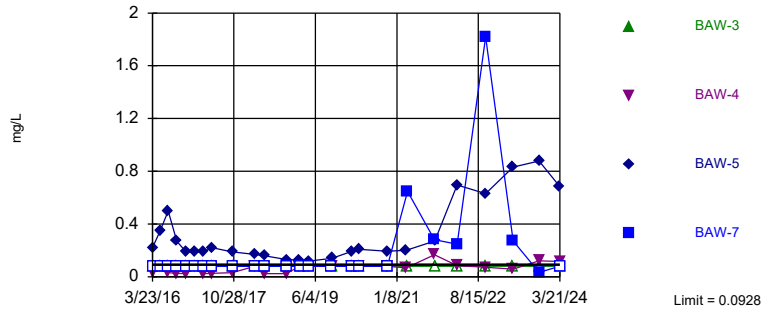
Interwell Prediction Limits - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:26 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BAW-3	0.0928	n/a	3/21/2024	0.08ND	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-4	0.0928	n/a	3/21/2024	0.115	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-5	0.0928	n/a	3/20/2024	0.686	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-7	0.0928	n/a	3/21/2024	0.08ND	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BAW-3	1.881	n/a	3/21/2024	0.818	No	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Calcium (mg/L)	BAW-4	1.881	n/a	3/21/2024	7.31	Yes	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Calcium (mg/L)	BAW-5	1.881	n/a	3/20/2024	28.9	Yes	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Calcium (mg/L)	BAW-7	1.881	n/a	3/21/2024	1.38	No	49	-0.159	0.4381	4.082	None	ln(x)	0.00188	Param Inter 1 of 2
Chloride (mg/L)	BAW-3	16.4	n/a	3/21/2024	5.21	No	47	n/a	n/a	0	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-4	16.4	n/a	3/21/2024	8.17	No	47	n/a	n/a	0	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-5	16.4	n/a	3/20/2024	9	No	47	n/a	n/a	0	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-7	16.4	n/a	3/21/2024	8.37	No	47	n/a	n/a	0	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BAW-3	0.1	n/a	3/21/2024	0.0537J	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-4	0.1	n/a	3/21/2024	0.0578J	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-5	0.1	n/a	3/20/2024	0.11	Yes	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-7	0.1	n/a	3/21/2024	0.0292J	No	49	n/a	n/a	83.67	n/a	n/a	0.0007847	NP Inter (NDs) 1 of 2
pH (SU)	BAW-3	5.77	4.59	3/21/2024	4.39	Yes	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
pH (SU)	BAW-4	5.77	4.59	3/21/2024	5.47	No	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
pH (SU)	BAW-5	5.77	4.59	3/20/2024	6.2	Yes	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
pH (SU)	BAW-7	5.77	4.59	3/21/2024	4.89	No	47	n/a	n/a	0	n/a	n/a	0.001728	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-3	7.68	n/a	3/21/2024	7.6	No	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-4	7.68	n/a	3/21/2024	12.1	Yes	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-5	7.68	n/a	3/20/2024	30	Yes	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-7	7.68	n/a	3/21/2024	1.66	No	47	n/a	n/a	40.43	n/a	n/a	0.0008638	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BAW-3	57.17	n/a	3/21/2024	31	No	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-4	57.17	n/a	3/21/2024	64	Yes	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-5	57.17	n/a	3/20/2024	164	Yes	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-7	57.17	n/a	3/21/2024	40	No	47	5.01	1.409	4.255	None	sqrt(x)	0.00188	Param Inter 1 of 2

Exceeds Limit: BAW-4, BAW-5

Prediction Limit
Interwell Non-parametric

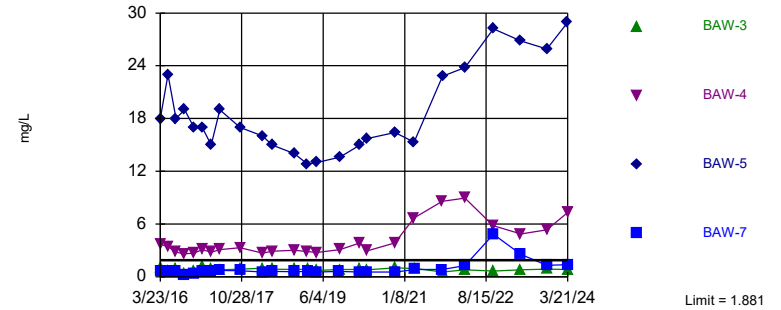


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 83.67% NDs. Annual per-constituent alpha = 0.006261. Individual comparison alpha = 0.0007847 (1 of 2). Comparing 4 points to limit.

Constituent: Boron Analysis Run 5/2/2024 10:16 AM View: Interwell
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Exceeds Limit: BAW-4, BAW-5

Prediction Limit
Interwell Parametric

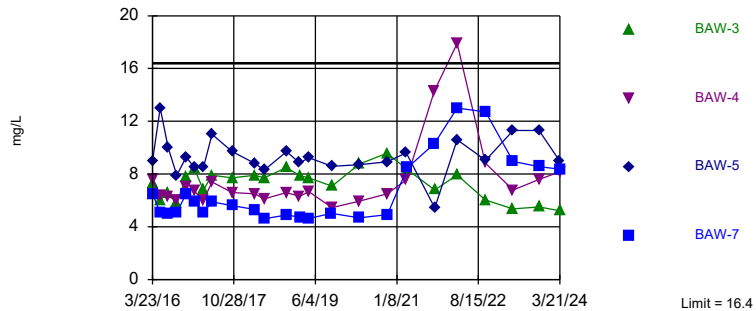


Background Data Summary (based on natural log transformation): Mean=-0.159, Std. Dev.=0.4381, n=49, 4.082% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9325, critical = 0.929. Kappa = 1.805 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Comparing 4 points to limit.

Constituent: Calcium Analysis Run 5/2/2024 10:16 AM View: Interwell
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Within Limit

Prediction Limit
Interwell Non-parametric

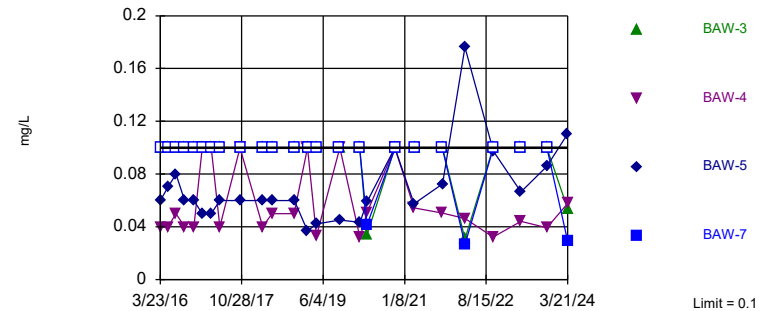


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. Annual per-constituent alpha = 0.00689. Individual comparison alpha = 0.0008638 (1 of 2). Comparing 4 points to limit.

Constituent: Chloride Analysis Run 5/2/2024 10:16 AM View: Interwell
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Exceeds Limit: BAW-5

Prediction Limit
Interwell Non-parametric

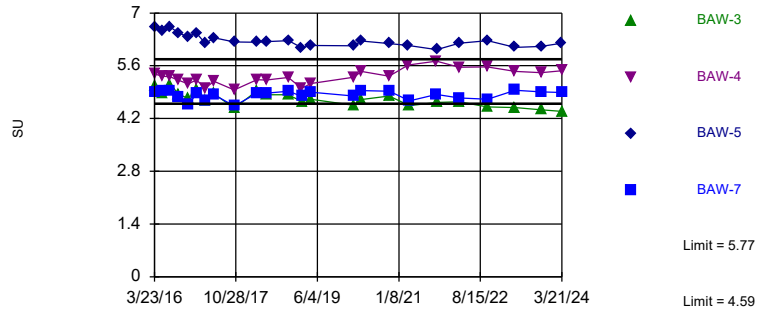


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 83.67% NDs. Annual per-constituent alpha = 0.006261. Individual comparison alpha = 0.0007847 (1 of 2). Comparing 4 points to limit.

Constituent: Fluoride Analysis Run 5/2/2024 10:16 AM View: Interwell
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Exceeds Limits: BAW-3, BAW-5

Prediction Limit
Interwell Non-parametric

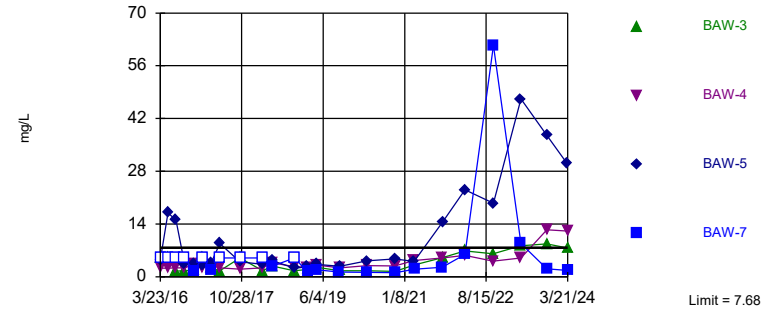


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 47 background values. Annual per-constituent alpha = 0.01378. Individual comparison alpha = 0.001728 (1 of 2). Comparing 4 points to limit.

Constituent: pH Analysis Run 5/2/2024 10:17 AM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Hollow symbols indicate censored values.
 Exceeds Limit: BAW-4, BAW-5

Prediction Limit
Interwell Non-parametric

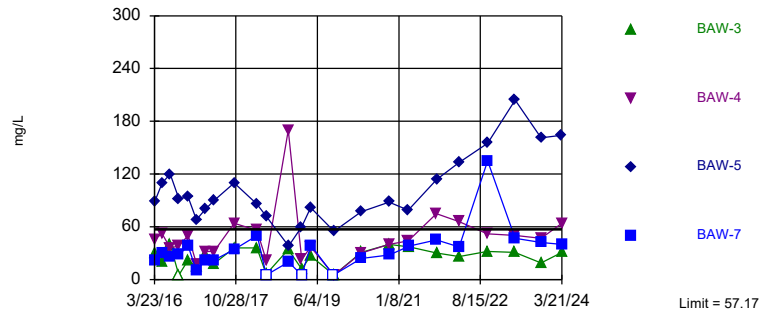


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. 40.43% NDs. Annual per-constituent alpha = 0.00689. Individual comparison alpha = 0.0008638 (1 of 2). Comparing 4 points to limit.

Constituent: Sulfate Analysis Run 5/2/2024 10:17 AM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Exceeds Limit: BAW-4, BAW-5

Prediction Limit
Interwell Parametric



Background Data Summary (based on square root transformation): Mean=5.01, Std. Dev.=1.409, n=47, 4.255% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.953, critical = 0.928. Kappa = 1.81 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Comparing 4 points to limit.

Constituent: Total Dissolved Solids Analysis Run 5/2/2024 10:17 AM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/2/2024 10:18 AM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	<0.08	<0.08	0.22	<0.08	<0.08	0.037 (J)	
5/17/2016	<0.08	<0.08	0.35			<0.08	
5/18/2016				<0.08	<0.08		
7/12/2016	<0.08	<0.08					
7/13/2016			0.5	<0.08	<0.08	0.032 (J)	
9/13/2016	<0.08	<0.08	0.27				
9/14/2016				<0.08	<0.08	0.027 (J)	
11/19/2016	<0.08	<0.08	0.19	<0.08	<0.08	0.024 (J)	
1/17/2017	<0.08	<0.08		<0.08	<0.08		
1/18/2017			0.19			<0.08	
3/22/2017	<0.08	<0.08					
3/23/2017			0.19	<0.08	<0.08	0.024 (J)	
5/24/2017	<0.08	<0.08	0.22	<0.08	<0.08	0.027 (J)	
10/16/2017	<0.08	<0.08	0.19	<0.08	<0.08	0.03 (J)	
3/28/2018	<0.08		0.17	<0.08		<0.08	<0.08
3/29/2018		<0.08					
6/2/2018	<0.08	<0.08	0.16	<0.08		0.025 (J)	<0.08
11/8/2018	<0.08			<0.08		0.024 (J)	
11/9/2018		<0.08	0.13				<0.08
2/11/2019	<0.08		0.126			<0.08	
2/12/2019		<0.08		<0.08			<0.08
4/17/2019	<0.08		0.118	<0.08		<0.08	<0.08
4/18/2019		<0.08					
9/27/2019	<0.08	<0.08					<0.08
9/30/2019			0.14	<0.08		<0.08	
2/21/2020	0.0928	<0.08		<0.08			0.0589 (J)
2/22/2020			0.193			<0.08	
4/14/2020	<0.08	<0.08	0.209	<0.08		<0.08	0.0424 (J)
10/30/2020	<0.08		0.194	<0.08		<0.08	0.0495 (J)
11/2/2020		<0.08					
3/17/2021			0.2			0.0673 (J)	
3/26/2021	<0.08	0.647		<0.08			<0.08
10/5/2021	<0.08	0.281				0.168	
10/6/2021			0.272	<0.08			<0.08
3/16/2022	<0.08	0.247	0.695	<0.08		0.084	0.0717 (J)
10/5/2022	<0.08			<0.08		0.0714 (J)	
10/6/2022		1.82	0.631				
4/20/2023	<0.08			<0.08			0.0711 (J)
4/21/2023		0.271	0.831			0.058 (J)	
10/24/2023	<0.08	0.0336 (J)					0.0502 (J)
10/25/2023			0.877	<0.08		0.122	
3/20/2024	<0.08		0.686				
3/21/2024		<0.08		<0.08		0.115	0.0604 (J)

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/2/2024 10:18 AM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	<0.5	0.65	18	1.1	2.6	3.7	
5/17/2016	0.84	0.68	23			3.4	
5/18/2016				0.56	1.3		
7/12/2016	0.79	0.62					
7/13/2016			18	0.95	1.1	2.8	
9/13/2016	0.42	0.25	19				
9/14/2016				0.4	1.1	2.6	
11/19/2016	1.2	0.36	17	0.62	1	2.7	
1/17/2017	1.4	0.66		1.2	0.87		
1/18/2017			17			3.1	
3/22/2017	0.95	0.65					
3/23/2017			15	0.87	0.74	2.8	
5/24/2017	1.3	0.72	19	0.81	0.84	3.1	
10/16/2017	0.93	0.7	17	0.86	0.76	3.3	
3/28/2018	1		16	0.97		2.7	2.8
3/29/2018		0.55					
6/2/2018	0.93	0.6	15	0.86		2.9	0.71
11/8/2018	1			0.84		3	
11/9/2018		0.59	14				0.61
2/11/2019	1		12.8			2.88	
2/12/2019		0.608		0.856			0.757
4/17/2019	0.893		13	0.711		2.77	0.755
4/18/2019		0.55					
9/27/2019	0.8	0.598					0.663
9/30/2019			13.6	0.826		3.08	
2/21/2020	1.02	0.552		0.841			0.648
2/22/2020			15			3.86	
4/14/2020	0.887	0.532	15.7	0.811		2.95	0.67
10/30/2020	0.945		16.4	1		3.84	0.672
11/2/2020		0.535					
3/17/2021			15.3			6.69	
3/26/2021	0.965	0.848		0.937			0.644
10/5/2021	0.996	0.829				8.57	
10/6/2021			22.8	0.532			<0.5
3/16/2022	1.32	1.28	23.8	0.78		8.94	0.539
10/5/2022	1.42			0.647		5.81	
10/6/2022		4.84	28.2				
4/20/2023	0.996			0.789			0.685
4/21/2023		2.56	26.8			4.87	
10/24/2023	0.918	1.3					0.498 (J)
10/25/2023			25.9	0.875		5.35	
3/20/2024	1.05		28.9				
3/21/2024		1.38		0.818		7.31	0.469 (J)

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/2/2024 10:18 AM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	6.5	6.5	9	7.3	5.1	7.6	
5/17/2016	4.9	5.1	13			6.4	
5/18/2016				6	4.2		
7/12/2016	5.3	5					
7/13/2016			10	6.6	4.7	6.3	
9/13/2016	4.8 (F1)	5.1	7.9				
9/14/2016				5.8	4.5	6	
11/19/2016	7.1	6.5	9.3	7.8	6.1	7	
1/17/2017	5.8	5.9		8.4	5.4		
1/18/2017			8.5			6.7	
3/22/2017	4.9	5.1					
3/23/2017			8.5	6.8	5.1	6	
5/24/2017	5.9	5.9	11	7.9	5.5	7.4	
10/16/2017	5.7	5.6	9.7	7.7	6.1	6.6	
3/28/2018	5.7		8.8	7.9		6.5	6.7
3/29/2018		5.3					
6/2/2018	4.7	4.6	8.3	7.7		6.1	5.8
11/8/2018	5.6			8.5		6.6	
11/9/2018		4.9	9.7				7.2
2/11/2019	4.84		8.84			6.31	
2/12/2019		4.72		7.89			8.4
4/17/2019	4.99		9.24	7.71		6.68	8.03
4/18/2019		4.64					
9/27/2019	5.08	5.02					8.37
9/30/2019			8.59	7.07		5.45	
4/14/2020	4.91	4.68	8.71	8.75		5.93	7.57
10/30/2020	5.55		8.93	9.58		6.49	7.59
11/2/2020		4.91					
3/17/2021			9.6			7.55	
3/26/2021	5.92	8.5		8.32			6.21
10/5/2021	6.21	10.3				14.3	
10/6/2021			5.44	6.8			16.4
3/16/2022	7.85	13	10.6	7.94		17.9	11.5
10/5/2022	6.75			6.04		8.84	
10/6/2022		12.7	9.04				
4/20/2023	5.22			5.36			9.6
4/21/2023		8.95	11.3			6.78	
10/24/2023	6.29	8.57					10
10/25/2023			11.3	5.5		7.6	
3/20/2024	6.17		9				
3/21/2024		8.37		5.21		8.17	9.52

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/2/2024 10:18 AM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	<0.1	<0.1	0.06 (J)	<0.1	<0.1	0.04 (J)	
5/17/2016	<0.1	<0.1	0.07 (J)			0.04 (J)	
5/18/2016				<0.1	<0.1		
7/12/2016	<0.1	<0.1					
7/13/2016			0.08 (J)	<0.1	<0.1	0.05 (J)	
9/13/2016	<0.1	<0.1	0.06 (J)				
9/14/2016				<0.1	<0.1	0.04 (J)	
11/19/2016	<0.1	<0.1	0.06 (J)	<0.1	<0.1	0.04 (J)	
1/17/2017	<0.1	<0.1		<0.1	<0.1		
1/18/2017			0.05 (J)			<0.1	
3/22/2017	<0.1	<0.1					
3/23/2017			0.05 (J)	<0.1	<0.1	<0.1	
5/24/2017	<0.1	<0.1 (D)	0.06 (J)	<0.1	<0.1	0.04 (J)	
10/16/2017	<0.1	<0.1	0.06 (J)	<0.1	<0.1	<0.1	
3/28/2018	<0.1		0.06 (J)	<0.1		0.04 (J)	<0.1
3/29/2018		<0.1					
6/2/2018	<0.1	<0.1	0.06 (J)	<0.1		0.05 (J)	<0.1
11/8/2018	<0.1			<0.1		0.05 (J)	
11/9/2018		<0.1	0.06 (J)				<0.1
2/11/2019	<0.1		0.0368 (J)			<0.1	
2/12/2019		<0.1		<0.1			<0.1
4/17/2019	<0.1		0.0421 (J)	<0.1		0.033 (J)	<0.1
4/18/2019		<0.1					
9/27/2019	<0.1	<0.1					0.0313 (J)
9/30/2019			0.045 (J)	<0.1		<0.1	
2/21/2020	<0.1	<0.1		<0.1			<0.1
2/22/2020			0.0434 (J)			0.0317 (J)	
4/14/2020	0.0532 (J)	0.0415 (J)	0.059 (J)	0.034 (J)		0.0508 (J)	0.0537 (J)
10/30/2020	<0.1		<0.1	<0.1		<0.1	<0.1
11/2/2020		<0.1					
3/17/2021			0.0575 (J)			0.0544 (J)	
3/26/2021	<0.1	<0.1		<0.1			<0.1
10/5/2021	0.0499 (J)	<0.1				0.0505 (J)	
10/6/2021			0.0725 (J)	<0.1			<0.1
3/16/2022	<0.1	0.0266 (J)	0.176	0.0307 (J)		0.0462 (J)	<0.1
10/5/2022	<0.1			<0.1		0.0322 (J)	
10/6/2022		<0.1	0.0972 (J)				
4/20/2023	<0.1			<0.1			0.0278 (J)
4/21/2023		<0.1	0.0665 (J)			0.0441 (J)	
10/24/2023	<0.1	<0.1					0.0276 (J)
10/25/2023			0.0858 (J)	<0.1		0.0393 (J)	
3/20/2024	0.0436 (J)		0.11				
3/21/2024		0.0292 (J)		0.0537 (J)		0.0578 (J)	0.0515 (J)

Prediction Limit

Constituent: pH (SU) Analysis Run 5/2/2024 10:18 AM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	5.12	4.89	6.64	5.05	5.52	5.38	
5/17/2016	5.23	4.92	6.52			5.32	
5/18/2016				4.86	5.24		
7/12/2016	5.77	4.93					
7/13/2016			6.63	5.11	5.17	5.31	
9/13/2016	4.98	4.76	6.46				
9/14/2016				4.84	5.04	5.21	
11/19/2016	4.82	4.56	6.38	4.74	4.88	5.12	
1/17/2017	5.04	4.86		4.95	5.04		
1/18/2017			6.47			5.22	
3/22/2017	4.73	4.66					
3/23/2017			6.19	4.66	4.66	5.01	
5/24/2017	5.01	4.83	6.34	4.86	4.93	5.19	
10/16/2017	4.59	4.53	6.23	4.47	4.65	4.96	
3/28/2018	4.87		6.22	4.93		5.23	5.39
3/29/2018		4.87					
6/2/2018	4.92	4.87	6.24	4.83		5.22	5.06
11/8/2018	5			4.83		5.29	
11/9/2018		4.92	6.27				4.92
2/11/2019	4.7		6.08			5	
2/12/2019		4.79		4.65			4.86
4/17/2019	4.9		6.14	4.71		5.13	4.79
4/18/2019		4.9					
2/21/2020	4.86	4.8		4.55			4.73
2/22/2020			6.13			5.3	
4/14/2020	5.23	4.94	6.26	4.7		5.45	4.87
10/30/2020	5		6.19	4.8		5.32	4.87
11/2/2020		4.92					
3/17/2021			6.14			5.62	
3/26/2021	4.86	4.67		4.54			4.7
10/5/2021	5	4.84				5.72	
10/6/2021			6.03	4.63			4.77
3/16/2022	4.92	4.75	6.2	4.64		5.56	4.91
10/5/2022	4.91			4.51		5.57	
10/6/2022		4.71	6.27				
4/20/2023	4.89			4.49			4.83
4/21/2023		4.95	6.09			5.45	
10/24/2023	4.99	4.91					4.98
10/25/2023			6.11	4.43		5.42	
3/20/2024	4.93		6.2				
3/21/2024		4.89		4.39		5.47	4.86

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/2/2024 10:18 AM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	<5	<5	4.5 (J)	<5	<5	2.3 (J)	
5/17/2016	<5	<5	17			2.3 (J)	
5/18/2016				<5	<5		
7/12/2016	<5	<5					
7/13/2016			15	1.5 (J)	<5	2.4 (J)	
9/13/2016	<5	<5	3.4 (J)				
9/14/2016				1.6 (J)	<5	2.4 (J)	
11/19/2016	<5	1.5 (J)	3.5 (J)	1.8 (J)	<5	3.3 (J)	
1/17/2017	<5	<5		<5	<5		
1/18/2017			3.2 (J)			2.3 (J)	
3/22/2017	<5	1.9 (J)					
3/23/2017			3.7 (J)	2.3 (J)	1.8 (J)	3.2 (J)	
5/24/2017	<5	<5	8.8	1.6 (J)	1.5 (J)	2.4 (J)	
10/16/2017	<5	<5	4 (J)	<5	<5	2 (J)	
3/28/2018	<5		3.3 (J)	1.6 (J)		2.4 (J)	1.7 (J)
3/29/2018		<5					
6/2/2018	1.9 (J)	2.8 (J)	4.3 (J)	2.9 (J)		3.7 (J)	3 (J)
11/8/2018	<5			1.6 (J)		2.7 (J)	
11/9/2018		<5	2.3 (J)				<5
2/11/2019	0.774 (J)		2.64			2.5	
2/12/2019		1.35		1.97			1.97
4/17/2019	1.43		3.27	2.5		3.15	2.82
4/18/2019		1.82					
9/27/2019	1.03	1.22					2.19
9/30/2019			2.82	1.64		2.34	
4/14/2020	0.928 (J)	1.18	4.2	1.62		2.99	2.71
10/30/2020	0.91 (J)		4.76	1.44		2.84	3.97
11/2/2020		1.08					
3/17/2021			4.07			4.35	
3/26/2021	1.49	2		3.25			2.04
10/5/2021	1.13	2.55				5.02	
10/6/2021			14.5	5.07			5.37
3/16/2022	3.6	5.93	23.1	6.85		5.64	5.37
10/5/2022	1.34			6.07		4.12	
10/6/2022		61.4	19.5				
4/20/2023	2.6			8.2			7.32
4/21/2023		8.82	47.2			5	
10/24/2023	1.8	2.11					7.68
10/25/2023			37.5	8.72		12.5	
3/20/2024	1.41		30				
3/21/2024		1.66		7.6		12.1	6.92

Prediction Limit

Constituent: T Total Dissolved Solids (mg/L) Analysis Run 5/2/2024 10:18 AM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	20	22	88	30	30	46	
5/17/2016	24	30	110			52	
5/18/2016				20	20		
7/12/2016	24	26					
7/13/2016			120	40	40	36	
9/13/2016	18	28	92				
9/14/2016				<10	10	38	
11/19/2016	20	38	94	22	28	50	
1/17/2017	<10	10		14	14		
1/18/2017			68			18	
3/22/2017	12	22					
3/23/2017			80	28	16	32	
5/24/2017	16 (D)	22	90	18	12	32	
10/16/2017	58	34	110	36	50	64	
3/28/2018	18		86	36		56	30
3/29/2018		50					
6/2/2018	6	<10	72	6		22	26
11/8/2018	12			34		170	
11/9/2018		20	38				94
2/11/2019	<10		60			23	
2/12/2019		<10		12			22
4/17/2019	16		82	27		37	22
4/18/2019		39					
9/27/2019	26	<10					25
9/30/2019			55	<10		<10	
4/14/2020	25	24	77	31		30	38
10/30/2020	34		88	40		40	48
11/2/2020		28					
3/17/2021			79			44	
3/26/2021	24	38		37			24
10/5/2021	26	45				75	
10/6/2021			114	30			61
3/16/2022	30	37	133	26		66	26
10/5/2022	30			32		52	
10/6/2022		135	155				
4/20/2023	26			31			30
4/21/2023		47	204			50	
10/24/2023	28	42					35
10/25/2023			161	19		47	
3/20/2024	29		164				
3/21/2024		40		31		64	38

Trend Tests - Prediction Limit Exceedances

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:20 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	BAW-2 (bg)	-0.5725	-31	-25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2A (bg)	-0.05023	-55	-53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-4	0.3488	139	111	Yes	25	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2 (bg)	-0.5393	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
pH (SU)	BAW-3	-0.06553	-182	-105	Yes	24	0	n/a	n/a	0.01	NP
pH (SU)	BAW-5	-0.05237	-152	-105	Yes	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-1 (bg)	-0.4138	-121	-105	Yes	24	45.83	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2A (bg)	0.9245	56	48	Yes	14	7.143	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-4	0.3988	165	105	Yes	24	0	n/a	n/a	0.01	NP

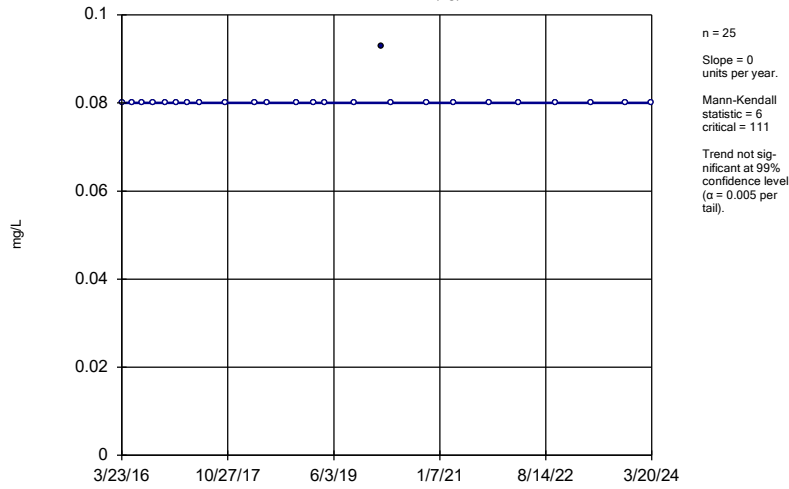
Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:20 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BAW-1 (bg)	0	6	111	No	25	96	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-2 (bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-2A (bg)	-0.002126	-39	-53	No	15	53.33	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-4	0.007426	108	111	No	25	36	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-5	0.0151	61	111	No	25	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-1 (bg)	0.02243	73	111	No	25	4	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2 (bg)	-0.5725	-31	-25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2A (bg)	-0.05023	-55	-53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-4	0.3488	139	111	Yes	25	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-5	0.7643	38	111	No	25	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	BAW-1 (bg)	0	-49	-111	No	25	88	n/a	n/a	0.01	NP
Fluoride (mg/L)	BAW-2 (bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Fluoride (mg/L)	BAW-2A (bg)	0	-34	-53	No	15	66.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	BAW-5	0.0009981	39	111	No	25	4	n/a	n/a	0.01	NP
pH (SU)	BAW-1 (bg)	-0.01122	-40	-105	No	24	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2 (bg)	-0.5393	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2A (bg)	-0.02024	-21	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	BAW-3	-0.06553	-182	-105	Yes	24	0	n/a	n/a	0.01	NP
pH (SU)	BAW-5	-0.05237	-152	-105	Yes	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-1 (bg)	-0.4138	-121	-105	Yes	24	45.83	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2 (bg)	0	-11	-25	No	9	77.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2A (bg)	0.9245	56	48	Yes	14	7.143	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-4	0.3988	165	105	Yes	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-5	0.8287	80	105	No	24	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-1 (bg)	1.364	92	105	No	24	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-2 (bg)	-5.236	-4	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-2A (bg)	1.336	17	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-4	2.234	50	105	No	24	4.167	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-5	6.434	58	105	No	24	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

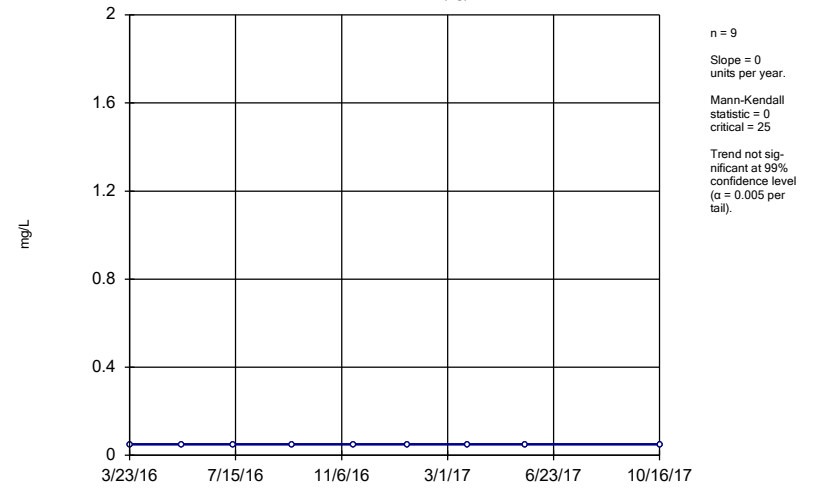
BAW-1 (bg)



Constituent: Boron Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

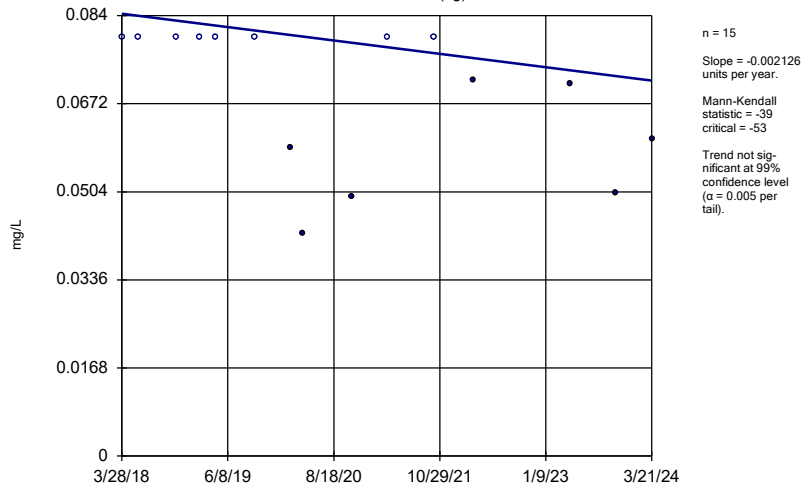
BAW-2 (bg)



Constituent: Boron Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

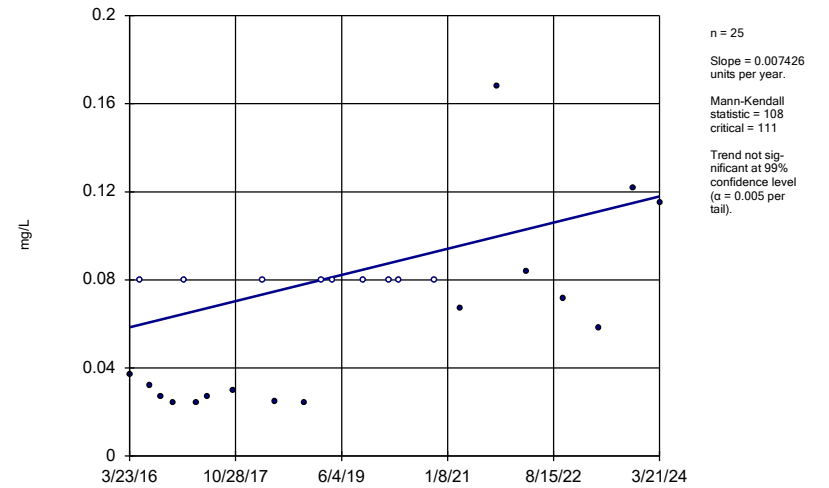
BAW-2A (bg)



Constituent: Boron Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

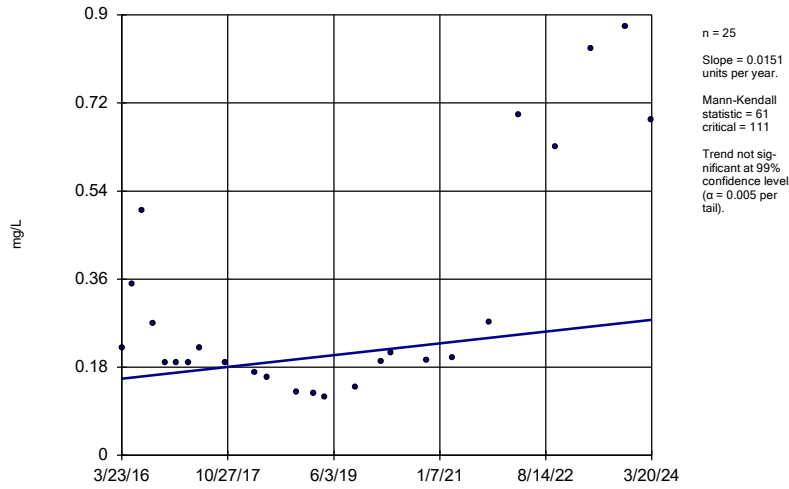
BAW-4



Constituent: Boron Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5

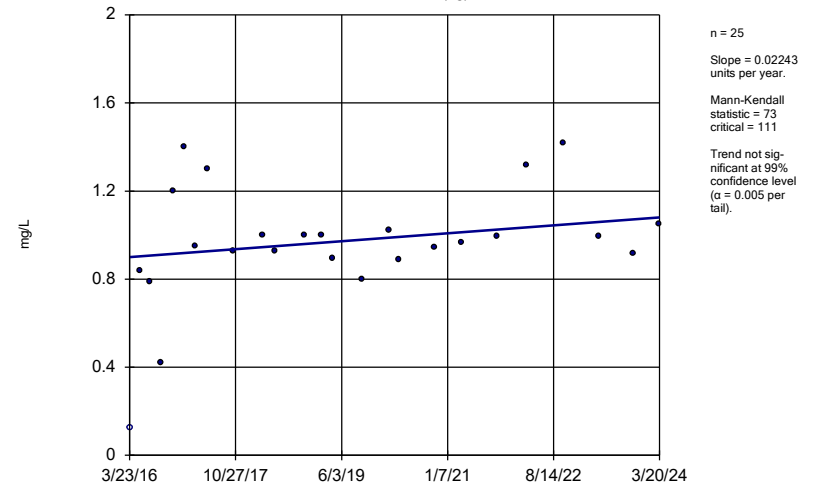


Constituent: Boron Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Hollow symbols indicate censored values.

Sen's Slope Estimator

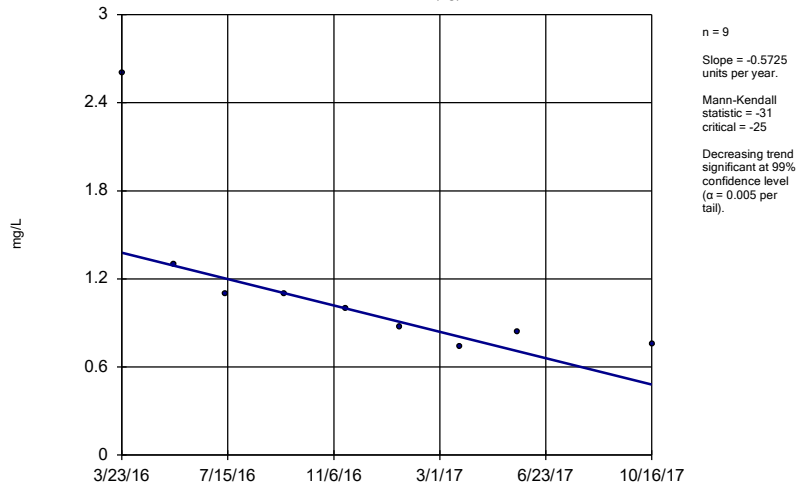
BAW-1 (bg)



Constituent: Calcium Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2 (bg)

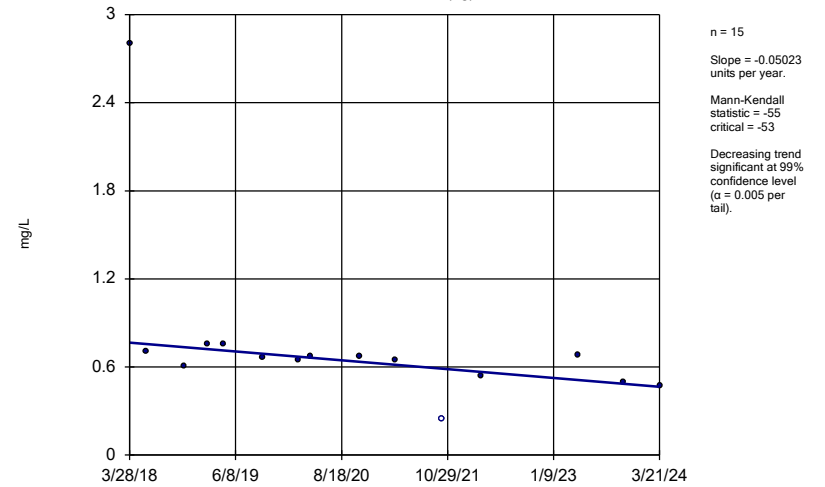


Constituent: Calcium Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Hollow symbols indicate censored values.

Sen's Slope Estimator

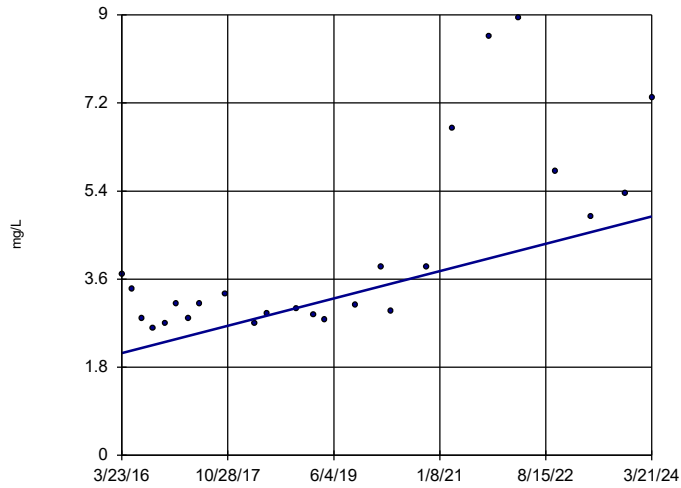
BAW-2A (bg)



Constituent: Calcium Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-4

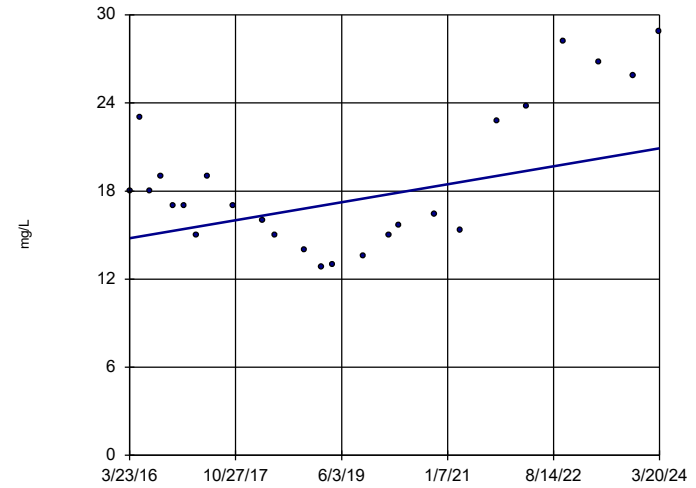


n = 25
Slope = 0.3488
units per year.
Mann-Kendall
statistic = 139
critical = 111
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Calcium Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5

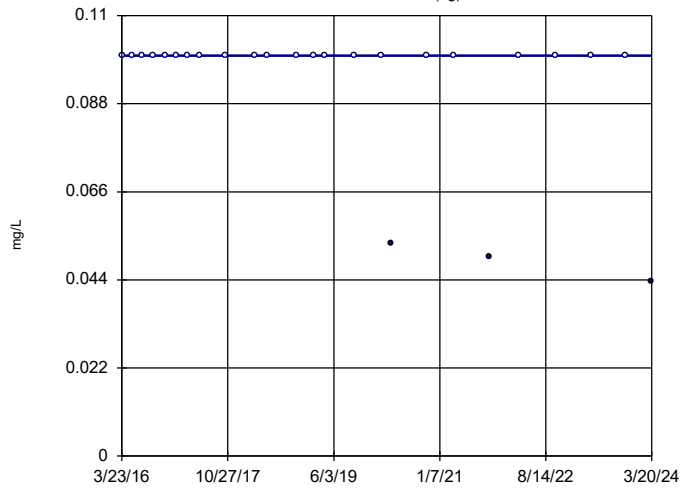


n = 25
Slope = 0.7643
units per year.
Mann-Kendall
statistic = 38
critical = 111
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Calcium Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-1 (bg)

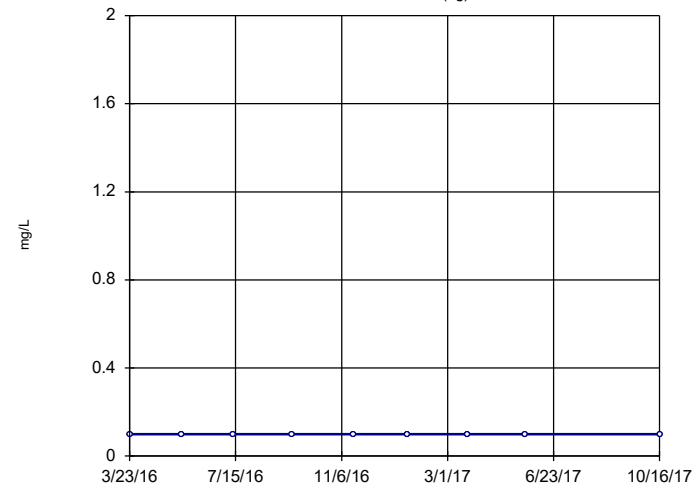


n = 25
Slope = 0
units per year.
Mann-Kendall
statistic = -49
critical = -111
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Fluoride Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2 (bg)

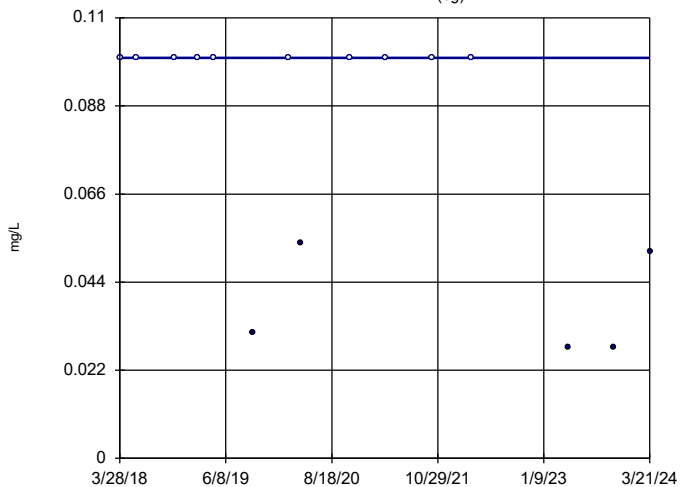


n = 9
Slope = 0
units per year.
Mann-Kendall
statistic = 0
critical = 25
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Fluoride Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2A (bg)

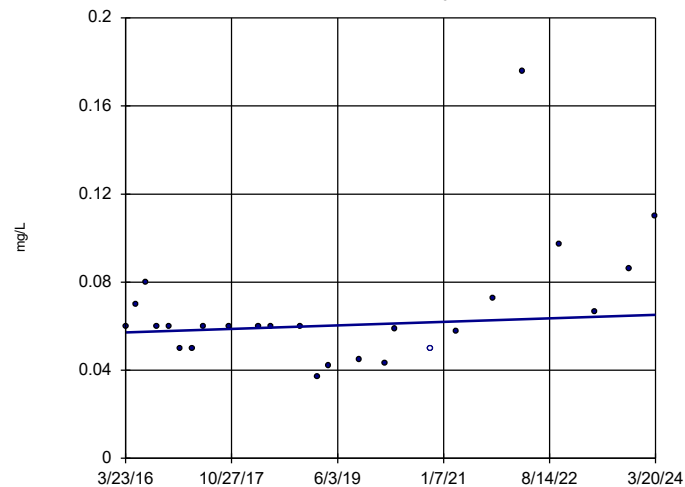


n = 15
Slope = 0
units per year.
Mann-Kendall
statistic = -34
critical = -53
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Fluoride Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5

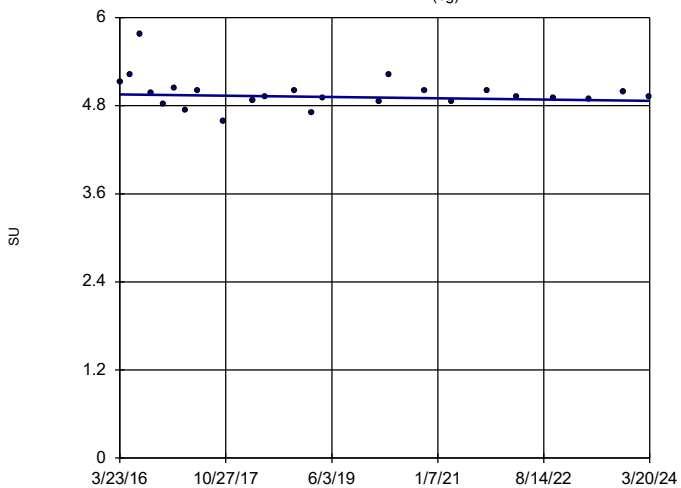


n = 25
Slope = 0.0009981
units per year.
Mann-Kendall
statistic = 39
critical = 111
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Fluoride Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-1 (bg)

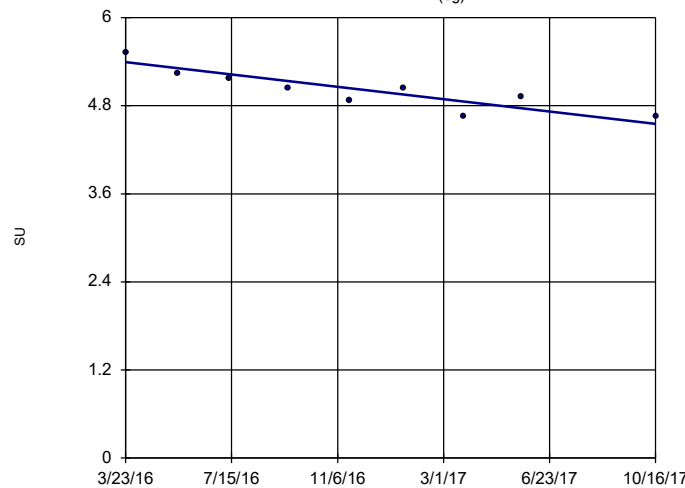


n = 24
Slope = -0.01122
units per year.
Mann-Kendall
statistic = -40
critical = -105
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2 (bg)

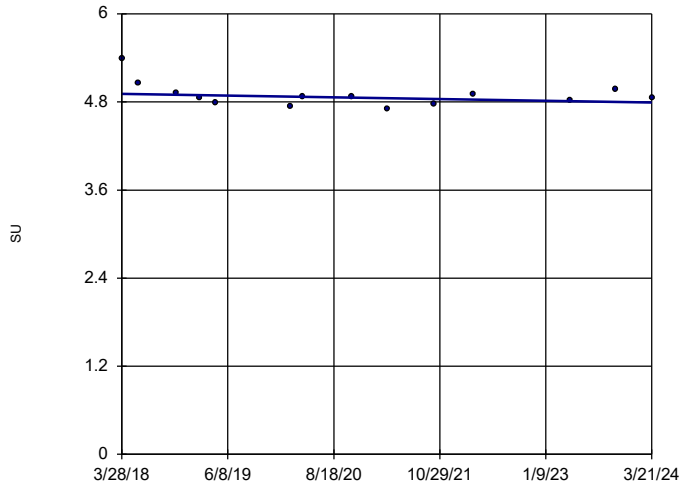


n = 9
Slope = -0.5393
units per year.
Mann-Kendall
statistic = -29
critical = -25
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2A (bg)

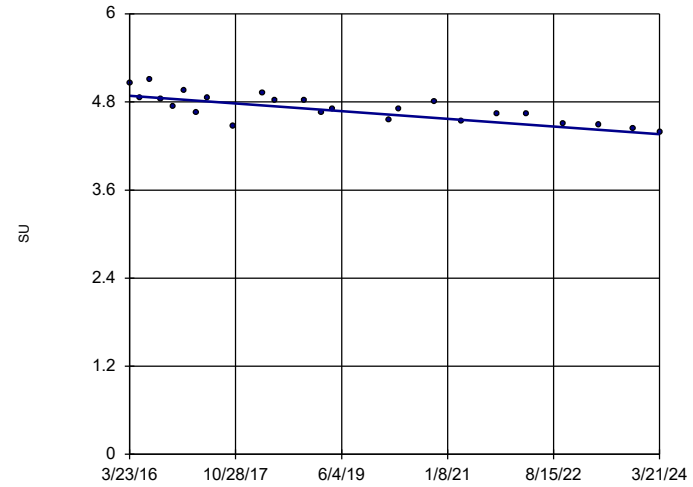


n = 14
 Slope = -0.02024
 units per year.
 Mann-Kendall
 statistic = -21
 critical = -48
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: pH Analysis Run 5/2/2024 10:18 AM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-3

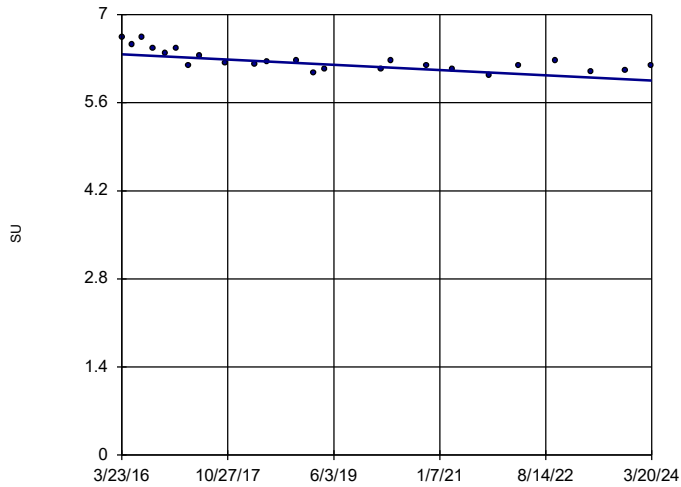


n = 24
 Slope = -0.06553
 units per year.
 Mann-Kendall
 statistic = -182
 critical = -105
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: pH Analysis Run 5/2/2024 10:18 AM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5



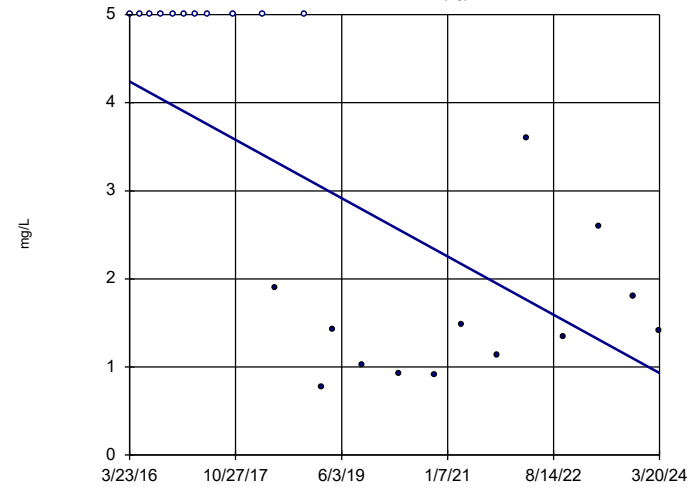
n = 24
 Slope = -0.05237
 units per year.
 Mann-Kendall
 statistic = -152
 critical = -105
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: pH Analysis Run 5/2/2024 10:18 AM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Hollow symbols indicate censored values.

Sen's Slope Estimator

BAW-1 (bg)

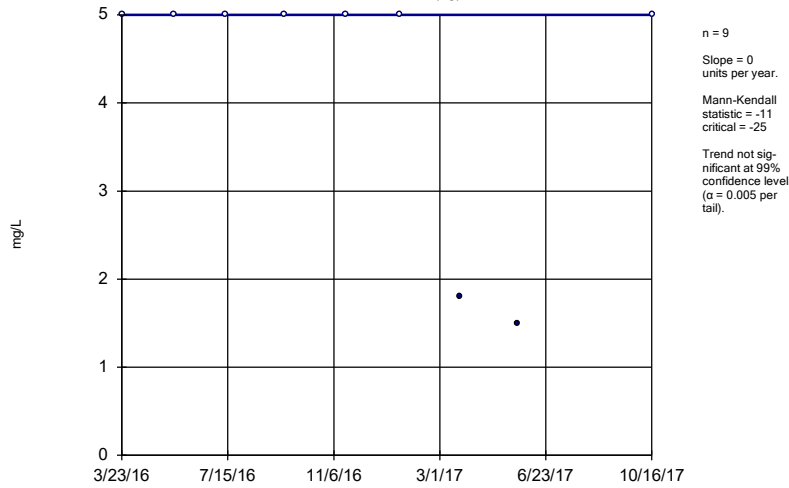


n = 24
 Slope = -0.4138
 units per year.
 Mann-Kendall
 statistic = -121
 critical = -105
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 5/2/2024 10:18 AM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

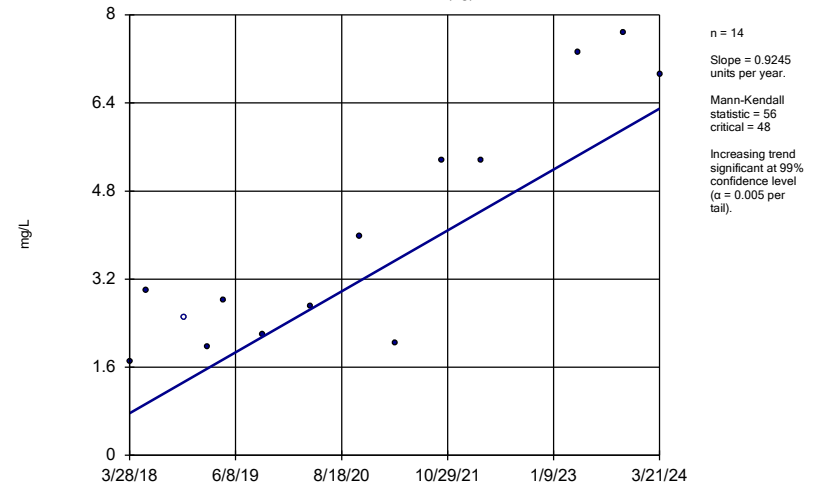
BAW-2 (bg)



Constituent: Sulfate Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

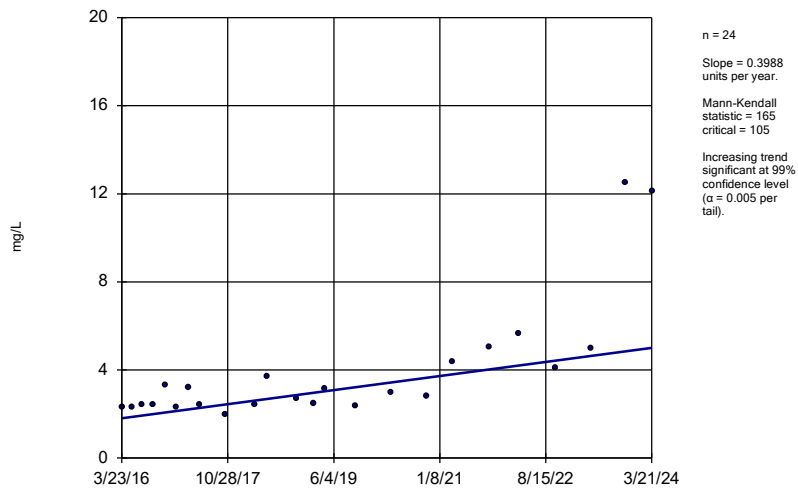
BAW-2A (bg)



Constituent: Sulfate Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

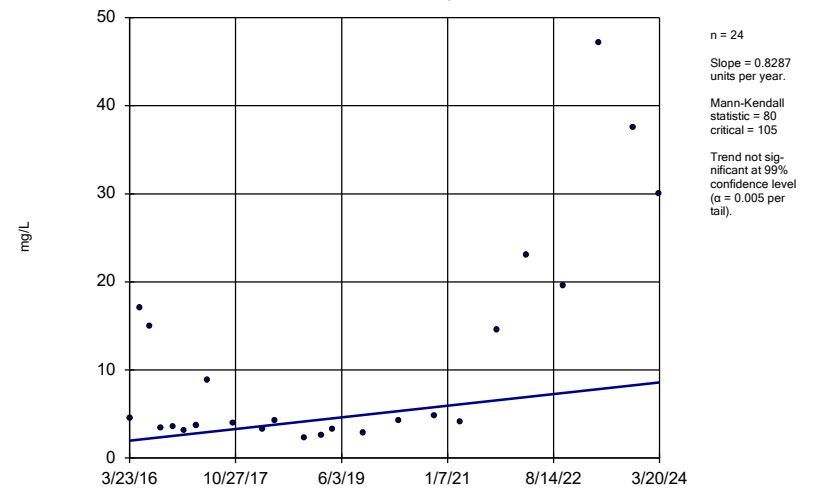
BAW-4



Constituent: Sulfate Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

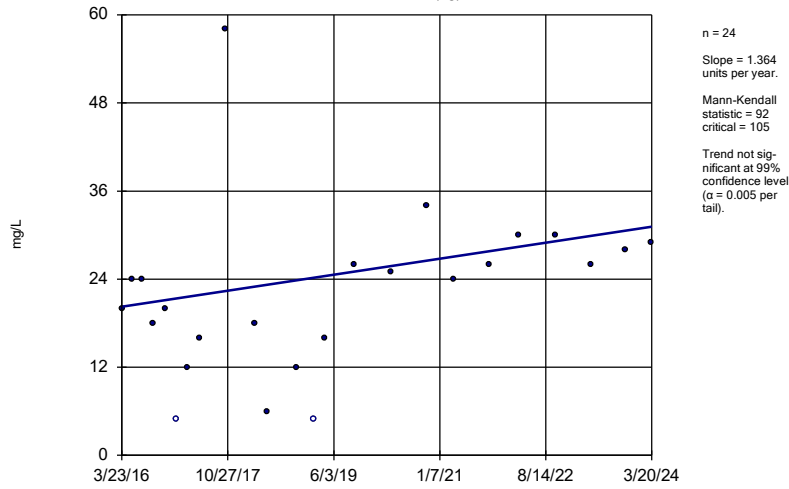
BAW-5



Constituent: Sulfate Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

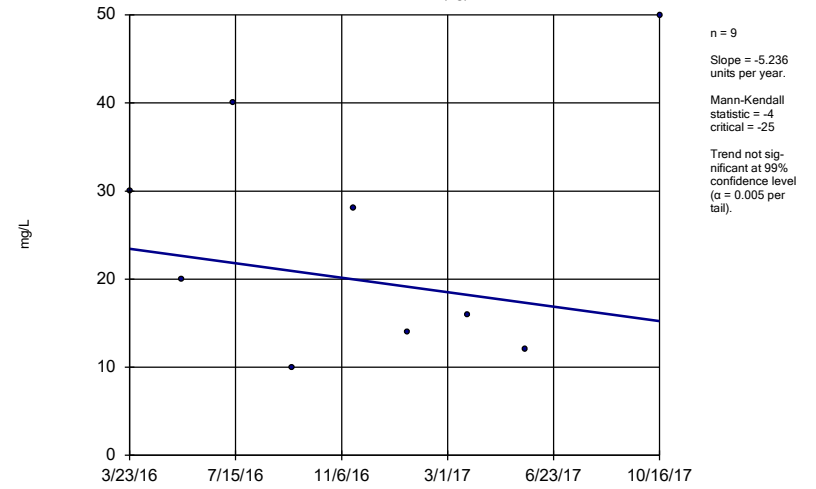
BAW-1 (bg)



Constituent: Total Dissolved Solids Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

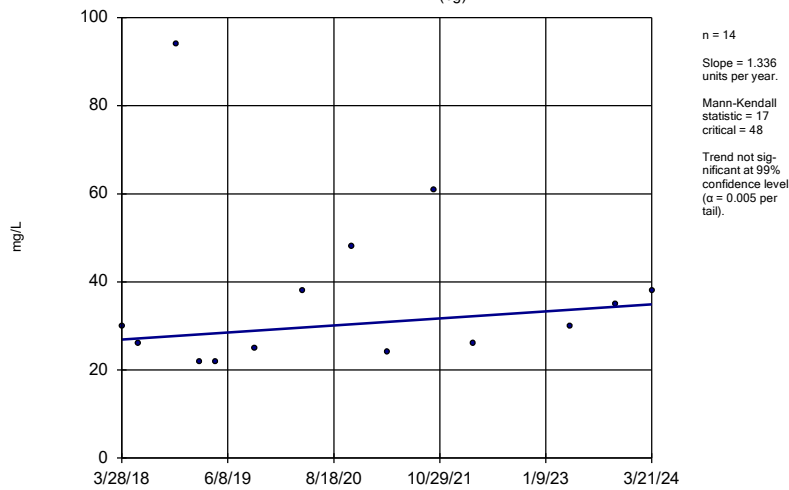
BAW-2 (bg)



Constituent: Total Dissolved Solids Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

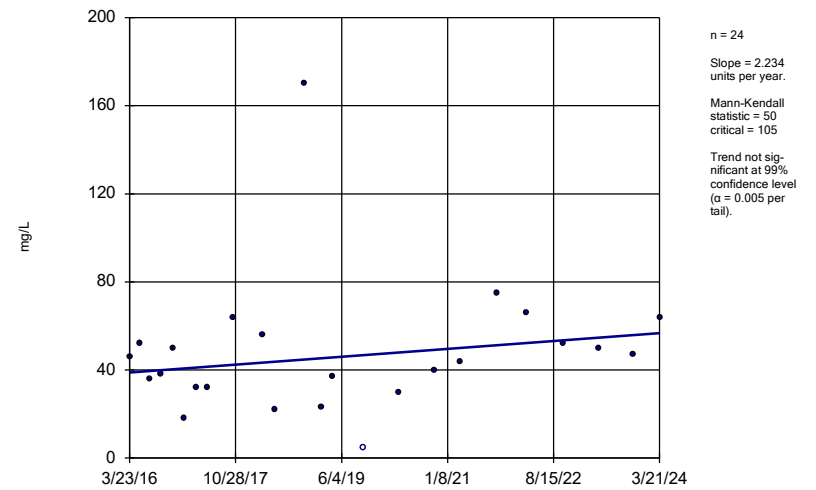
BAW-2A (bg)



Constituent: Total Dissolved Solids Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

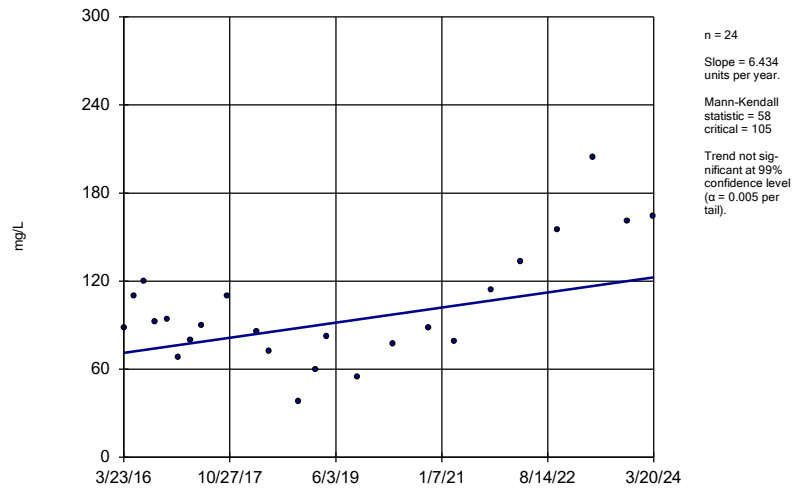
BAW-4



Constituent: Total Dissolved Solids Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5



Constituent: Total Dissolved Solids Analysis Run 5/2/2024 10:18 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

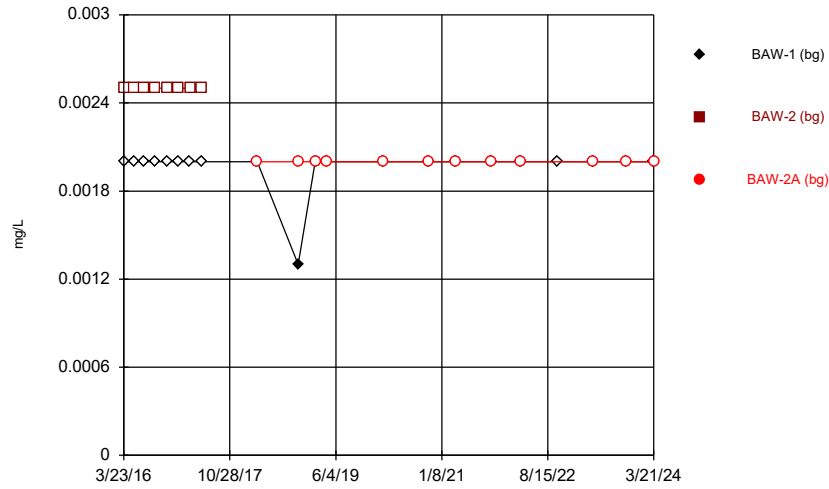
Upper Tolerance Limits

Upper Tolerance Limits

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:09 AM

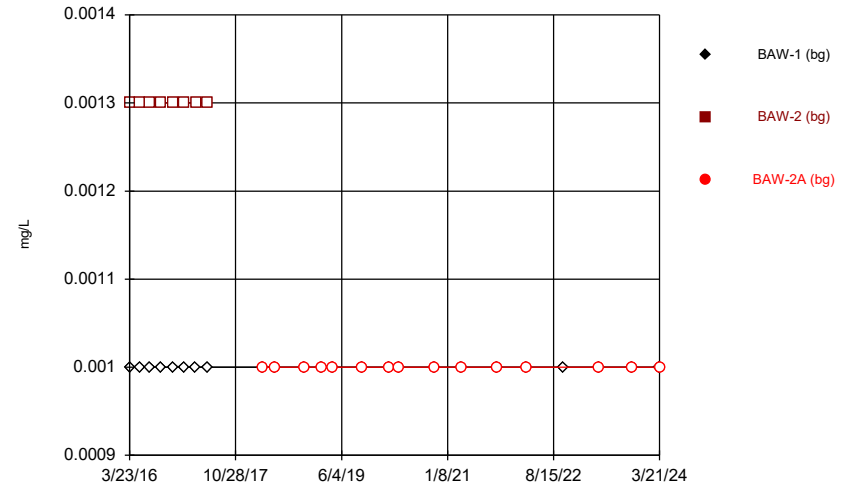
<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.002	n/a	41	n/a	n/a	97.56	n/a	n/a	0.1221	NP Inter(NDs)
Arsenic (mg/L)	0.001	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter(NDs)
Barium (mg/L)	0.0512	n/a	47	n/a	n/a	2.128	n/a	n/a	0.08974	NP Inter(normality)
Beryllium (mg/L)	0.001	n/a	43	n/a	n/a	97.67	n/a	n/a	0.1102	NP Inter(NDs)
Cadmium (mg/L)	0.001	n/a	47	n/a	n/a	97.87	n/a	n/a	0.08974	NP Inter(NDs)
Chromium (mg/L)	0.00286	n/a	45	n/a	n/a	91.11	n/a	n/a	0.09944	NP Inter(NDs)
Cobalt (mg/L)	0.001707	n/a	47	0.02914	0.00585	6.383	None	sqrt(x)	0.05	Inter
Combined Radium 226 + 228 (pCi/L)	2.5	n/a	47	n/a	n/a	4.255	n/a	n/a	0.08974	NP Inter(normality)
Fluoride (mg/L)	0.1	n/a	49	n/a	n/a	83.67	n/a	n/a	0.08099	NP Inter(NDs)
Lead (mg/L)	0.001	n/a	45	n/a	n/a	100	n/a	n/a	0.09944	NP Inter(NDs)
Lithium (mg/L)	0.00505	n/a	46	n/a	n/a	67.39	n/a	n/a	0.09447	NP Inter(NDs)
Mercury (mg/L)	0.0002	n/a	39	n/a	n/a	89.74	n/a	n/a	0.1353	NP Inter(NDs)
Molybdenum (mg/L)	0.005	n/a	43	n/a	n/a	90.7	n/a	n/a	0.1102	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	43	n/a	n/a	86.05	n/a	n/a	0.1102	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	43	n/a	n/a	95.35	n/a	n/a	0.1102	NP Inter(NDs)

Time Series



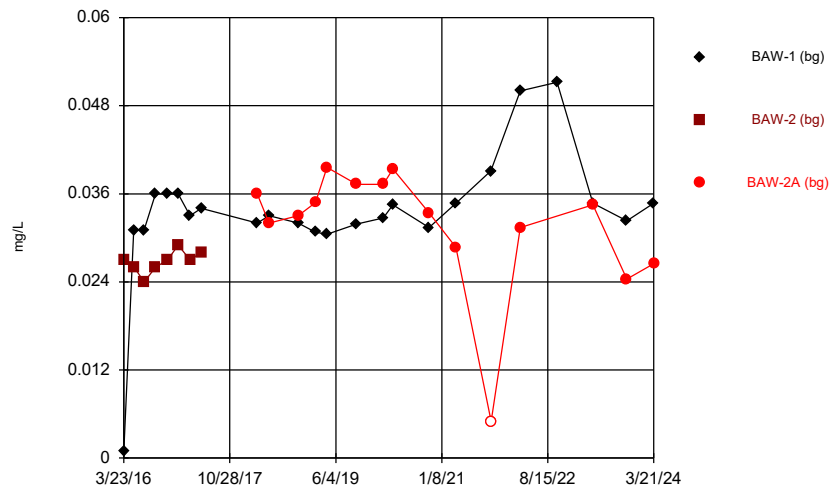
Constituent: Antimony Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



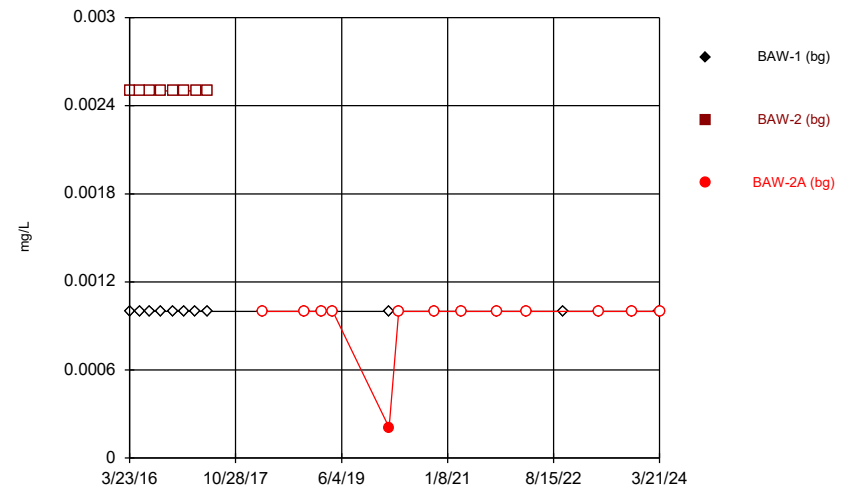
Constituent: Arsenic Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



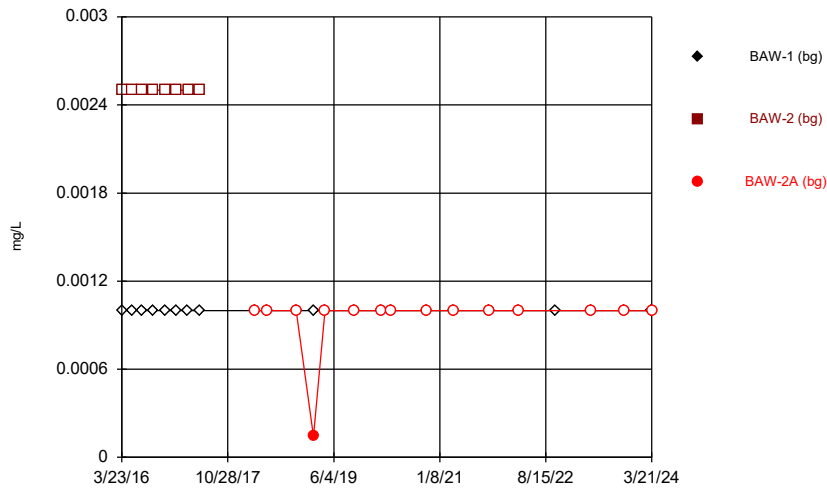
Constituent: Barium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



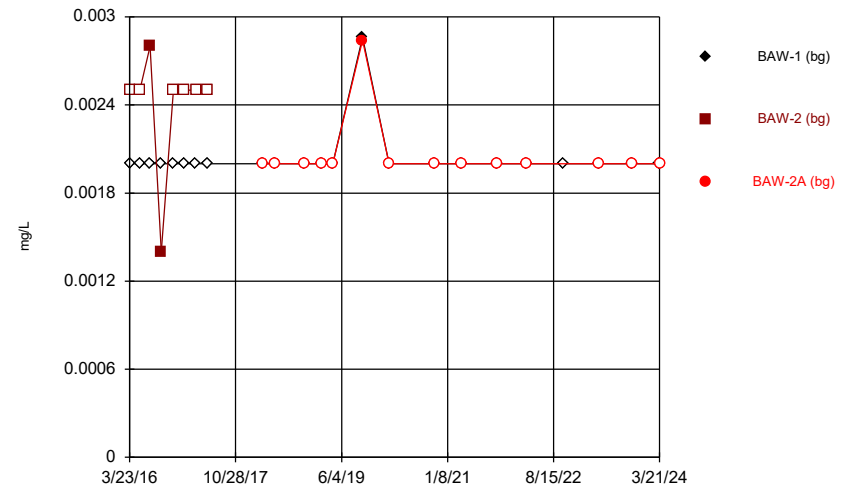
Constituent: Beryllium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



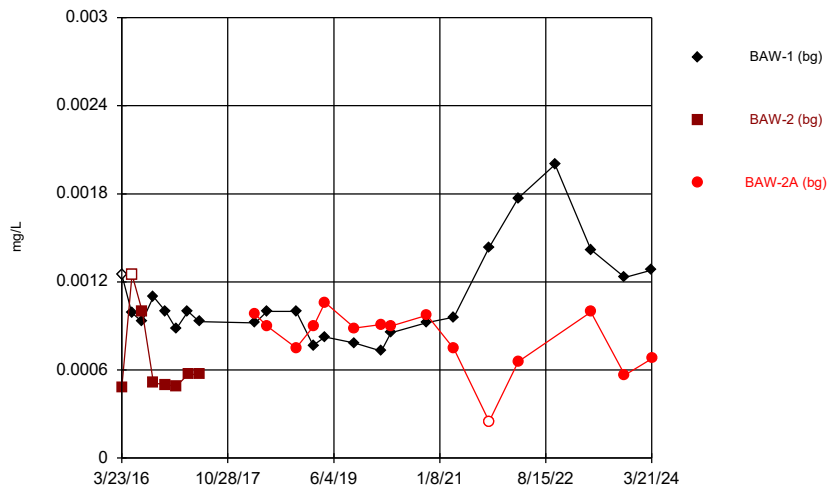
Constituent: Cadmium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



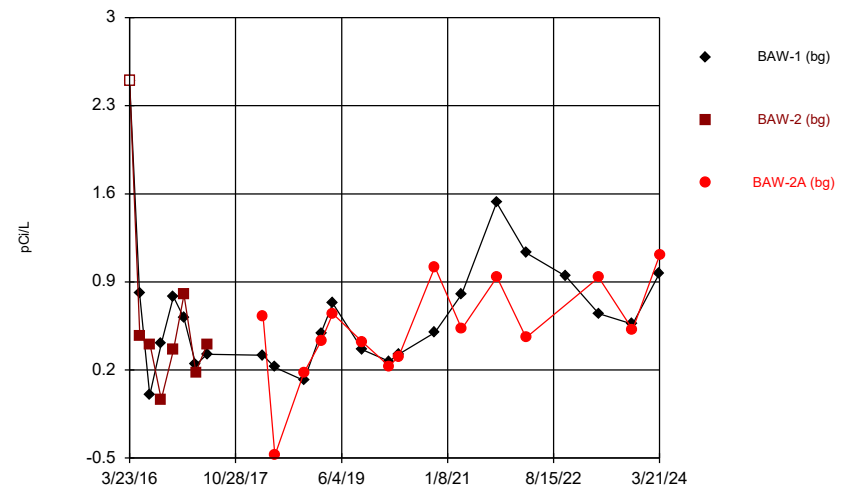
Constituent: Chromium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



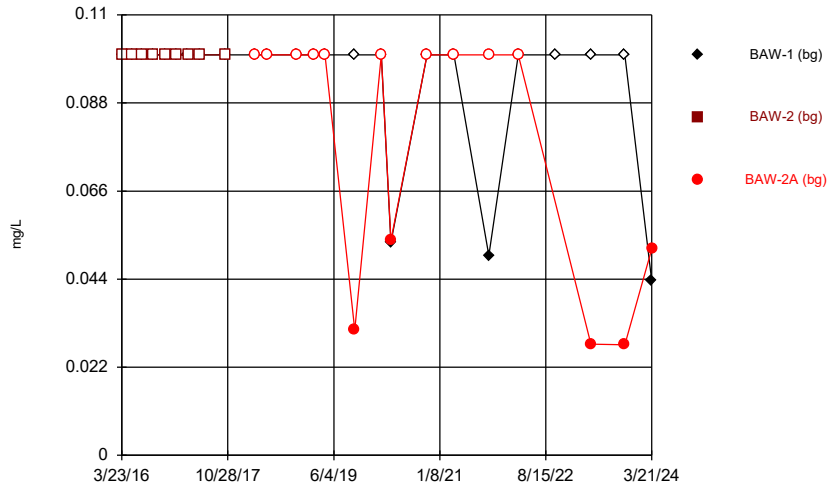
Constituent: Cobalt Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



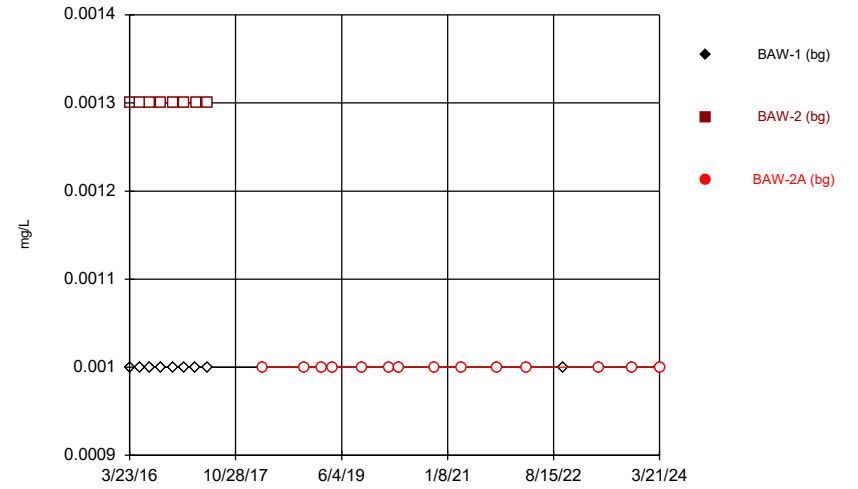
Constituent: Combined Radium 226 + 228 Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



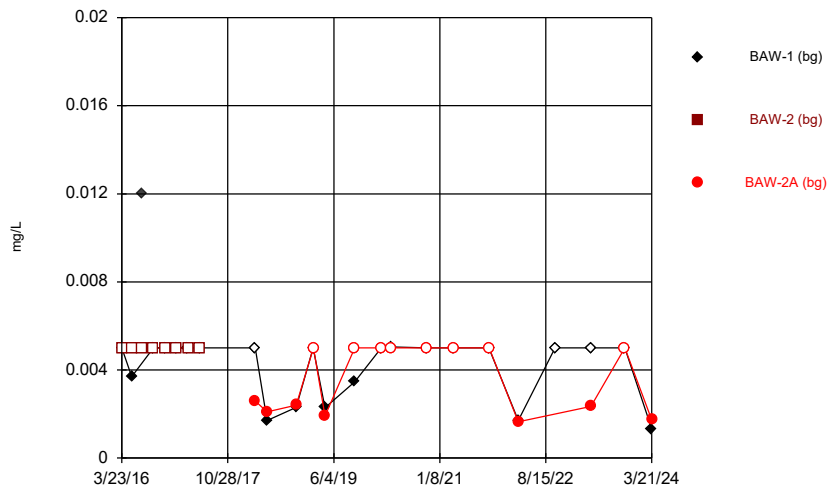
Constituent: Fluoride Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



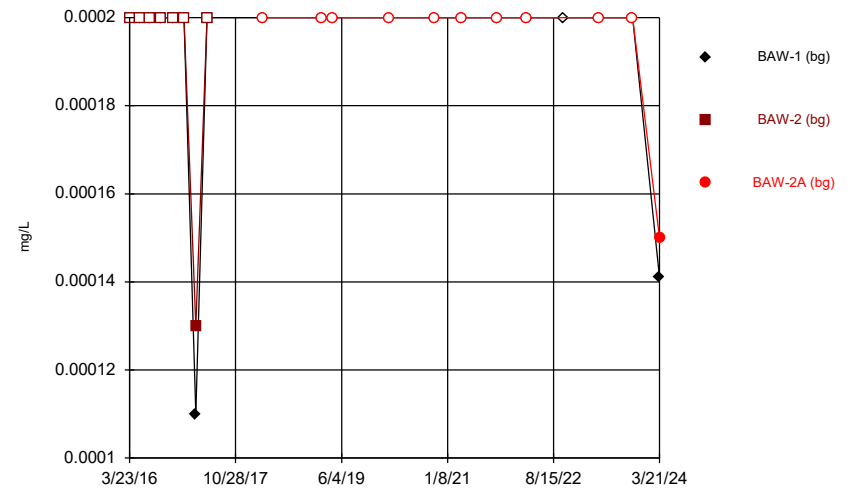
Constituent: Lead Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



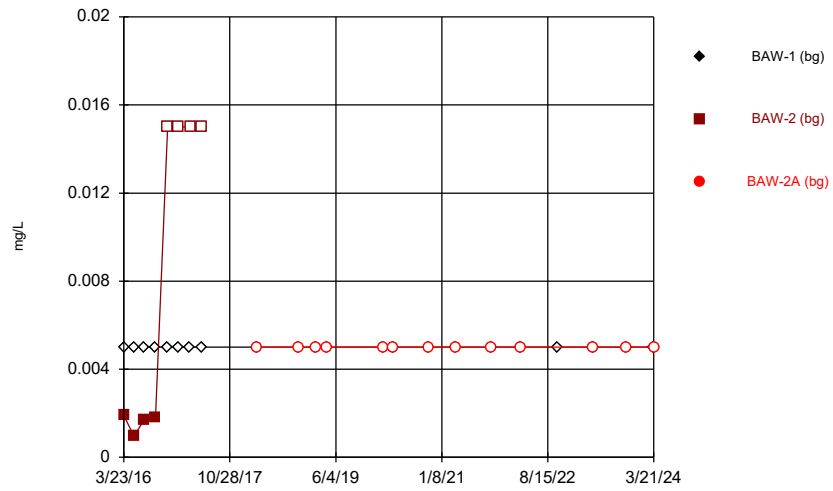
Constituent: Lithium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



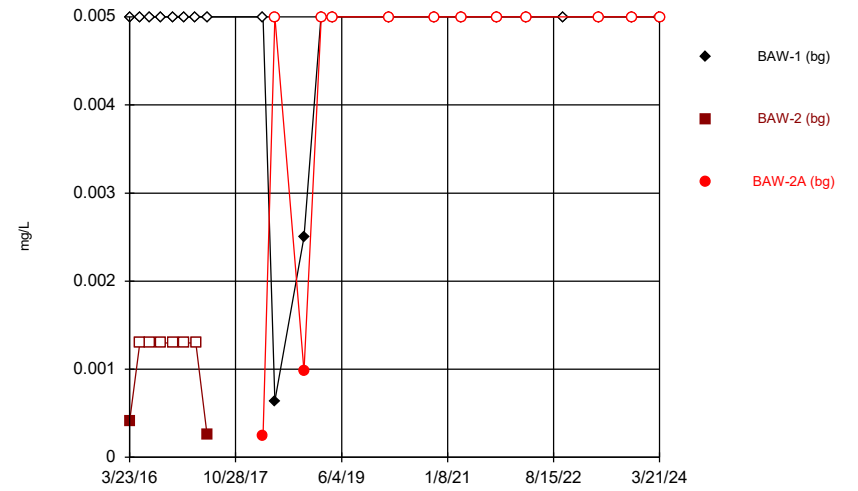
Constituent: Mercury Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



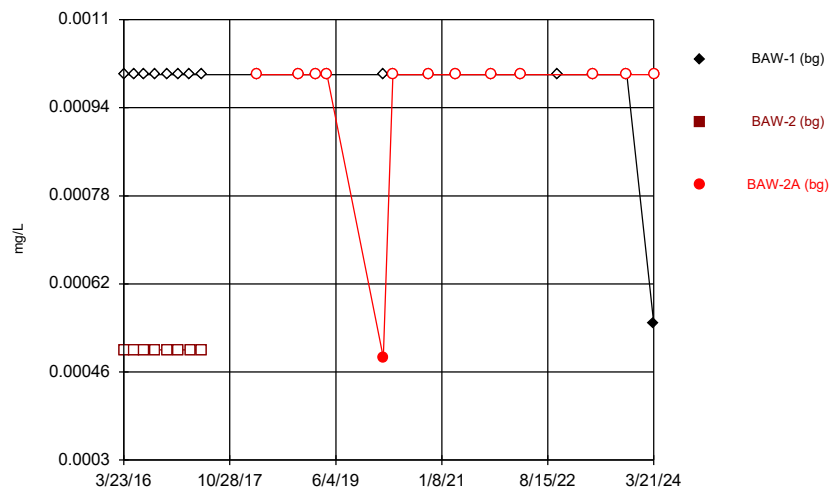
Constituent: Molybdenum Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



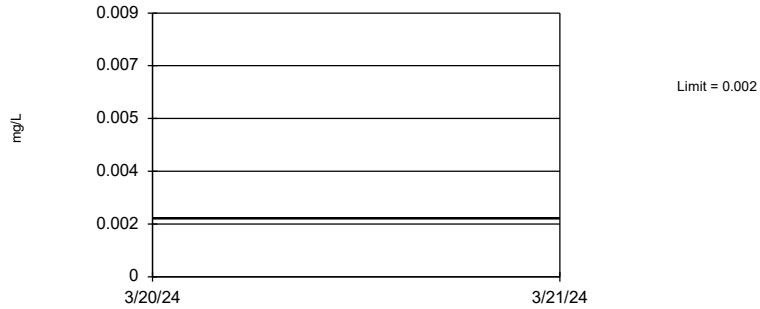
Constituent: Selenium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



Constituent: Thallium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

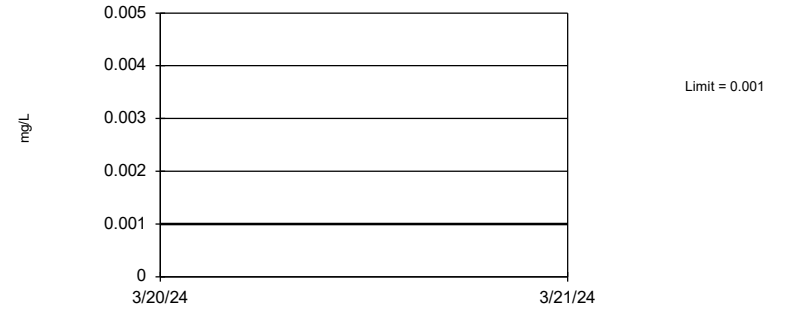
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1221.

Constituent: Antimony Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

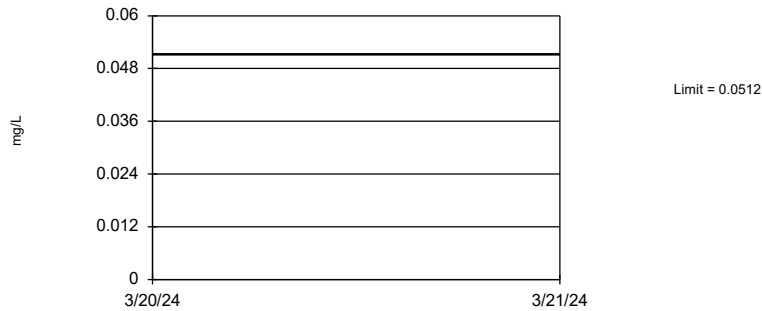
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored, limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Arsenic Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

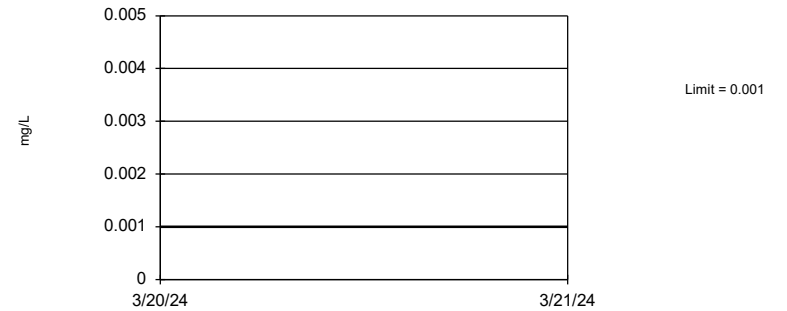
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. 2.128% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Barium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

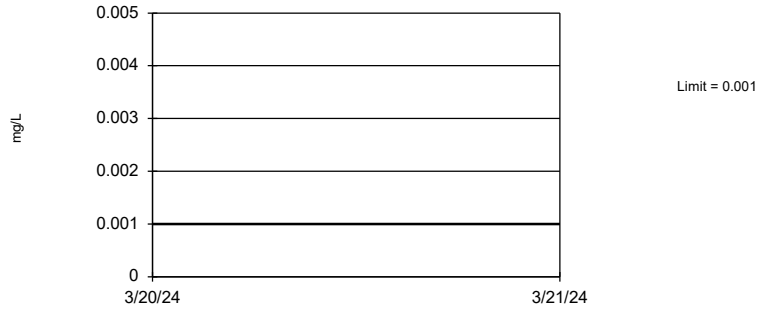
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. 90.04% coverage at alpha=0.01; 93.16% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1102.

Constituent: Beryllium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

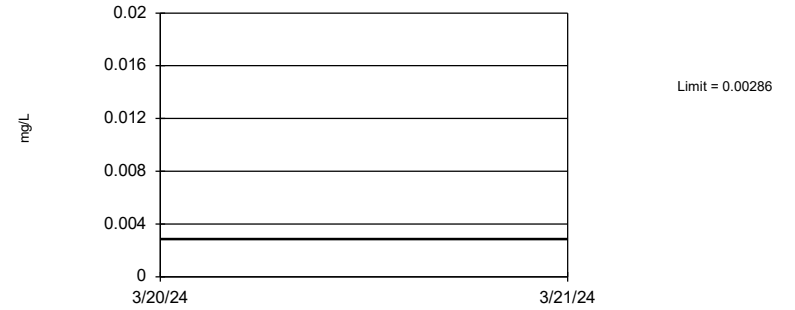
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 47 background values. 97.87% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Cadmium Analysis Run 5/2/2024 10:08 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

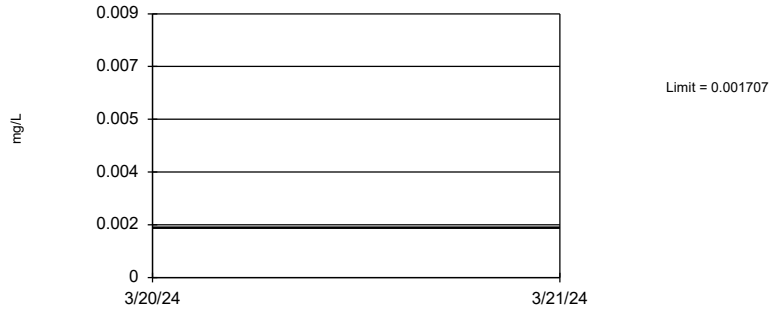
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 45 background values. 91.11% NDs. 90.43% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.09944.

Constituent: Chromium Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

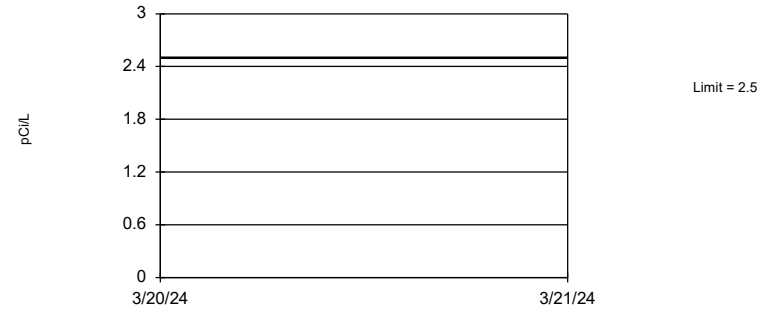
Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary (based on square root transformation): Mean=0.02914, Std. Dev.=0.00585, n=47, 6.383% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9427, critical = 0.928. Report alpha = 0.05.

Constituent: Cobalt Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

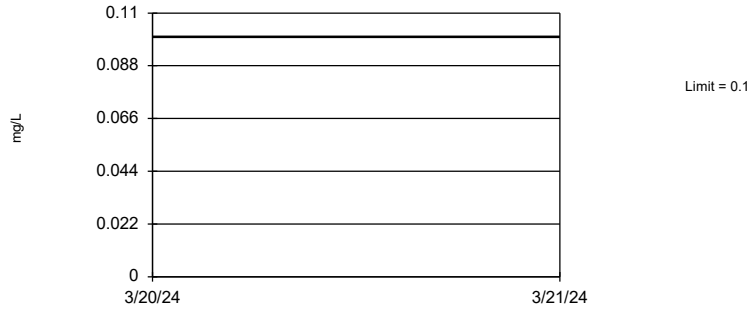
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. 4.255% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Combined Radium 226 + 228 Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

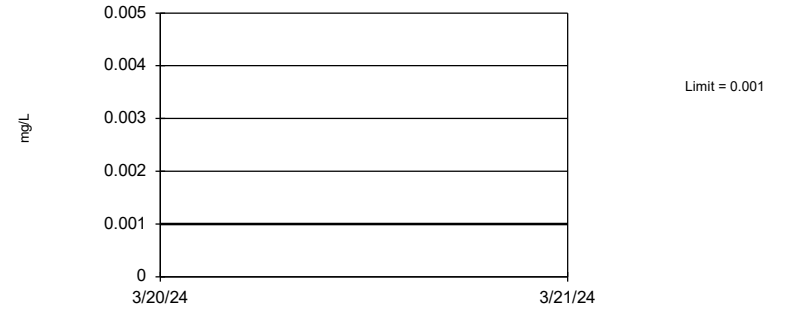
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 49 background values. 83.67% NDs. 91.21% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08099.

Constituent: Fluoride Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

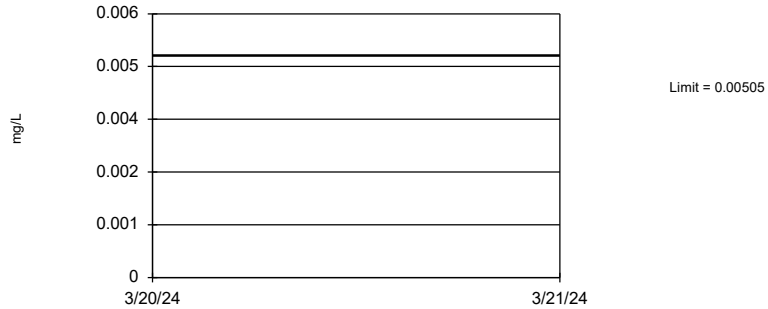
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 90.43% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.09944.

Constituent: Lead Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

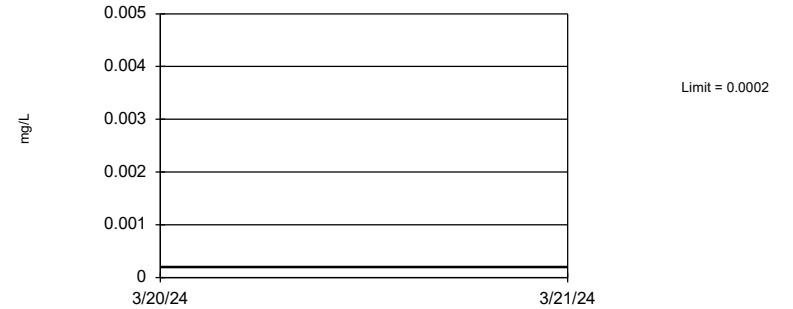
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 46 background values. 67.39% NDs. 90.43% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.09447.

Constituent: Lithium Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 39 background values. 89.74% NDs. 88.87% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1353.

Constituent: Mercury Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 43 background values. 90.7% NDs. 90.04% coverage at alpha=0.01; 93.16% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1102.

Constituent: Molybdenum Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLS
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

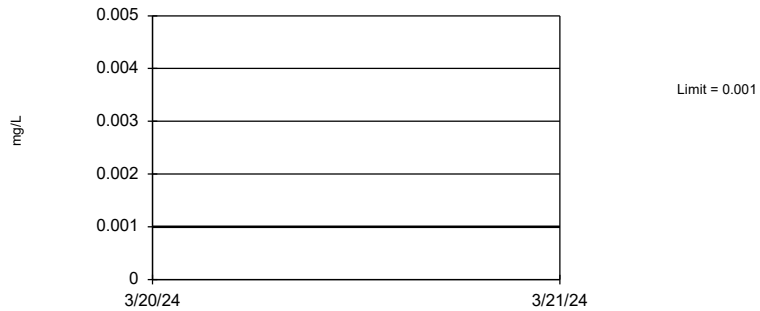
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 43 background values. 86.05% NDs. 90.04% coverage at alpha=0.01; 93.16% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1102.

Constituent: Selenium Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLS
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 43 background values. 95.35% NDs. 90.04% coverage at alpha=0.01; 93.16% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1102.

Constituent: Thallium Analysis Run 5/2/2024 10:09 AM View: Appendix IV - UTLS
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Groundwater Protection Standards

PLANT DANIEL BOTTOM ASH 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		0.001	0.01
Barium, Total (mg/L)	2		0.051	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		0.0029	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0017	0.006
Combined Radium, Total (pCi/L)	5		2.5	5
Fluoride, Total (mg/L)	4		0.1	4
Lead, Total (mg/L)	0.015		0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.0051	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

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

Confidence Intervals

Confidence Interval Summary Table - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:13 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig. N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-5	0.1837	0.1377	0.04	Yes 24	0.1535	0.05393	0	None	x^2	0.01	Param.

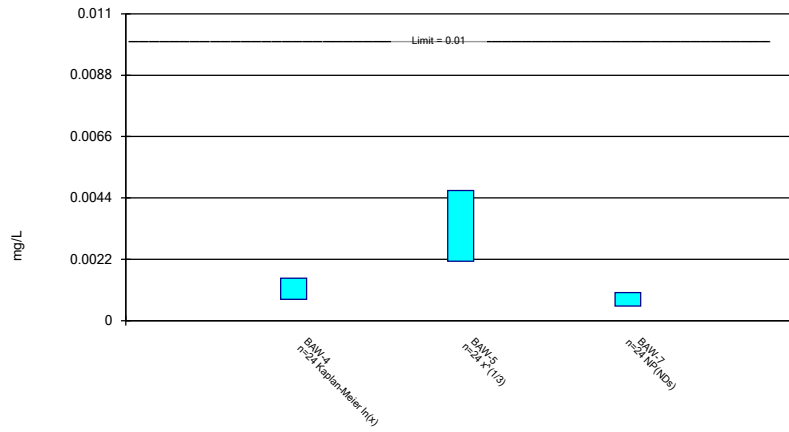
Confidence Interval Summary Table - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:13 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	BAW-4	0.001525	0.0007639	0.01	No 24	0.001516	0.001274	16.67	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	BAW-5	0.004662	0.002135	0.01	No 24	0.003876	0.003196	0	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	BAW-7	0.001	0.00052	0.01	No 24	0.0009592	0.0001384	91.67	None	No	0.01	NP (NDs)
Barium (mg/L)	BAW-3	0.03274	0.02393	2	No 24	0.02833	0.008638	0	None	No	0.01	Param.
Barium (mg/L)	BAW-4	0.0223	0.0091	2	No 24	0.0142	0.007611	0	None	No	0.01	NP (normality)
Barium (mg/L)	BAW-5	0.055	0.041	2	No 24	0.05227	0.01909	0	None	No	0.01	NP (normality)
Barium (mg/L)	BAW-7	0.02	0.0117	2	No 24	0.01873	0.01745	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	BAW-3	0.001	0.000225	0.004	No 22	0.0009295	0.000228	90.91	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BAW-7	0.001	0.000185	0.004	No 22	0.000963	0.0001738	95.45	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BAW-3	0.0008494	0.0005588	0.005	No 24	0.0007041	0.0002848	4.167	None	No	0.01	Param.
Cadmium (mg/L)	BAW-5	0.001	0.000155	0.005	No 24	0.0009648	0.0001725	95.83	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-3	0.003	0.00165	0.1	No 23	0.002772	0.003566	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-4	0.002	0.0015	0.1	No 23	0.001917	0.0002289	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-5	0.0024	0.0012	0.1	No 23	0.002113	0.0006573	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-7	0.00206	0.002	0.1	No 23	0.002003	0.00001251	95.65	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BAW-3	0.006845	0.005147	0.006	No 24	0.005996	0.001664	0	None	No	0.01	Param.
Cobalt (mg/L)	BAW-4	0.00144	0.00107	0.006	No 24	0.001255	0.0003628	0	None	No	0.01	Param.
Cobalt (mg/L)	BAW-5	0.000802	0.0005	0.006	No 24	0.000711	0.0005099	70.83	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BAW-7	0.00112	0.00071	0.006	No 24	0.00119	0.0009895	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-3	0.884	0.27	5	No 24	0.6381	0.6789	8.333	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-4	0.7165	0.1361	5	No 24	0.6056	0.7719	12.5	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAW-5	0.9408	0.4066	5	No 23	0.7426	0.5912	4.348	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAW-7	1.014	0.333	5	No 24	0.7977	0.7902	12.5	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BAW-3	0.1	0.0537	4	No 25	0.09274	0.0204	88	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BAW-4	0.0578	0.04	4	No 25	0.0572	0.0254	24	None	No	0.01	NP (normality)
Fluoride (mg/L)	BAW-5	0.07424	0.05336	4	No 25	0.06687	0.02828	4	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BAW-7	0.1	0.0415	4	No 25	0.09189	0.02253	88	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-3	0.001	0.000322	0.015	No 23	0.0007143	0.000375	60.87	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-4	0.001	0.00042	0.015	No 23	0.0008763	0.0002803	82.61	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-5	0.001	0.000152	0.015	No 23	0.0009631	0.0001768	95.65	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-7	0.001	0.000129	0.015	No 23	0.0009621	0.0001816	95.65	None	No	0.01	NP (NDs)
Lithium (mg/L)	BAW-3	0.005	0.00322	0.04	No 24	0.004271	0.001255	58.33	None	No	0.01	NP (NDs)
Lithium (mg/L)	BAW-4	0.02574	0.0176	0.04	No 24	0.02167	0.007973	0	None	No	0.01	Param.
Lithium (mg/L)	BAW-5	0.1837	0.1377	0.04	Yes 24	0.1535	0.05393	0	None	x^2	0.01	Param.
Lithium (mg/L)	BAW-7	0.005	0.0037	0.04	No 24	0.004956	0.002231	50	None	No	0.01	NP (normality)
Mercury (mg/L)	BAW-3	0.000497	0.000133	0.002	No 20	0.0002022	0.00007642	80	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-4	0.0002	0.000135	0.002	No 20	0.0001869	0.00003389	85	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-5	0.0002	0.000134	0.002	No 20	0.0001904	0.00003111	90	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-7	0.000235	0.000151	0.002	No 20	0.00024	0.0002284	75	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BAW-4	0.005	0.00109	0.1	No 22	0.003809	0.001845	68.18	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BAW-5	0.003809	0.001686	0.1	No 22	0.006402	0.005683	27.27	Kaplan-Meier	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	BAW-7	0.005	0.0038	0.1	No 22	0.004945	0.0002558	95.45	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-3	0.005	0.00079	0.05	No 22	0.003563	0.002157	68.18	None	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-5	0.005	0.00033	0.05	No 22	0.004788	0.0009956	95.45	None	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-7	0.005	0.0021	0.05	No 22	0.004013	0.001895	77.27	None	No	0.01	NP (NDs)
Thallium (mg/L)	BAW-3	0.001	0.000276	0.002	No 22	0.0008461	0.0003358	81.82	None	No	0.01	NP (NDs)
Thallium (mg/L)	BAW-7	0.001	0.000153	0.002	No 22	0.0009615	0.0001806	95.45	None	No	0.01	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

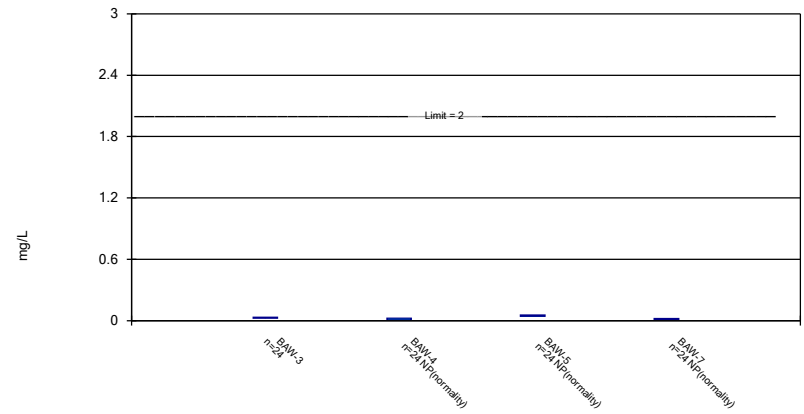
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

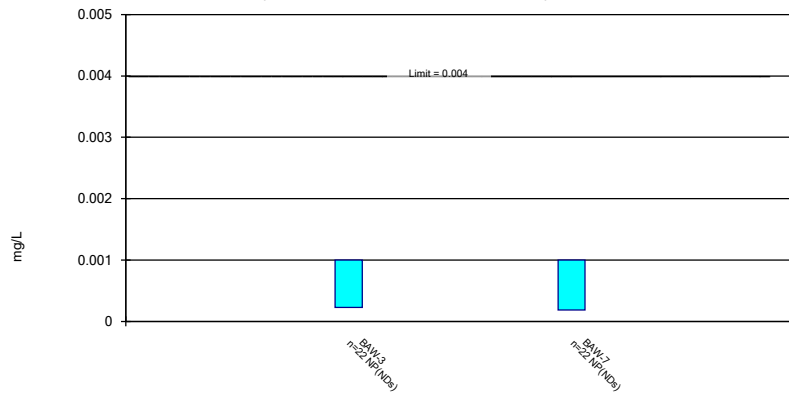
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

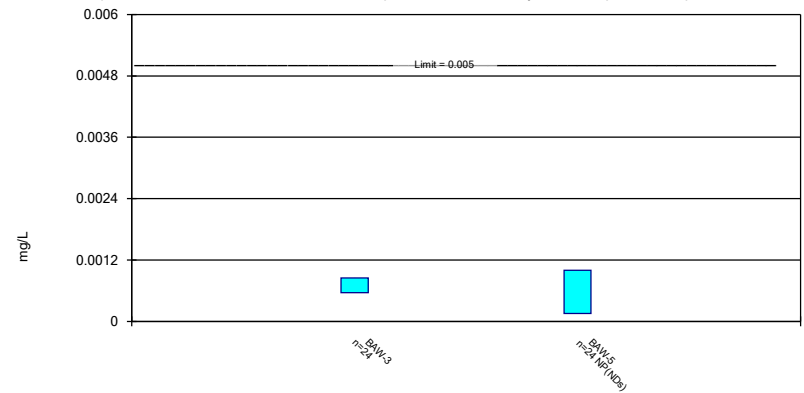
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

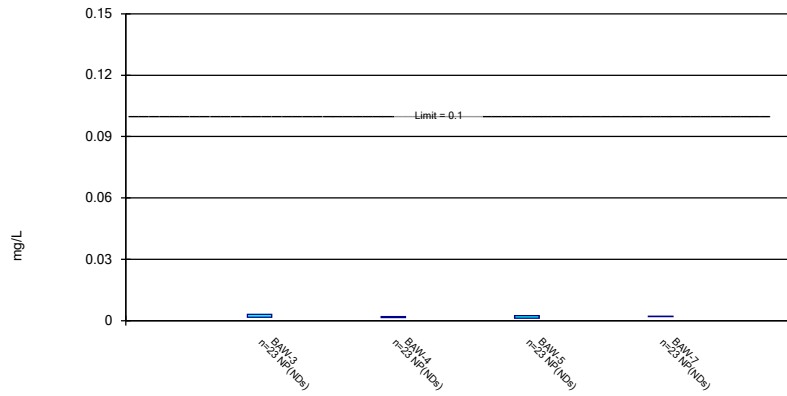
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

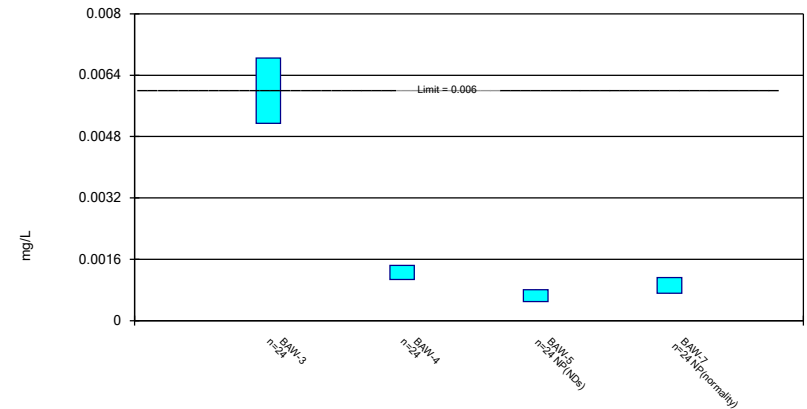
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

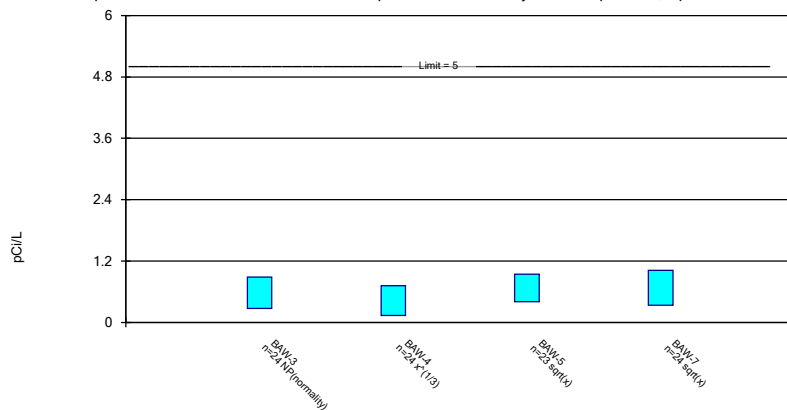
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

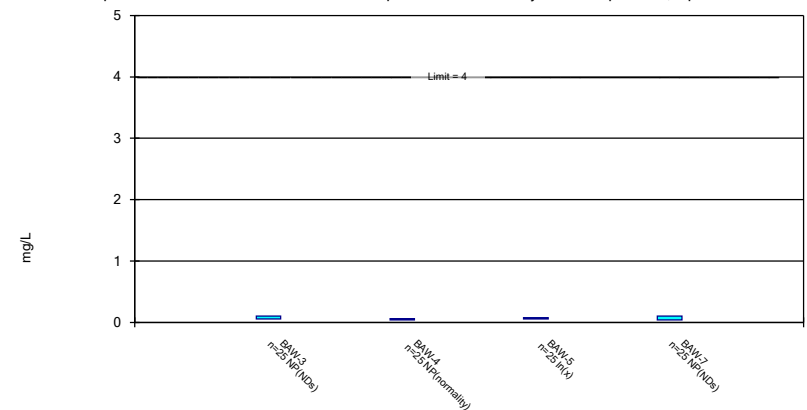
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

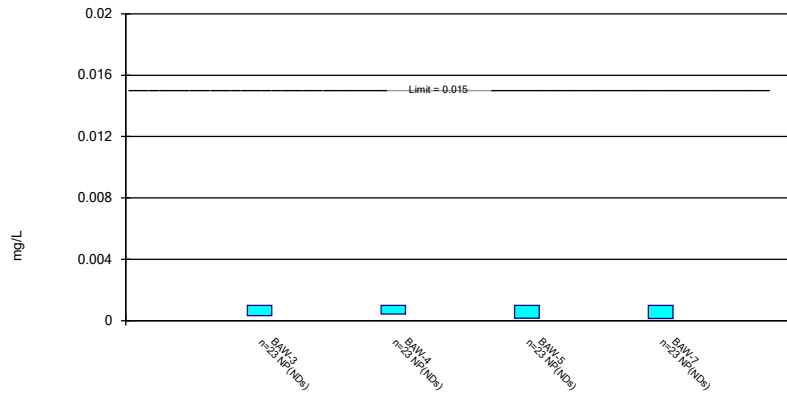
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

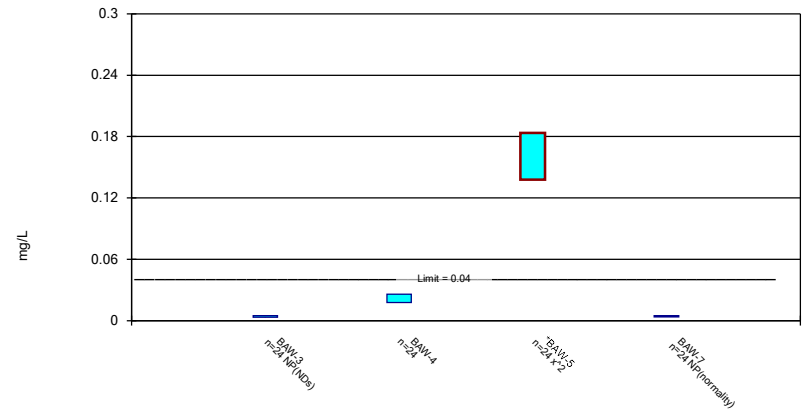
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

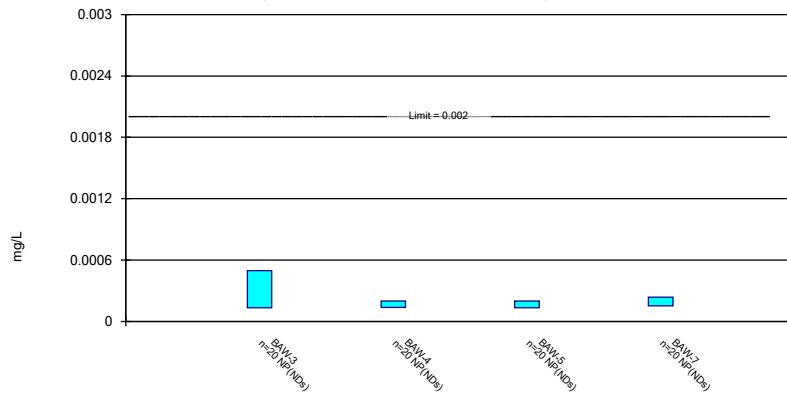
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

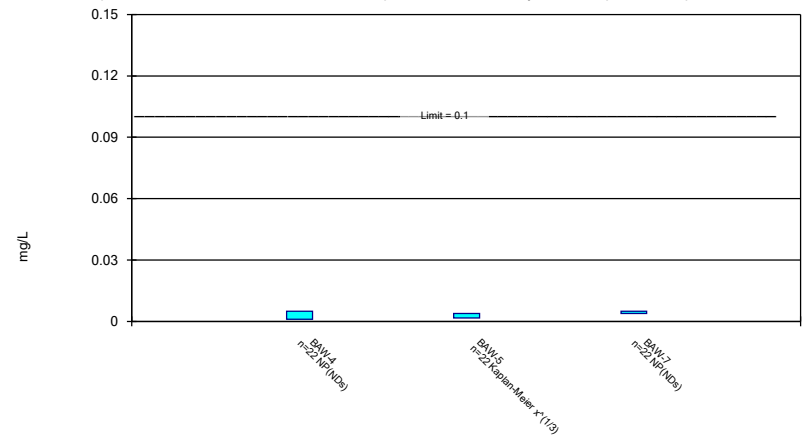
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

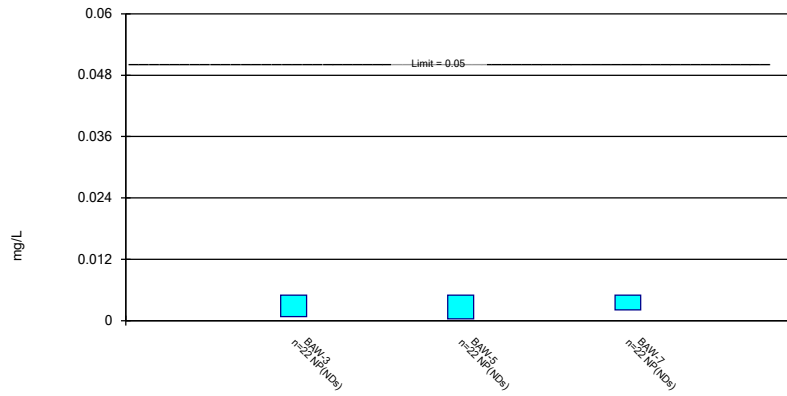
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

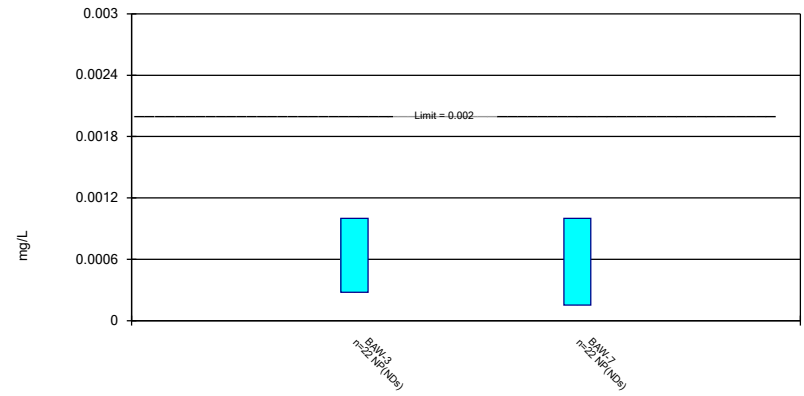
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 5/2/2024 10:12 AM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-4	BAW-5	BAW-7
3/23/2016	0.00087 (J)	0.0033	<0.001
5/17/2016	<0.0013	0.00089 (J)	<0.001
7/12/2016			<0.001
7/13/2016	0.00081 (J)	0.0039	
9/13/2016		0.0039	<0.001
9/14/2016	0.00069 (J)		
11/19/2016	0.0013	0.0037	0.0005 (J)
1/17/2017			<0.001
1/18/2017	<0.0013	0.0016	
3/22/2017			0.00052 (J)
3/23/2017	0.00078 (J)	0.0017	
5/24/2017	0.001 (J)	0.0021	<0.001
3/28/2018	<0.0013	0.0011 (J)	
3/29/2018			<0.001
6/2/2018	0.00068 (J)	0.0017	<0.001
11/8/2018	<0.0013		
11/9/2018		0.0021	<0.001
2/11/2019	0.000737 (J)	0.00232	
2/12/2019			<0.001
4/17/2019	0.000645 (J)	0.00218	
4/18/2019			<0.001
9/27/2019			<0.001
9/30/2019	0.000821 (J)	0.00272	
2/21/2020			<0.001
2/22/2020	0.000837 (J)	0.00177	
4/14/2020	0.000896 (J)	0.00177	<0.001
10/30/2020	0.000529 (J)	0.0013	
11/2/2020			<0.001
3/17/2021	0.000454 (J)	0.00385	
3/26/2021			<0.001
10/5/2021	0.00259		<0.001
10/6/2021		0.0125	
3/16/2022	0.00411	0.0101	<0.001
10/5/2022	0.00467		
10/6/2022		0.0108	<0.001
4/21/2023	0.00477	0.00683	<0.001
10/24/2023			<0.001
10/25/2023	0.00241	0.00575	
3/20/2024		0.00515	
3/21/2024	0.00159		<0.001
Mean	0.001516	0.003876	0.0009592
Std. Dev.	0.001274	0.003196	0.0001384
Upper Lim.	0.001525	0.004662	0.001
Lower Lim.	0.0007639	0.002135	0.00052

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	0.013	0.011	0.044	0.013
5/17/2016		0.0085	0.055	0.012
5/18/2016	0.012			
7/12/2016				0.011
7/13/2016	0.016	0.0073	0.041	
9/13/2016			0.046	0.012
9/14/2016	0.018	0.0095		
11/19/2016	0.021	0.012	0.044	0.012
1/17/2017	0.029			0.014
1/18/2017		0.0096	0.045	
3/22/2017				0.012
3/23/2017	0.024	0.0093	0.038	
5/24/2017	0.022	0.0096	0.046	0.012
3/28/2018	0.026	0.0086	0.043	
3/29/2018				0.011
6/2/2018	0.029	0.0087	0.043	0.011
11/8/2018	0.028	0.0091		
11/9/2018			0.039	0.011
2/11/2019		0.00931	0.0388	
2/12/2019	0.0274			0.0102
4/17/2019	0.0263	0.00888	0.0378	
4/18/2019				0.0101
9/27/2019				0.0121
9/30/2019	0.0343	0.0103	0.0424	
2/21/2020	0.0304			0.0117
2/22/2020		0.0108	0.0453	
4/14/2020	0.0335	0.00949 (J)	0.0452	0.0124
10/30/2020	0.0349	0.0116	0.0428	
11/2/2020				0.0117
3/17/2021		0.0224	0.0382	
3/26/2021	0.0253			0.0184
10/5/2021		0.0283		0.02
10/6/2021	0.03		0.0493	
3/16/2022	0.037	0.0326	0.0688	0.0245
10/5/2022	0.0415	0.0248		
10/6/2022			0.0747	0.0937
4/20/2023	0.0369			
4/21/2023		0.0223	0.103	0.0355
10/24/2023				0.0274
10/25/2023	0.0427	0.0221	0.0883	
3/20/2024			0.0958	
3/21/2024	0.0418	0.0246		0.0307
Mean	0.02833	0.0142	0.05227	0.01873
Std. Dev.	0.008638	0.007611	0.01909	0.01745
Upper Lim.	0.03274	0.0223	0.055	0.02
Lower Lim.	0.02393	0.0091	0.041	0.0117

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-7
3/23/2016	<0.001	<0.001
5/17/2016		<0.001
5/18/2016	<0.001	
7/12/2016		<0.001
7/13/2016	<0.001	
9/13/2016		<0.001
9/14/2016	<0.001	
11/19/2016	<0.001	<0.001
1/17/2017	<0.001	<0.001
3/22/2017		<0.001
3/23/2017	<0.001	
5/24/2017	<0.001	<0.001
3/28/2018	<0.001	
3/29/2018		<0.001
11/8/2018	<0.001	
11/9/2018		<0.001
2/12/2019	<0.001	<0.001
4/17/2019	<0.001	
4/18/2019		<0.001
2/21/2020	<0.001	<0.001
4/14/2020	<0.001	<0.001
10/30/2020	<0.001	
11/2/2020		<0.001
3/26/2021	<0.001	<0.001
10/5/2021		0.000185 (J)
10/6/2021	<0.001	
3/16/2022	<0.001	<0.001
10/5/2022	<0.001	
10/6/2022		<0.001
4/20/2023	0.000225 (J)	
4/21/2023		<0.001
10/24/2023		<0.001
10/25/2023	0.000225 (J)	
3/21/2024	<0.001	<0.001
Mean	0.0009295	0.000963
Std. Dev.	0.000228	0.0001738
Upper Lim.	0.001	0.001
Lower Lim.	0.000225	0.000185

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-5
3/23/2016	0.00041 (J)	<0.001
5/17/2016		<0.001
5/18/2016	<0.0025	
7/13/2016	0.00087 (J)	<0.001
9/13/2016		<0.001
9/14/2016	0.00078 (J)	
11/19/2016	0.00054 (J)	<0.001
1/17/2017	0.00048 (J)	
1/18/2017		<0.001
3/23/2017	0.00059 (J)	<0.001
5/24/2017	0.00081 (J)	<0.001
3/28/2018	0.0008 (J)	<0.001
6/2/2018	0.001 (J)	<0.001
11/8/2018	0.00085 (J)	
11/9/2018		<0.001
2/11/2019		<0.001
2/12/2019	0.000877 (J)	
4/17/2019	0.000915 (J)	<0.001
9/30/2019	0.00112 (J)	0.000155 (J)
2/21/2020	0.000962 (J)	
2/22/2020		<0.001
4/14/2020	0.00107 (J)	<0.001
10/30/2020	0.00084 (J)	<0.001
3/17/2021		<0.001
3/26/2021	0.000615 (J)	
10/6/2021	0.000338 (J)	<0.001
3/16/2022	0.000252 (J)	<0.001
10/5/2022	0.000379 (J)	
10/6/2022		<0.001
4/20/2023	0.0004 (J)	
4/21/2023		<0.001
10/25/2023	0.00035 (J)	<0.001
3/20/2024		<0.001
3/21/2024	0.000401 (J)	
Mean	0.0007041	0.0009648
Std. Dev.	0.0002848	0.0001725
Upper Lim.	0.0008494	0.001
Lower Lim.	0.0005588	0.000155

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.002	0.0015 (J)	0.0012 (J)	<0.002
5/17/2016		<0.002	<0.002	<0.002
5/18/2016	<0.002			
7/12/2016				<0.002
7/13/2016	0.003	0.0015 (J)	0.0024 (J)	
9/13/2016			<0.002	<0.002
9/14/2016	<0.002	<0.002		
11/19/2016	<0.002	0.0011 (J)	<0.002	<0.002
1/17/2017	<0.002			<0.002
1/18/2017		<0.002	<0.002	
3/22/2017				<0.002
3/23/2017	<0.002	<0.002	<0.002	
5/24/2017	<0.002	<0.002	<0.002	<0.002
3/28/2018	<0.002	<0.002	0.005	
3/29/2018				<0.002
6/2/2018	<0.002	<0.002	<0.002	<0.002
11/8/2018	<0.002	<0.002		
11/9/2018			<0.002	<0.002
2/11/2019		<0.002	<0.002	
2/12/2019	0.00165 (J)			<0.002
4/17/2019	<0.002	<0.002	<0.002	
4/18/2019				<0.002
9/27/2019				0.00206 (J)
9/30/2019	<0.002	<0.002	<0.002	
2/21/2020	<0.002			<0.002
2/22/2020		<0.002	<0.002	
10/30/2020	<0.002	<0.002	<0.002	
11/2/2020				<0.002
3/17/2021		<0.002	<0.002	
3/26/2021	<0.002			<0.002
10/5/2021		<0.002		<0.002
10/6/2021	<0.002		<0.002	
3/16/2022	<0.002	<0.002	<0.002	<0.002
10/5/2022	0.0191	<0.002		
10/6/2022			<0.002	<0.002
4/20/2023	<0.002			
4/21/2023		<0.002	<0.002	<0.002
10/24/2023				<0.002
10/25/2023	<0.002	<0.002	<0.002	
3/20/2024			<0.002	
3/21/2024	<0.002	<0.002		<0.002
Mean	0.002772	0.001917	0.002113	0.002003
Std. Dev.	0.003566	0.0002289	0.0006573	1.251E-05
Upper Lim.	0.003	0.002	0.0024	0.00206
Lower Lim.	0.00165	0.0015	0.0012	0.002

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	0.0055	0.00094 (J)	<0.0005	0.0011 (J)
5/17/2016		0.0007 (J)	<0.0005	0.001 (J)
5/18/2016	0.0059			
7/12/2016				0.00091 (J)
7/13/2016	0.0048	0.0016 (J)	0.00042 (J)	
9/13/2016			<0.0005	0.001 (J)
9/14/2016	0.0063	0.0011 (J)		
11/19/2016	0.0056	0.0012 (J)	<0.0005	0.00083 (J)
1/17/2017	0.0046			0.00091 (J)
1/18/2017		0.0011 (J)	<0.0005	
3/22/2017				0.00098 (J)
3/23/2017	0.0049	0.0011 (J)	<0.0005	
5/24/2017	0.0052	0.0012 (J)	<0.0005	0.00098 (J)
3/28/2018	0.0063	0.00095 (J)	<0.0005	
3/29/2018				0.00063 (J)
6/2/2018	0.0068	0.0012 (J)	<0.0005	0.00087 (J)
11/8/2018	0.0068	0.0011 (J)		
11/9/2018			<0.0005	0.00076 (J)
2/11/2019		0.00093 (J)	<0.0005	
2/12/2019	0.00552			0.000661 (J)
4/17/2019	0.00603	0.00116 (J)	<0.0005	
4/18/2019				0.000705 (J)
9/27/2019				0.00071 (J)
9/30/2019	0.0062	0.001 (J)	<0.0005	
2/21/2020	0.00576			0.000634 (J)
2/22/2020		0.000907 (J)	<0.0005	
4/14/2020	0.00633	0.00105 (J)	<0.0005	0.000684 (J)
10/30/2020	0.00657	0.00102 (J)	<0.0005	
11/2/2020				0.000729 (J)
3/17/2021		0.00208	<0.0005	
3/26/2021	0.00339			0.000995
10/5/2021		0.00187		0.00112
10/6/2021	0.00336		0.000802	
3/16/2022	0.00289	0.00182	0.000967	0.00141
10/5/2022	0.00821	0.00121		
10/6/2022			0.00143	0.00548
4/20/2023	0.0083			
4/21/2023		0.00142	0.00275	0.00216
10/24/2023				0.00143
10/25/2023	0.0092	0.00187	0.000885	
3/20/2024			0.00131	
3/21/2024	0.00945	0.0016		0.00186
Mean	0.005996	0.001255	0.000711	0.00119
Std. Dev.	0.001664	0.0003628	0.0005099	0.0009895
Upper Lim.	0.006845	0.00144	0.000802	0.00112
Lower Lim.	0.005147	0.00107	0.0005	0.00071

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<5	<5	0.549	<5
5/17/2016		<5	0.551	<5
5/18/2016	<5			
7/12/2016				0.165 (U)
7/13/2016	0.27 (U)	0.0365 (U)	0.859	
9/13/2016			0.367 (U)	0.341 (U)
9/14/2016	-0.0909 (U)	0.3 (U)		
11/19/2016	0.416	<5 (U)	<5 (U)	<5 (U)
1/17/2017	0.412 (U)			0.124 (U)
1/18/2017		0.235 (U)	0.289 (U)	
3/22/2017				0.0719 (U)
3/23/2017	0.0761 (U)	0.168 (U)	0.554	
5/24/2017	0.0415 (U)	-0.0607 (U)	0.831	0.441
3/28/2018	0.398	0.42	0.458	
3/29/2018				0.731
6/2/2018	-0.253 (U)	0.0844 (U)	0.226 (U)	0.303 (U)
11/8/2018	0.343 (U)	0.367 (U)		
11/9/2018			0.298 (U)	0.00226 (U)
2/11/2019		0.0402 (U)	0.15 (U)	
2/12/2019	0.581			0.094 (U)
4/17/2019	0.646	0.493	0.326 (U)	
4/18/2019				0.48
9/27/2019				0.497
9/30/2019	1	0.404		
2/21/2020	0.126 (U)			0.375
2/22/2020		0.53	0.47	
4/14/2020	0.338	0.0408 (U)	0.376 (U)	0.329 (U)
10/30/2020	0.485	0.344	0.528	
11/2/2020				0.535
3/17/2021		0.312 (U)	0.0889 (U)	
3/26/2021	0.78			0.813
10/5/2021		1.06		0.814
10/6/2021	0.503		0.931	
3/16/2022	0.286 (U)	0.314 (U)	1.39	1.39
10/21/2022	1.29	0.562 (U)	1.36	2.03
4/20/2023	0.884			
4/21/2023		0.158 (U)	1.73	0.802
10/24/2023				0.7
10/25/2023	0.857	0.472 (U)	1.49	
3/20/2024			0.758	
3/21/2024	0.926	0.754		0.606
Mean	0.6381	0.6056	0.7426	0.7977
Std. Dev.	0.6789	0.7719	0.5912	0.7902
Upper Lim.	0.884	0.7165	0.9408	1.014
Lower Lim.	0.27	0.1361	0.4066	0.333

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.1	0.04 (J)	0.06 (J)	<0.1
5/17/2016		0.04 (J)	0.07 (J)	<0.1
5/18/2016	<0.1			
7/12/2016				<0.1
7/13/2016	<0.1	0.05 (J)	0.08 (J)	
9/13/2016			0.06 (J)	<0.1
9/14/2016	<0.1	0.04 (J)		
11/19/2016	<0.1	0.04 (J)	0.06 (J)	<0.1
1/17/2017	<0.1			<0.1
1/18/2017		<0.1	0.05 (J)	
3/22/2017				<0.1
3/23/2017	<0.1	<0.1	0.05 (J)	
5/24/2017	<0.1	0.04 (J)	0.06 (J)	<0.1 (D)
10/16/2017	<0.1	<0.1	0.06 (J)	<0.1
3/28/2018	<0.1	0.04 (J)	0.06 (J)	
3/29/2018				<0.1
6/2/2018	<0.1	0.05 (J)	0.06 (J)	<0.1
11/8/2018	<0.1	0.05 (J)		
11/9/2018			0.06 (J)	<0.1
2/11/2019		<0.1	0.0368 (J)	
2/12/2019	<0.1			<0.1
4/17/2019	<0.1	0.033 (J)	0.0421 (J)	
4/18/2019				<0.1
9/27/2019				<0.1
9/30/2019	<0.1	<0.1	0.045 (J)	
2/21/2020	<0.1			<0.1
2/22/2020		0.0317 (J)	0.0434 (J)	
4/14/2020	0.034 (J)	0.0508 (J)	0.059 (J)	0.0415 (J)
10/30/2020	<0.1	<0.1	<0.1	
11/2/2020				<0.1
3/17/2021		0.0544 (J)	0.0575 (J)	
3/26/2021	<0.1			<0.1
10/5/2021		0.0505 (J)		<0.1
10/6/2021	<0.1		0.0725 (J)	
3/16/2022	0.0307 (J)	0.0462 (J)	0.176	0.0266 (J)
10/5/2022	<0.1	0.0322 (J)		
10/6/2022			0.0972 (J)	<0.1
4/20/2023	<0.1			
4/21/2023		0.0441 (J)	0.0665 (J)	<0.1
10/24/2023				<0.1
10/25/2023	<0.1	0.0393 (J)	0.0858 (J)	
3/20/2024			0.11	
3/21/2024	0.0537 (J)	0.0578 (J)		0.0292 (J)
Mean	0.09274	0.0572	0.06687	0.09189
Std. Dev.	0.0204	0.0254	0.02828	0.02253
Upper Lim.	0.1	0.0578	0.07424	0.1
Lower Lim.	0.0537	0.04	0.05336	0.0415

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.001	0.00039 (J)	<0.001	<0.001
5/17/2016		<0.001	<0.001	<0.001
5/18/2016	<0.001			
7/12/2016				<0.001
7/13/2016	<0.001	<0.001	<0.001	
9/13/2016			<0.001	<0.001
9/14/2016	0.00056 (J)	<0.001		
11/19/2016	<0.001	0.00042 (J)	<0.001	<0.001
1/17/2017	<0.001			<0.001
1/18/2017		<0.001	<0.001	
3/22/2017				<0.001
3/23/2017	0.00038 (J)	<0.001	<0.001	
5/24/2017	0.00036 (J)	<0.001	<0.001	<0.001
3/28/2018	<0.001	<0.001	<0.001	
3/29/2018				<0.001
11/8/2018	<0.001	<0.001		
11/9/2018			<0.001	<0.001
2/11/2019		<0.001	<0.001	
2/12/2019	0.000139 (J)			<0.001
4/17/2019	<0.001	<0.001	<0.001	
4/18/2019				<0.001
9/27/2019				0.000129 (J)
9/30/2019	0.000322 (J)	0.000191 (J)	0.000152 (J)	
2/21/2020	0.00015 (J)			<0.001
2/22/2020		<0.001	<0.001	
4/14/2020	0.000236 (J)	<0.001	<0.001	<0.001
10/30/2020	0.000136 (J)	<0.001	<0.001	
11/2/2020				<0.001
3/17/2021		0.000153 (J)	<0.001	
3/26/2021	0.000145 (J)			<0.001
10/5/2021		<0.001		<0.001
10/6/2021	<0.001		<0.001	
3/16/2022	<0.001	<0.001	<0.001	<0.001
10/5/2022	<0.001	<0.001		
10/6/2022			<0.001	<0.001
4/20/2023	<0.001			
4/21/2023		<0.001	<0.001	<0.001
10/24/2023				<0.001
10/25/2023	<0.001	<0.001	<0.001	
3/20/2024			<0.001	
3/21/2024	<0.001	<0.001		<0.001
Mean	0.0007143	0.0008763	0.0009631	0.0009621
Std. Dev.	0.000375	0.0002803	0.0001768	0.0001816
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	0.000322	0.00042	0.000152	0.000129

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.005	0.044	0.17	<0.005
5/17/2016		0.028	0.2	<0.005
5/18/2016	<0.005			
7/12/2016				<0.005
7/13/2016	<0.005	0.026	0.17	
9/13/2016			0.17	<0.005
9/14/2016	<0.005	0.026		
11/19/2016	<0.005	0.026	0.18	0.0035 (J)
1/17/2017	<0.005			<0.005
1/18/2017		0.027	0.2	
3/22/2017				<0.005
3/23/2017	<0.005	0.024	0.19	
5/24/2017	<0.005	0.027	0.21	<0.005
3/28/2018	0.0023 (J)	0.021	0.23	
3/29/2018				0.0026 (J)
6/2/2018	0.002 (J)	0.022	0.19	0.0029 (J)
11/8/2018	0.0024 (J)	0.025		
11/9/2018			0.18	0.0027 (J)
2/11/2019		0.0229	0.161	
2/12/2019	<0.005			<0.005
4/17/2019	0.00197 (J)	0.0236	0.174	
4/18/2019				0.00238 (J)
9/27/2019				0.00375 (J)
9/30/2019	0.00687	0.0249	0.166	
2/21/2020	<0.005			<0.005
2/22/2020		0.0211	0.169	
4/14/2020	<0.005	0.0224	0.192	<0.005
10/30/2020	<0.005	0.0267	0.194	
11/2/2020				<0.005
3/17/2021		0.0174	0.12	
3/26/2021	<0.005			<0.005
10/5/2021		0.0127		0.0045 (J)
10/6/2021	<0.005		0.0994	
3/16/2022	0.0038 (J)	0.0112	0.0629	0.00437 (J)
10/5/2022	0.00322 (J)	0.00676		
10/6/2022			0.0534	0.0123
4/20/2023	0.00309 (J)			
4/21/2023		0.0091	0.0564	0.0107
10/24/2023				0.00555
10/25/2023	0.0033 (J)	0.0123	0.0679	
3/20/2024			0.0786	
3/21/2024	0.00355 (J)	0.013		0.0037 (J)
Mean	0.004271	0.02167	0.1535	0.004956
Std. Dev.	0.001255	0.007973	0.05393	0.002231
Upper Lim.	0.005	0.02574	0.1837	0.005
Lower Lim.	0.00322	0.0176	0.1377	0.0037

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	8.4E-05 (JB)	7.3E-05 (JB)	7.4E-05 (JB)	7.1E-05 (JB)
5/17/2016		<0.0002	<0.0002	<0.0002
5/18/2016	<0.0002			
7/12/2016				<0.0002
7/13/2016	<0.0002	<0.0002	<0.0002	
9/13/2016			<0.0002	<0.0002
9/14/2016	<0.0002	<0.0002		
11/19/2016	<0.0002	<0.0002	<0.0002	<0.0002
1/17/2017	<0.0002			<0.0002
1/18/2017		<0.0002	<0.0002	
3/22/2017				<0.0002
3/23/2017	0.00013 (J)	0.00013 (J)	<0.0002	
5/24/2017	<0.0002	<0.0002	<0.0002	<0.0002
3/28/2018	<0.0002	<0.0002	<0.0002	
3/29/2018				<0.0002
2/11/2019		<0.0002	<0.0002	
2/12/2019	<0.0002			<0.0002
4/17/2019	<0.0002	<0.0002	<0.0002	
4/18/2019				<0.0002
2/21/2020	<0.0002			<0.0002
2/22/2020		<0.0002	<0.0002	
10/30/2020	0.000497	<0.0002	<0.0002	
11/2/2020				<0.0002
3/17/2021		<0.0002	<0.0002	
3/26/2021	<0.0002			0.000235
10/5/2021		<0.0002		0.000151 (J)
10/6/2021	<0.0002		<0.0002	
3/16/2022	<0.0002	<0.0002	<0.0002	0.0012
10/5/2022	<0.0002	<0.0002		
10/6/2022			<0.0002	<0.0002
4/20/2023	<0.0002			
4/21/2023		<0.0002	<0.0002	<0.0002
10/24/2023				<0.0002
10/25/2023	<0.0002	<0.0002	<0.0002	
3/20/2024			0.000134 (J)	
3/21/2024	0.000133 (J)	0.000135 (J)		0.000143 (J)
Mean	0.0002022	0.0001869	0.0001904	0.00024
Std. Dev.	7.642E-05	3.389E-05	3.111E-05	0.0002284
Upper Lim.	0.000497	0.0002	0.0002	0.000235
Lower Lim.	0.000133	0.000135	0.000134	0.000151

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-4	BAW-5	BAW-7
3/23/2016	<0.005	0.0026 (J)	<0.005
5/17/2016	<0.005	0.0011 (J)	<0.005
7/12/2016			<0.005
7/13/2016	<0.005	0.0079 (J)	
9/13/2016		0.0038 (J)	<0.005
9/14/2016	<0.005		
11/19/2016	<0.005	0.0014 (J)	<0.005
1/17/2017			<0.005
1/18/2017	<0.005	0.001 (J)	
3/22/2017			0.0038 (J)
3/23/2017	<0.005	<0.015	
5/24/2017	<0.005	0.0014 (J)	<0.005
3/28/2018	<0.005	<0.015	
3/29/2018			<0.005
11/8/2018	<0.005		
11/9/2018		<0.015	<0.005
2/11/2019	<0.005	<0.015	
2/12/2019			<0.005
4/17/2019	<0.005	<0.015	
4/18/2019			<0.005
2/21/2020			<0.005
2/22/2020	0.000616 (J)	0.000627 (J)	
4/14/2020	<0.005	0.000747 (J)	<0.005
10/30/2020	<0.005	<0.015	
11/2/2020			<0.005
3/17/2021	0.0032 (J)	0.00328 (J)	
3/26/2021			<0.005
10/5/2021	0.00109 (J)		<0.005
10/6/2021		0.00364 (J)	
3/16/2022	0.000916 (J)	0.00533	<0.005
10/5/2022	0.000939 (J)		
10/6/2022		0.00424 (J)	<0.005
4/21/2023	0.00109 (J)	0.00651	<0.005
10/24/2023			<0.005
10/25/2023	<0.005	0.0036 (J)	
3/20/2024		0.00366 (J)	
3/21/2024	0.000937 (J)		<0.005
Mean	0.003809	0.006402	0.004945
Std. Dev.	0.001845	0.005683	0.0002558
Upper Lim.	0.005	0.003809	0.005
Lower Lim.	0.00109	0.001686	0.0038

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-5	BAW-7
3/23/2016	0.00033 (J)	<0.005	<0.005
5/17/2016		<0.005	0.00026 (J)
5/18/2016	<0.005		
7/12/2016			<0.005
7/13/2016	0.00041 (J)	<0.005	
9/13/2016		<0.005	0.00031 (J)
9/14/2016	0.00079 (J)		
11/19/2016	<0.005	<0.005	<0.005
1/17/2017	<0.005		<0.005
1/18/2017		<0.005	
3/22/2017			0.0021
3/23/2017	<0.005	<0.005	
5/24/2017	0.00028 (J)	0.00033 (J)	0.00026 (J)
3/28/2018	0.00038 (J)	<0.005	
3/29/2018			0.00036 (J)
6/2/2018	0.00031 (J)	<0.005	<0.005
11/8/2018	0.00088 (J)		
11/9/2018		<0.005	<0.005
2/11/2019		<0.005	
2/12/2019	<0.005		<0.005
4/17/2019	<0.005	<0.005	
4/18/2019			<0.005
2/21/2020	<0.005		<0.005
2/22/2020		<0.005	
10/30/2020	<0.005	<0.005	
11/2/2020			<0.005
3/17/2021		<0.005	
3/26/2021	<0.005		<0.005
10/5/2021			<0.005
10/6/2021	<0.005	<0.005	
3/16/2022	<0.005	<0.005	<0.005
10/5/2022	<0.005		
10/6/2022		<0.005	<0.005
4/20/2023	<0.005		
4/21/2023		<0.005	<0.005
10/24/2023			<0.005
10/25/2023	<0.005	<0.005	
3/20/2024		<0.005	
3/21/2024	<0.005		<0.005
Mean	0.003563	0.004788	0.004013
Std. Dev.	0.002157	0.0009956	0.001895
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.00079	0.00033	0.0021

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/2/2024 10:13 AM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-7
3/23/2016	<0.001	<0.001
5/17/2016		<0.001
5/18/2016	<0.001	
7/12/2016		<0.001
7/13/2016	<0.001	
9/13/2016		<0.001
9/14/2016	9.5E-05 (J)	
11/19/2016	<0.001	<0.001
1/17/2017	<0.001	<0.001
3/22/2017		<0.001
3/23/2017	<0.001	
5/24/2017	<0.001	<0.001
3/28/2018	<0.001	
3/29/2018		<0.001
11/8/2018	8.5E-05 (J)	
11/9/2018		<0.001
2/12/2019	<0.001	<0.001
4/17/2019	<0.001	
4/18/2019		<0.001
2/21/2020	0.000276 (J)	<0.001
4/14/2020	0.000158 (J)	<0.001
10/30/2020	<0.001	
11/2/2020		<0.001
3/26/2021	<0.001	<0.001
10/5/2021		0.000153 (J)
10/6/2021	<0.001	
3/16/2022	<0.001	<0.001
10/5/2022	<0.001	
10/6/2022		<0.001
4/20/2023	<0.001	
4/21/2023		<0.001
10/24/2023		<0.001
10/25/2023	<0.001	
3/21/2024	<0.001	<0.001
Mean	0.0008461	0.0009615
Std. Dev.	0.0003358	0.0001806
Upper Lim.	0.001	0.001
Lower Lim.	0.000276	0.000153

Trend Tests - Confidence Interval Exceedances

Appendix IV Trend Tests - Confidence Interval Exceedances - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:16 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-5	-0.01541	-126	-81	Yes	24	0	n/a	n/a	0.05	NP

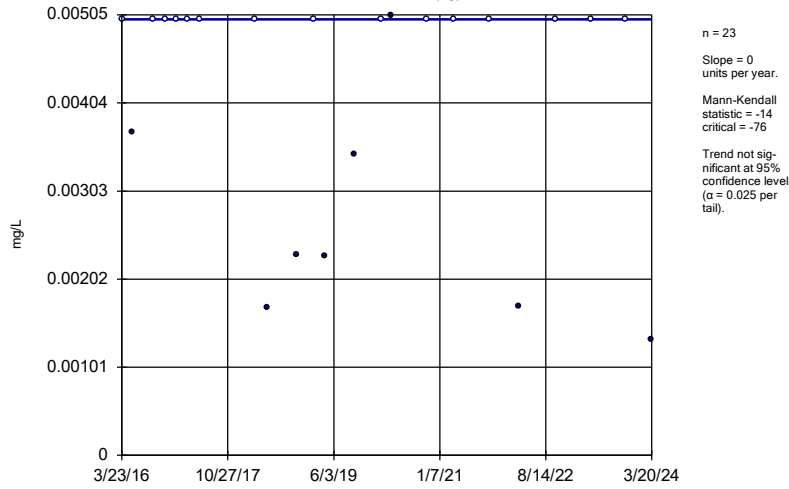
Appendix IV Trend Tests - Confidence Interval Exceedances - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 5/2/2024, 10:16 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-1 (bg)	0	-14	-76	No	23	65.22	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-2 (bg)	0	0	17	No	8	100	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-2A (bg)	0	-1	-41	No	15	53.33	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-5	-0.01541	-126	-81	Yes	24	0	n/a	n/a	0.05	NP

Sen's Slope Estimator

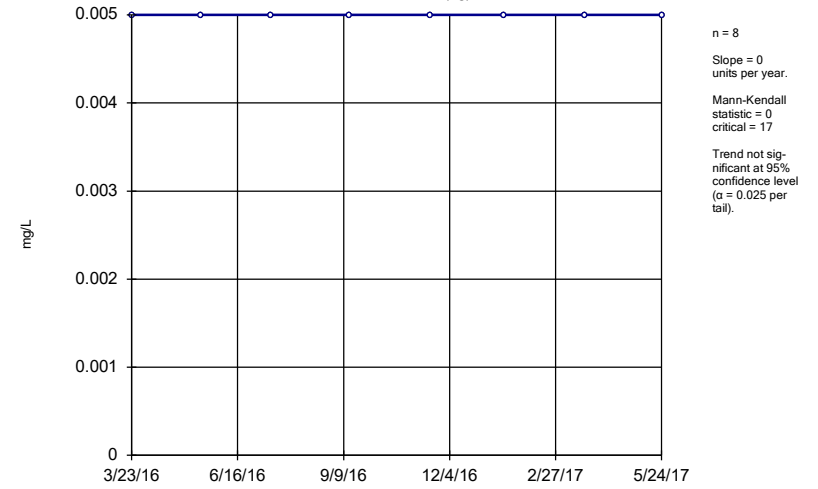
BAW-1 (bg)



Constituent: Lithium Analysis Run 5/2/2024 10:15 AM View: Appendix IV Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

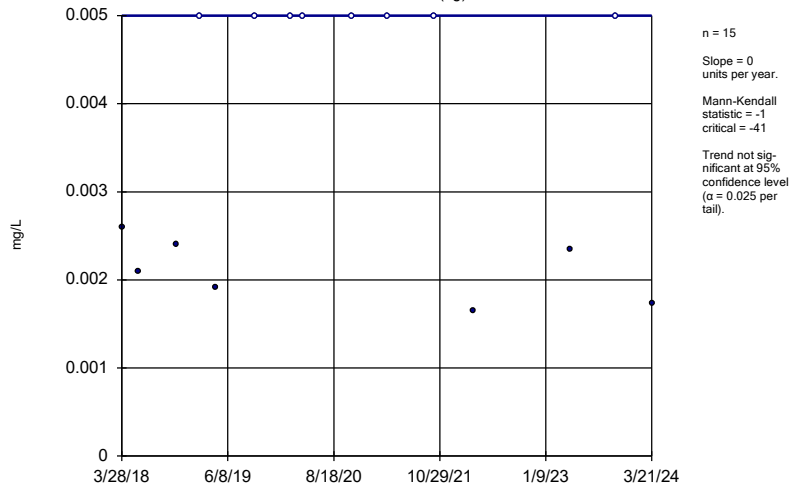
BAW-2 (bg)



Constituent: Lithium Analysis Run 5/2/2024 10:15 AM View: Appendix IV Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

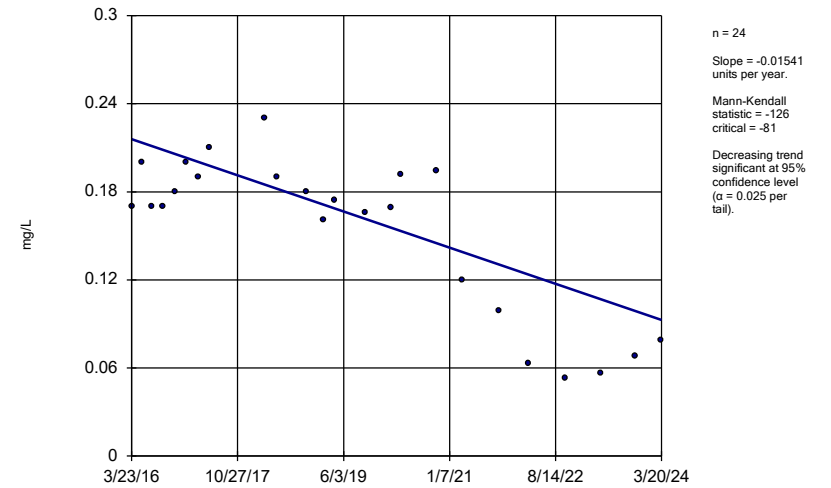
BAW-2A (bg)



Constituent: Lithium Analysis Run 5/2/2024 10:15 AM View: Appendix IV Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5

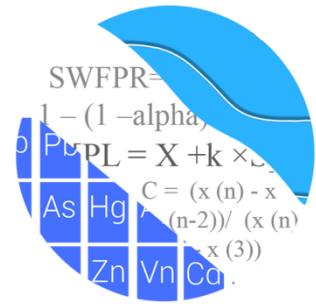


Constituent: Lithium Analysis Run 5/2/2024 10:15 AM View: Appendix IV Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

GROUNDWATER STATS CONSULTING

December 4, 2024

Southern Company Services
Attn: Mr. Trey Singleton
3535 Colonnade Parkway
Birmingham, AL 35243



Re: Plant Daniel Bottom Ash Pond
2024 Annual Statistical Analysis – October 2024 Sample Event

Dear Mr. Singleton,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the October 2024 Groundwater Detection and Assessment Monitoring report for Mississippi Power Company's Plant Daniel Bottom Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at Daniel Bottom Ash Pond for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** BAW-1, BAW-2, and BAW-2A
- **Downgradient wells:** BAW-3, BAW-4, BAW-5, and BAW-7
- **Piezometers:** PZ-8 and PZ-9

Upgradient well BAW-2 was last sampled in October 2017 and has since been abandoned; however, data from this well are included in construction of interwell prediction limits and upper tolerance limits to represent historical groundwater quality upgradient of the ash pond. Replacement upgradient well BAW-2A was first sampled in March 2018 and has since been sampled to supplement existing upgradient data for well BAW-2. Piezometers PZ-8 and PZ-9 were first sampled in October 2024. These wells are included in time series

and box plots, but will not be evaluated with confidence intervals for Appendix IV constituents until a minimum of 4 samples are available.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager for Groundwater Stats Consulting.

The CCR program monitors the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follow this letter. For all constituents, a substitution of the most recent reporting limit is used for non-detect data. This generally gives the most conservative limit in each case.

Time series plots for Appendix III and IV parameters are provided for all wells and are used to evaluate concentrations over time. Additionally, box plots are included for all constituents at upgradient and downgradient wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graph. A summary of these values follows this letter. 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.

During the previous screening, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided with the screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance recommendations as discussed below.

Summary of Statistical Methods

Based on the evaluation for federal regulatory requirements, the following methods were selected for Appendix III constituents:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric prediction limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric prediction limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. In some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality.

Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening Conducted in October 2017

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits. No suspected outliers were observed in any of the proposed background data at upgradient wells. When any values are identified as outliers, the measurements are plotted in a lighter font on the time series graph.

Seasonality

No seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Test Evaluation

While trends may be visual, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed a couple statistically significant decreasing and increasing trends. All trends noted were relatively low in magnitude when compared to

average concentrations; therefore, no adjustments were made to any of the data sets at that time.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA showed no variation for calcium, chloride, pH, sulfate, and TDS, making these parameters eligible for interwell methods. Boron and fluoride contained 100% non-detects and, therefore, could not be tested with the ANOVA. These parameters are also eligible for interwell methods since no variation is present. A summary table of the ANOVA results was included with the October 2017 screening.

Statistical Analysis of Appendix III Parameters – October 2024

Prior to constructing interwell prediction limits, data through the October 2024 sample event at upgradient wells were re-evaluated for outliers using visual screening. No additional outliers were suspected or flagged during this analysis. Tukey's outlier test had previously identified an outlier for calcium at well BAW-2 during the November 2019 statistical analysis; however, a similar measurement exists in replacement upgradient well BAW-2A. Therefore, the measurement for calcium is not flagged as an outlier and no outliers are flagged for Appendix III parameters.

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample strategy, were established for each of the Appendix III parameters using pooled historical upgradient well data through October 2024. The reported measurements at downgradient wells for the October 2024 sample event were compared to the interwell prediction limits to determine whether initial exceedances are present.

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 the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary. Complete graphical results of the prediction limits may be found following this letter. Exceedances were identified for the following well/constituent pairs:

- Boron: BAW-5
- Calcium: BAW-4 and BAW-5
- pH: BAW-3 (lower limit) and BAW-5 (upper limit)
- Sulfate: BAW-5
- TDS: BAW-5

Trend Test Evaluation

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable. Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of variability in groundwater that is assumed to be unrelated to practices at the site. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Calcium: BAW-4
- Sulfate: BAW-2A (upgradient)

Decreasing:

- Calcium: BAW-2 (upgradient)
- pH: BAW-2 (upgradient), BAW-3, and BAW-5
- Sulfate: BAW-1 (upgradient)

As mentioned above, upgradient well BAW-2 was abandoned but data from this well are still used for constructing interwell statistical limits.

Statistical Methods – Appendix IV Parameters

Appendix IV parameters are evaluated by statistically comparing the mean of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits) or site-specific limits that are based on upgradient groundwater quality. Site-specific background limits are determined using upper tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. The methods are described below.

Evaluation of Appendix IV Parameters – October 2024

For Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that have 100% non-detects do not require analysis.

Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. No additional values were flagged during this analysis. Tukey's outlier test had previously identified an outlier for lithium at upgradient well BAW-1 during the November 2019 statistical analysis, and this value remains flagged. A summary of flagged outliers follows this report.

Interwell Upper Tolerance Limits

Parametric upper tolerance limits were used to calculate background limits from pooled upgradient well data through October 2024 when data followed a normal distribution for Appendix IV parameters with a target of 95% confidence and 95% coverage to determine background limits. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were constructed. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples.

Groundwater Protection Standards

The interwell upper tolerance limits were compared to the Maximum Contaminant Levels (MCLs), CCR Rule-Specified levels, and background limits in the GWPS table following this letter to determine the highest limit for use as the GWPS in the Confidence Interval comparisons.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using all data through October 2024 for each of the Appendix IV parameters. The Sanitas software was used to calculate the confidence intervals, either parametric or nonparametric, as appropriate. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. Complete graphical results of the confidence intervals follow this letter. An exceedance was identified for the following well/constituent pair:

- Lithium: BAW-5

Trend Test Evaluation – Appendix IV

When confidence interval exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 95% confidence level. Utilizing the 95% confidence level for trend tests readily identifies significant trends and is more sensitive than the 99% confidence level without drastically increasing the false negative rate. Upgradient wells are included in the trend analyses for all parameters found to exceed their confidence intervals in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of variability in groundwater which may be unrelated to practices at the site. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- None

Decreasing:

- Lithium: BAW-5

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for the Daniel Bottom Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Tristan Clark
Groundwater Analyst



Andrew Collins
Project Manager

100% Non-Detects: Appendix IV Downgradient

Analysis Run 11/11/2024 3:03 PM View: Appendix IV
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Antimony (mg/L)
BAW-3, BAW-4, BAW-5, BAW-7

Arsenic (mg/L)
BAW-3

Beryllium (mg/L)
BAW-4, BAW-5

Cadmium (mg/L)
BAW-4, BAW-7

Molybdenum (mg/L)
BAW-3

Selenium (mg/L)
BAW-4

Thallium (mg/L)
BAW-4, BAW-5

Appendix III - Interwell Prediction Limits - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BAW-5	0.0928	n/a	10/2/2024	0.751	Yes	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BAW-4	2.8	n/a	10/2/2024	5.03	Yes	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Calcium (mg/L)	BAW-5	2.8	n/a	10/2/2024	30.5	Yes	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
pH (SU)	BAW-3	5.77	4.59	10/2/2024	4.52	Yes	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
pH (SU)	BAW-5	5.77	4.59	10/2/2024	6.14	Yes	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-5	7.68	n/a	10/2/2024	40.1	Yes	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BAW-5	57.74	n/a	10/2/2024	195	Yes	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BAW-3	0.0928	n/a	10/2/2024	0.08ND	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-4	0.0928	n/a	10/2/2024	0.0389J	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-5	0.0928	n/a	10/2/2024	0.751	Yes	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-7	0.0928	n/a	10/2/2024	0.08ND	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BAW-3	2.8	n/a	10/2/2024	0.781	No	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Calcium (mg/L)	BAW-4	2.8	n/a	10/2/2024	5.03	Yes	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Calcium (mg/L)	BAW-5	2.8	n/a	10/2/2024	30.5	Yes	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Calcium (mg/L)	BAW-7	2.8	n/a	10/2/2024	1.08	No	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-3	16.4	n/a	10/2/2024	5.35	No	49	0	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-4	16.4	n/a	10/2/2024	6.42	No	49	0	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-5	16.4	n/a	10/2/2024	10.7	No	49	0	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-7	16.4	n/a	10/2/2024	7.43	No	49	0	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BAW-3	0.1	n/a	10/2/2024	0.026J	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-4	0.1	n/a	10/2/2024	0.04J	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-5	0.1	n/a	10/2/2024	0.0865J	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-7	0.1	n/a	10/2/2024	0.1ND	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
pH (SU)	BAW-3	5.77	4.59	10/2/2024	4.52	Yes	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
pH (SU)	BAW-4	5.77	4.59	10/2/2024	5.51	No	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
pH (SU)	BAW-5	5.77	4.59	10/2/2024	6.14	Yes	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
pH (SU)	BAW-7	5.77	4.59	10/2/2024	4.87	No	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-3	7.68	n/a	10/2/2024	7.63	No	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-4	7.68	n/a	10/2/2024	5.89	No	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-5	7.68	n/a	10/2/2024	40.1	Yes	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-7	7.68	n/a	10/2/2024	1.61	No	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BAW-3	57.74	n/a	10/2/2024	30	No	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-4	57.74	n/a	10/2/2024	40	No	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-5	57.74	n/a	10/2/2024	195	Yes	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-7	57.74	n/a	10/2/2024	33	No	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2

Appendix III - Trend Test Summary - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	BAW-2 (bg)	-0.5725	-31	-25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-4	0.3324	152	118	Yes	26	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2 (bg)	-0.5393	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
pH (SU)	BAW-3	-0.05979	-196	-111	Yes	25	0	n/a	n/a	0.01	NP
pH (SU)	BAW-5	-0.04626	-164	-111	Yes	25	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-1 (bg)	-0.3965	-127	-111	Yes	25	44	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2A (bg)	0.872	64	53	Yes	15	6.667	n/a	n/a	0.01	NP

Appendix III - Trend Test Summary - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	BAW-1 (bg)	0	5	118	No	26	96.15	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-2 (bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-2A (bg)	-0.002283	-44	-58	No	16	50	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-5	0.02419	82	118	No	26	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-1 (bg)	0.02641	90	118	No	26	3.846	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2 (bg)	-0.5725	-31	-25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2A (bg)	-0.04117	-50	-58	No	16	6.25	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-4	0.3324	152	118	Yes	26	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-5	1.022	63	118	No	26	0	n/a	n/a	0.01	NP
pH (SU)	BAW-1 (bg)	-0.008992	-38	-111	No	25	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2 (bg)	-0.5393	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2A (bg)	-0.01118	-13	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	BAW-3	-0.05979	-196	-111	Yes	25	0	n/a	n/a	0.01	NP
pH (SU)	BAW-5	-0.04626	-164	-111	Yes	25	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-1 (bg)	-0.3965	-127	-111	Yes	25	44	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2 (bg)	0	-11	-25	No	9	77.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2A (bg)	0.872	64	53	Yes	15	6.667	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-5	1.329	102	111	No	25	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-1 (bg)	1.236	105	111	No	25	8	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-2 (bg)	-5.236	-4	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-2A (bg)	1.911	27	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-5	8.394	80	111	No	25	0	n/a	n/a	0.01	NP

Upper Tolerance Limit Summary Table

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:00 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.002	n/a	n/a	n/a	n/a	43	97.67	n/a	n/a	0.1102	NP Inter(NDs)
Arsenic (mg/L)	0.001	n/a	n/a	n/a	n/a	49	100	n/a	n/a	0.08099	NP Inter(NDs)
Barium (mg/L)	0.0512	n/a	n/a	n/a	n/a	49	2.041	n/a	n/a	0.08099	NP Inter(normality)
Beryllium (mg/L)	0.001	n/a	n/a	n/a	n/a	45	97.78	n/a	n/a	0.09944	NP Inter(NDs)
Cadmium (mg/L)	0.001	n/a	n/a	n/a	n/a	49	95.92	n/a	n/a	0.08099	NP Inter(NDs)
Chromium (mg/L)	0.00286	n/a	n/a	n/a	n/a	47	87.23	n/a	n/a	0.08974	NP Inter(NDs)
Cobalt (mg/L)	0.001617	n/a	n/a	n/a	n/a	49	6.122	None	No	0.05	Inter
Combined Radium 226 + 228 (pCi/L)	2.5	n/a	n/a	n/a	n/a	49	4.082	n/a	n/a	0.08099	NP Inter(normality)
Fluoride (mg/L)	0.1	n/a	n/a	n/a	n/a	51	82.35	n/a	n/a	0.0731	NP Inter(NDs)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	47	95.74	n/a	n/a	0.08974	NP Inter(NDs)
Lithium (mg/L)	0.00505	n/a	n/a	n/a	n/a	48	66.67	n/a	n/a	0.08526	NP Inter(NDs)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	41	90.24	n/a	n/a	0.1221	NP Inter(NDs)
Molybdenum (mg/L)	0.005	n/a	n/a	n/a	n/a	45	91.11	n/a	n/a	0.09944	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	45	86.67	n/a	n/a	0.09944	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	45	95.56	n/a	n/a	0.09944	NP Inter(NDs)

PLANT DANIEL BOTTOM ASH 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		0.001	0.01
Barium, Total (mg/L)	2		0.051	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		0.0029	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0016	0.006
Combined Radium, Total (pCi/L)	5		2.5	5
Fluoride, Total (mg/L)	4		0.1	4
Lead, Total (mg/L)	0.015		0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.0051	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

*MCL = Maximum Contaminant Level

*CCR = Coal Combustion Residuals

*GWPS = Groundwater Protection Standard

Appendix IV - Confidence Intervals - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	BAW-5	0.1814	0.1349	0.04	Yes	25	0.1505	0.05495	0	None	x^2	0.01	Param.

Appendix IV - Confidence Intervals - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	ComplianceSig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method	
Arsenic (mg/L)	BAW-4	0.001505	0.0007783	0.01	No	25	0.001498	0.001251	16	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	BAW-5	0.00483	0.00224	0.01	No	25	0.003887	0.00313	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	BAW-7	0.001	0.00052	0.01	No	25	0.0009608	0.0001357	92	None	No	0.01	NP (NDs)
Barium (mg/L)	BAW-3	0.03322	0.02444	2	No	25	0.02883	0.00881	0	None	No	0.01	Param.
Barium (mg/L)	BAW-4	0.0221	0.0093	2	No	25	0.01432	0.007478	0	None	No	0.01	NP (normality)
Barium (mg/L)	BAW-5	0.055	0.0424	2	No	25	0.05458	0.02197	0	None	No	0.01	NP (normality)
Barium (mg/L)	BAW-7	0.02	0.0117	2	No	25	0.01903	0.01715	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	BAW-3	0.001	0.000235	0.004	No	23	0.0008993	0.0002657	86.96	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BAW-7	0.001	0.000185	0.004	No	23	0.0009646	0.0001699	95.65	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BAW-3	0.0008395	0.0005609	0.005	No	25	0.0007002	0.0002795	4	None	No	0.01	Param.
Cadmium (mg/L)	BAW-5	0.001	0.000155	0.005	No	25	0.0009662	0.000169	96	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-3	0.003	0.00165	0.1	No	24	0.002712	0.0035	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-4	0.002	0.0015	0.1	No	24	0.001923	0.0002253	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-5	0.0024	0.00175	0.1	No	24	0.002098	0.0006471	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-7	0.00206	0.00171	0.1	No	24	0.00199	0.00006097	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BAW-3	0.007104	0.005249	0.006	No	25	0.006176	0.001861	0	None	No	0.01	Param.
Cobalt (mg/L)	BAW-4	0.001451	0.001089	0.006	No	25	0.00127	0.000363	0	None	No	0.01	Param.
Cobalt (mg/L)	BAW-5	0.000802	0.0005	0.006	No	25	0.000753	0.0005414	68	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BAW-7	0.00112	0.000729	0.006	No	25	0.001244	0.001007	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-3	0.857	0.27	5	No	25	0.607	0.6826	8	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-4	0.53	0.158	5	No	25	0.5769	0.7692	12	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-5	0.9563	0.4286	5	No	24	0.7625	0.5863	4.167	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAW-7	1.005	0.3488	5	No	25	0.7983	0.7736	12	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BAW-3	0.1	0.0537	4	No	26	0.09017	0.02389	84.62	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BAW-4	0.0578	0.04	4	No	26	0.05654	0.02512	23.08	None	No	0.01	NP (normality)
Fluoride (mg/L)	BAW-5	0.07485	0.05423	4	No	26	0.06763	0.02797	3.846	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BAW-7	0.1	0.0415	4	No	26	0.0922	0.02213	88.46	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-3	0.001	0.000322	0.015	No	24	0.0007022	0.0003715	58.33	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-4	0.001	0.00042	0.015	No	24	0.0008523	0.0002983	79.17	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-5	0.001	0.00032	0.015	No	24	0.0009363	0.0002171	91.67	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-7	0.001	0.000345	0.015	No	24	0.0009364	0.0002178	91.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	BAW-3	0.005	0.0033	0.04	No	25	0.00433	0.001264	56	None	No	0.01	NP (NDs)
Lithium (mg/L)	BAW-4	0.02529	0.01727	0.04	No	25	0.02128	0.008046	0	None	No	0.01	Param.
Lithium (mg/L)	BAW-5	0.1814	0.1349	0.04	Yes	25	0.1505	0.05495	0	None	x^2	0.01	Param.
Lithium (mg/L)	BAW-7	0.005	0.00375	0.04	No	25	0.004958	0.002184	52	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-3	0.000497	0.000133	0.002	No	21	0.0002021	0.00007449	80.95	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-4	0.0002	0.000135	0.002	No	21	0.0001875	0.00003316	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-5	0.0002	0.000134	0.002	No	21	0.0001909	0.00003039	90.48	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-7	0.000235	0.000151	0.002	No	21	0.0002381	0.0002228	76.19	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BAW-4	0.005	0.00109	0.1	No	23	0.00369	0.00189	65.22	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BAW-5	0.003795	0.00176	0.1	No	23	0.006269	0.005589	26.09	Kaplan-Meier	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	BAW-7	0.005	0.0038	0.1	No	23	0.004948	0.0002502	95.65	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-3	0.005	0.00079	0.05	No	23	0.003625	0.002129	69.57	None	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-5	0.005	0.00033	0.05	No	23	0.004797	0.0009738	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-7	0.005	0.0021	0.05	No	23	0.004056	0.001863	78.26	None	No	0.01	NP (NDs)
Thallium (mg/L)	BAW-3	0.001	0.000276	0.002	No	23	0.0008528	0.0003297	82.61	None	No	0.01	NP (NDs)
Thallium (mg/L)	BAW-7	0.001	0.000153	0.002	No	23	0.0009632	0.0001766	95.65	None	No	0.01	NP (NDs)

Appendix IV - Trend Test Summary - Significant Results

Plant: Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:07 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-5	-0.01514	-142	-85	Yes	25	0	n/a	n/a	0.05	NP

Appendix IV - Trend Test Summary - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:07 PM

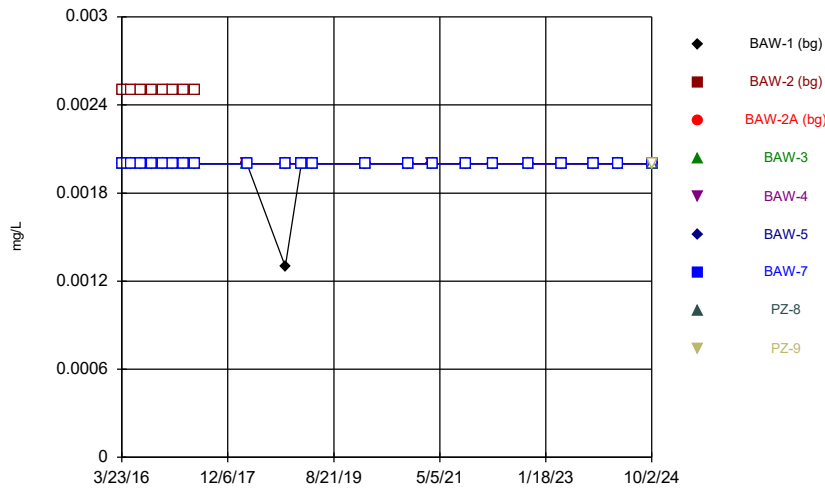
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Lithium (mg/L)	BAW-1 (bg)	0	-8	-81	No	24	66.67	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-2 (bg)	0	0	17	No	8	100	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-2A (bg)	0	-2	-45	No	16	50	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-5	-0.01514	-142	-85	Yes	25	0	n/a	n/a	0.05	NP

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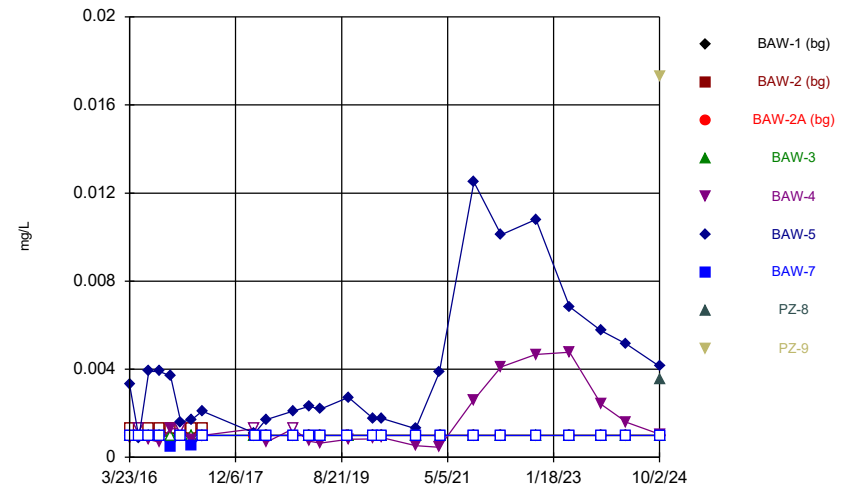
Time Series

Time Series



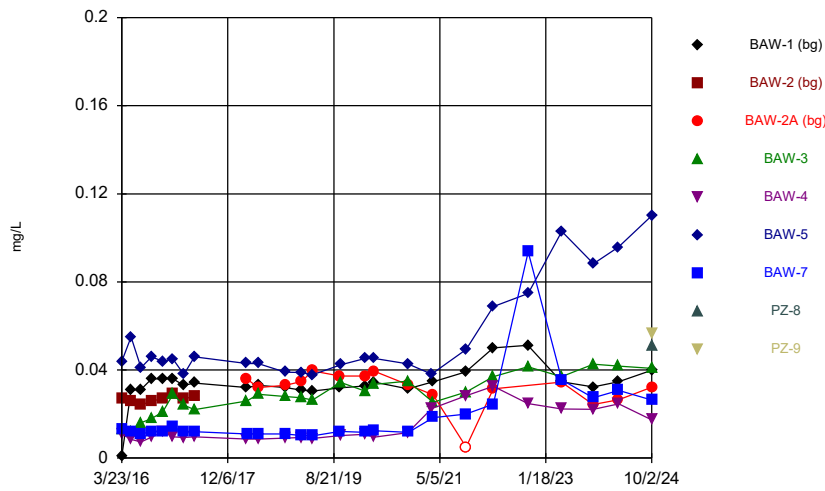
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



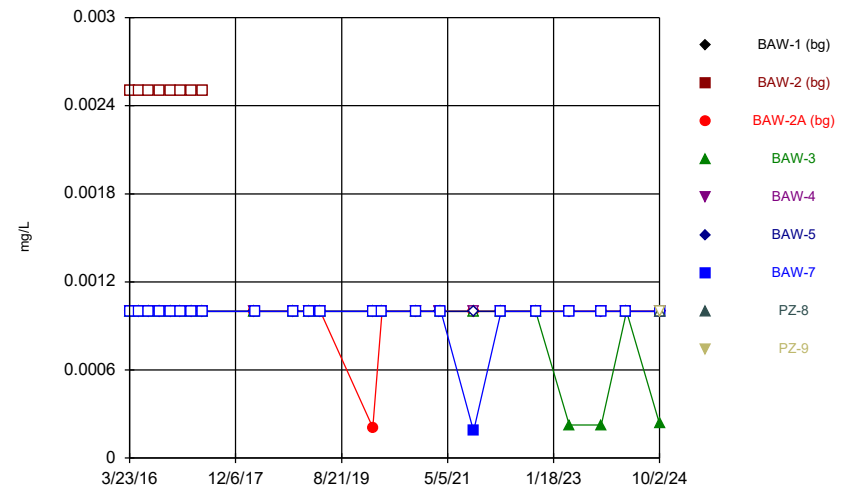
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



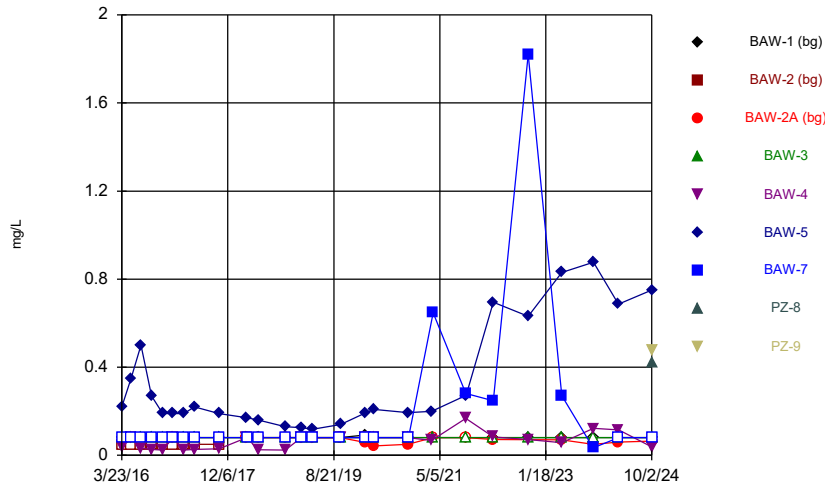
Constituent: Barium Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



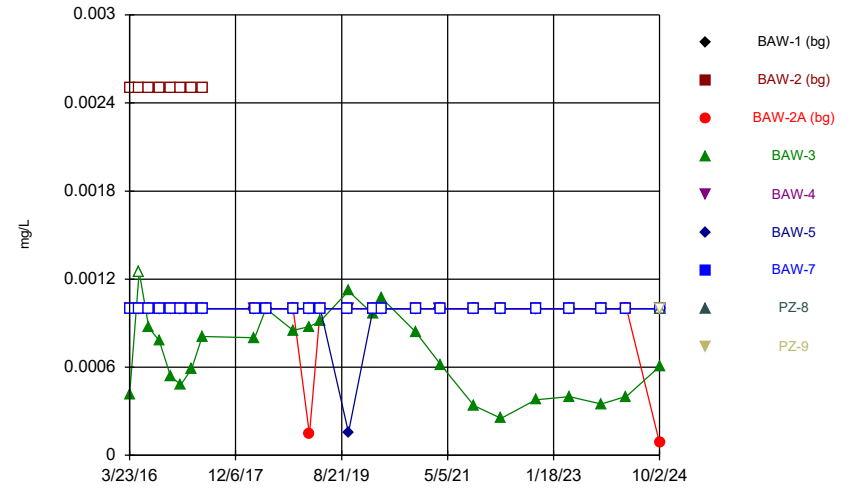
Constituent: Beryllium Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



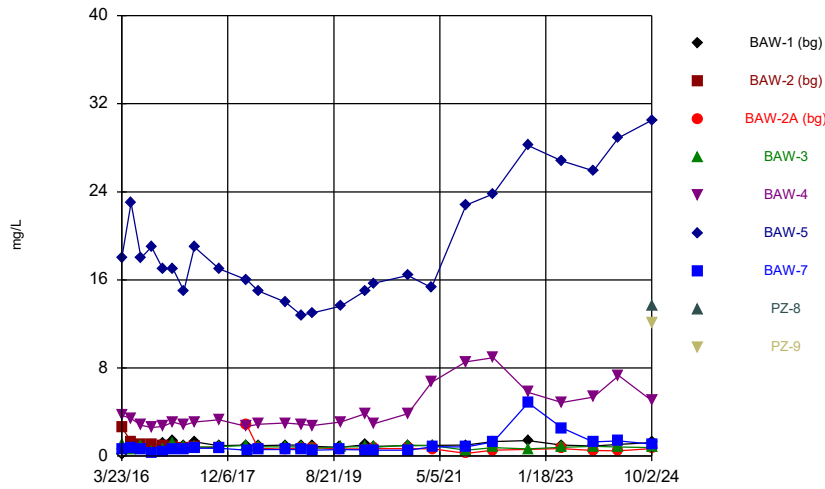
Constituent: Boron Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



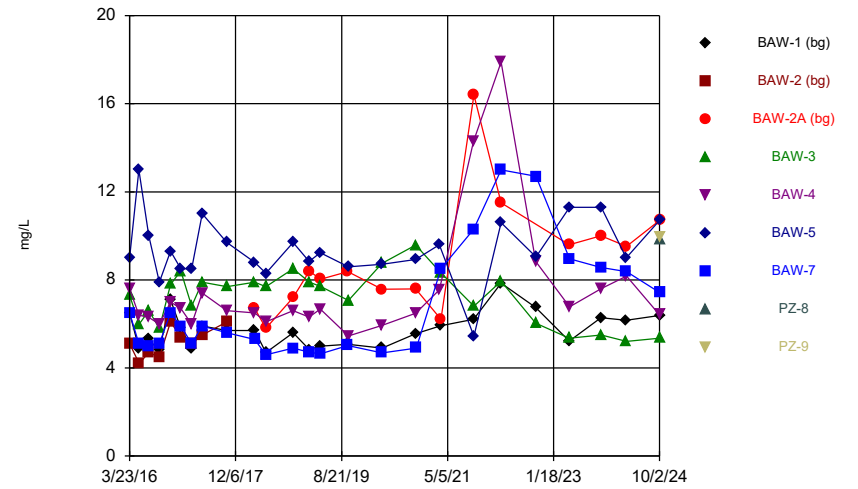
Constituent: Cadmium Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



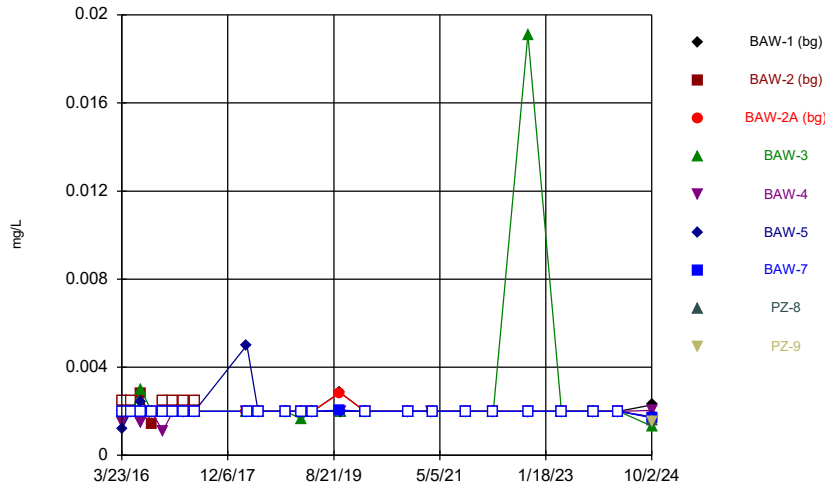
Constituent: Calcium Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



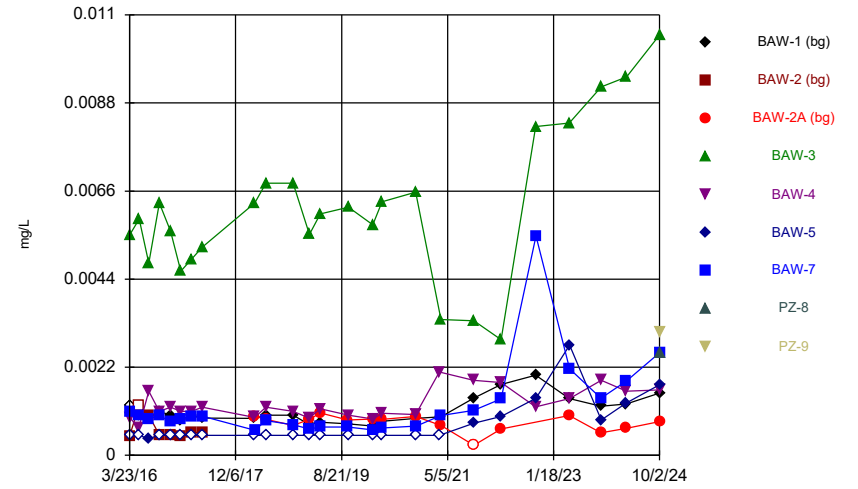
Constituent: Chloride Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



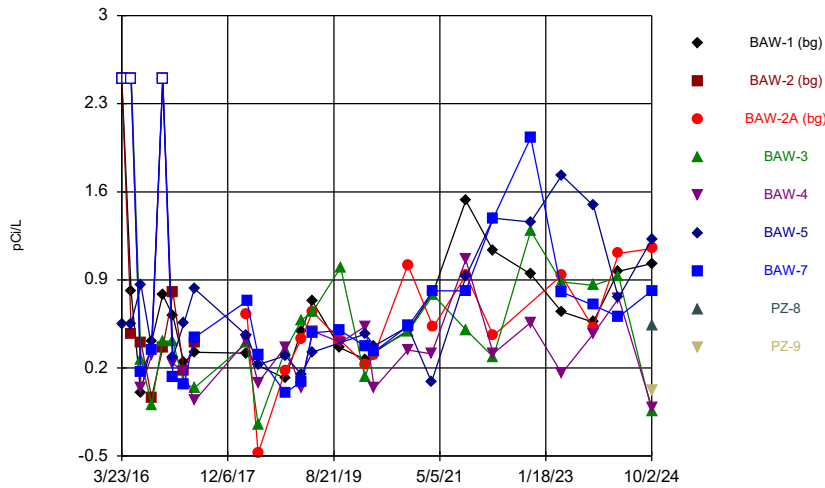
Constituent: Chromium Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



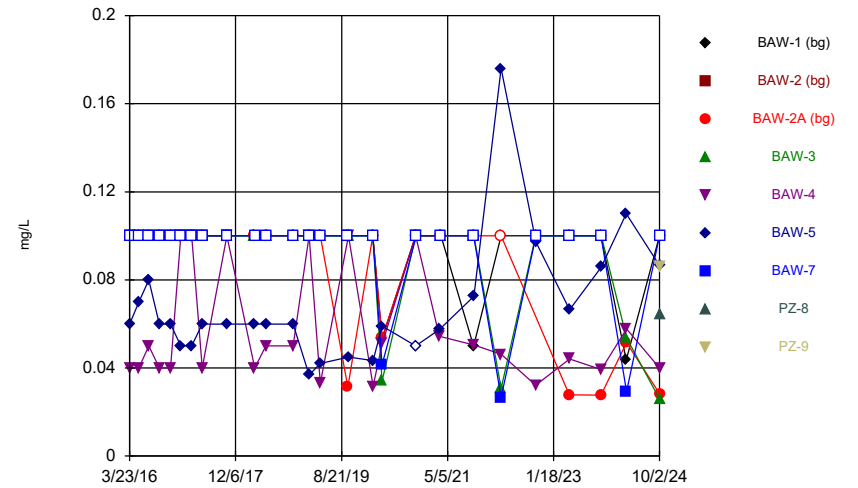
Constituent: Cobalt Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



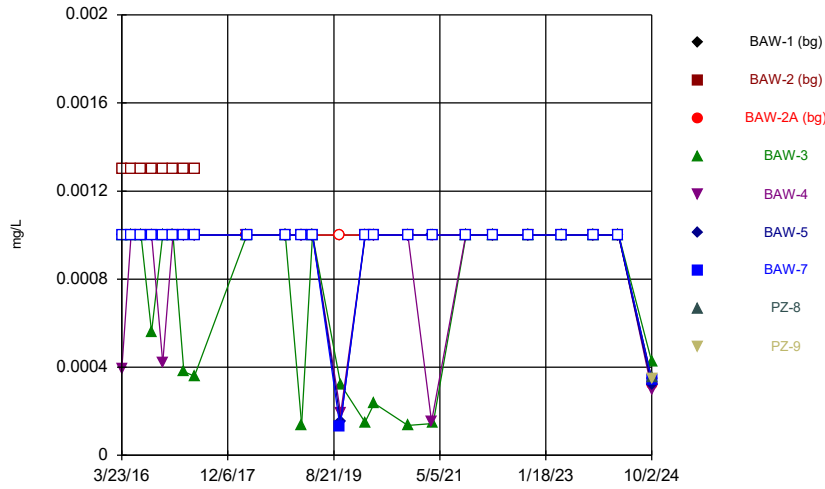
Constituent: Combined Radium 226 + 228 Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



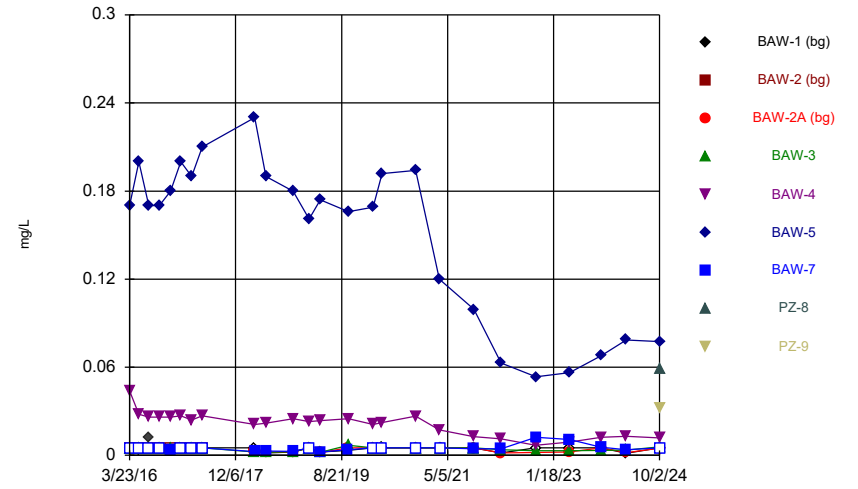
Constituent: Fluoride Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



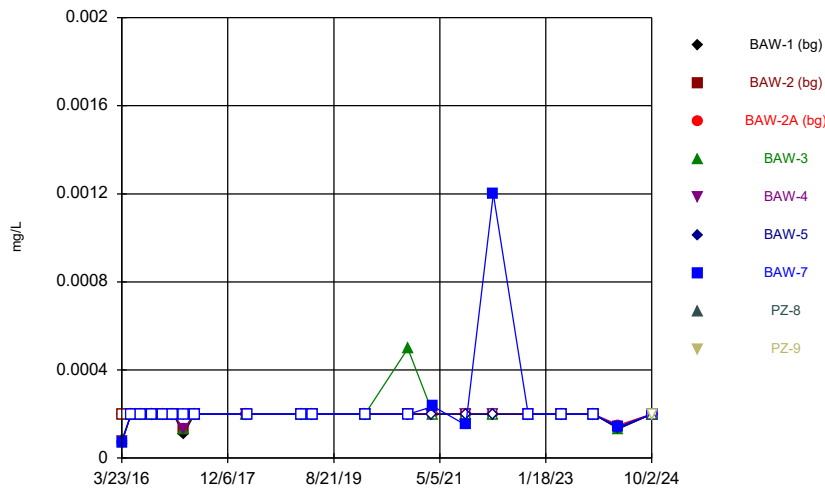
Constituent: Lead Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



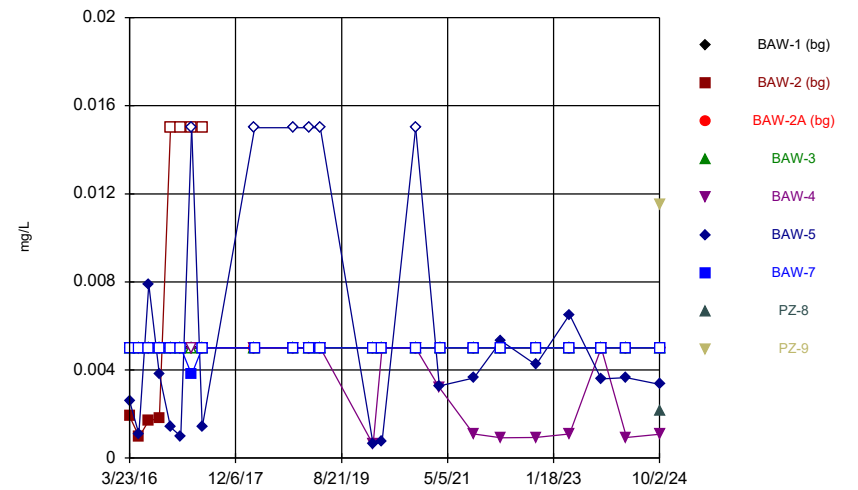
Constituent: Lithium Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



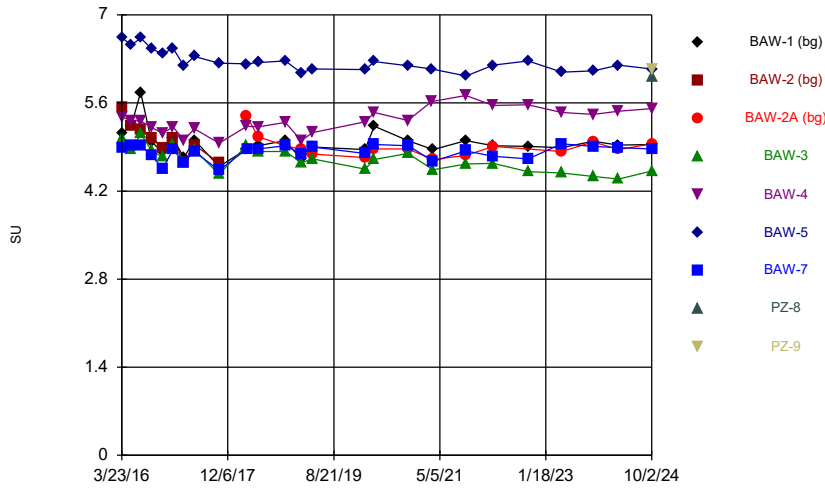
Constituent: Mercury Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



Constituent: Molybdenum Analysis Run 11/11/2024 2:43 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

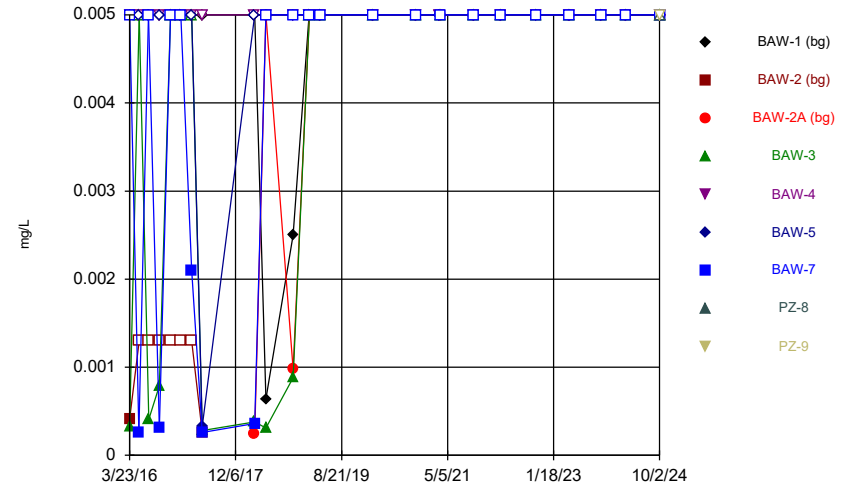
Time Series



Constituent: pH Analysis Run 11/11/2024 2:43 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Hollow symbols indicate censored values.

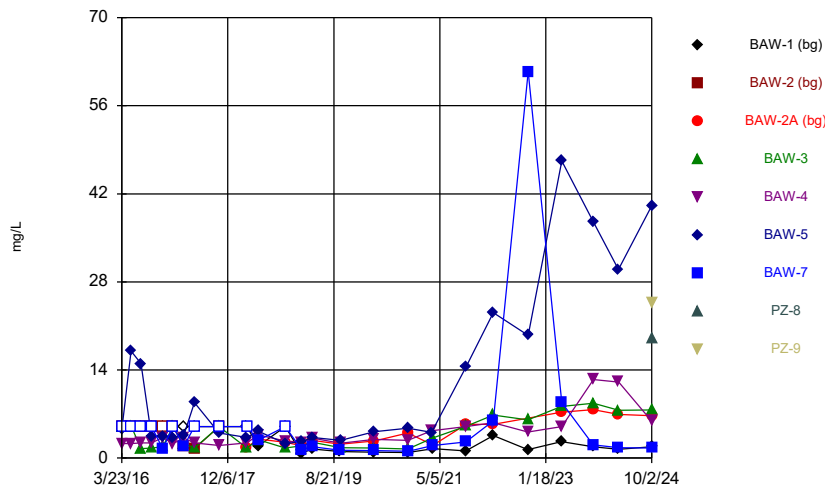
Time Series



Constituent: Selenium Analysis Run 11/11/2024 2:43 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Hollow symbols indicate censored values.

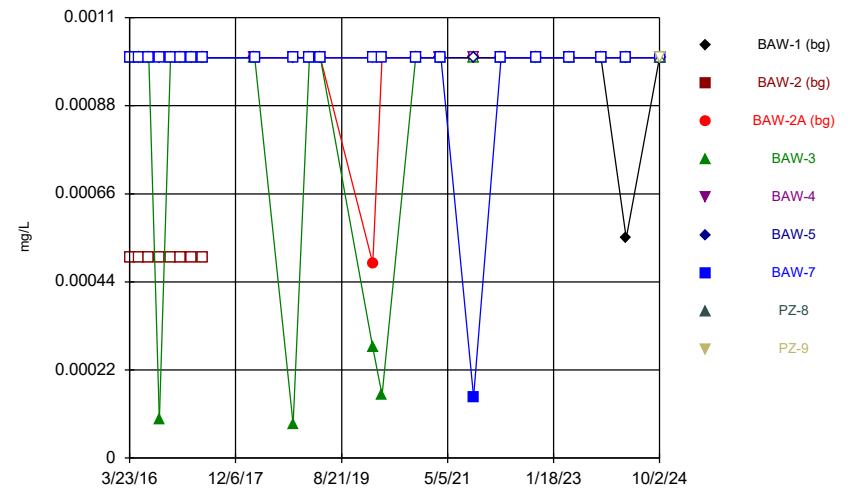
Time Series



Constituent: Sulfate Analysis Run 11/11/2024 2:44 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

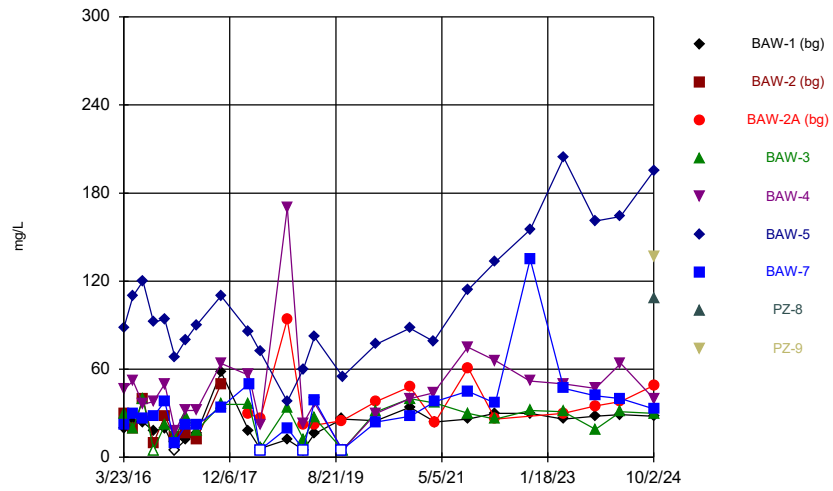
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 11/11/2024 2:44 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/11/2024 2:44 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.002	<0.0025		<0.002	<0.002	<0.002	<0.002		
5/17/2016	<0.002				<0.002	<0.002	<0.002		
5/18/2016		<0.0025		<0.002					
7/12/2016	<0.002						<0.002		
7/13/2016		<0.0025		<0.002	<0.002	<0.002			
9/13/2016	<0.002					<0.002	<0.002		
9/14/2016		<0.0025		<0.002	<0.002				
11/19/2016	<0.002	<0.0025		<0.002	<0.002	<0.002	<0.002		
1/17/2017	<0.002	<0.0025		<0.002			<0.002		
1/18/2017					<0.002	<0.002			
3/22/2017	<0.002						<0.002		
3/23/2017		<0.0025		<0.002	<0.002	<0.002			
5/24/2017	<0.002	<0.0025		<0.002	<0.002	<0.002	<0.002		
3/28/2018	<0.002		<0.002	<0.002	<0.002	<0.002			
3/29/2018							<0.002		
11/8/2018	0.0013 (J)			<0.002	<0.002				
11/9/2018			<0.002			<0.002	<0.002		
2/11/2019	<0.002				<0.002	<0.002			
2/12/2019			<0.002	<0.002			<0.002		
4/17/2019	<0.002		<0.002	<0.002	<0.002	<0.002			
4/18/2019							<0.002		
2/21/2020	<0.002		<0.002	<0.002			<0.002		
2/22/2020					<0.002	<0.002			
10/30/2020	<0.002		<0.002	<0.002	<0.002	<0.002			
11/2/2020							<0.002		
3/17/2021					<0.002	<0.002			
3/26/2021	<0.002		<0.002	<0.002			<0.002		
10/5/2021	<0.002				<0.002		<0.002		
10/6/2021			<0.002	<0.002		<0.002			
3/16/2022	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002		
10/5/2022	<0.002			<0.002	<0.002				
10/6/2022						<0.002	<0.002		
4/20/2023	<0.002		<0.002	<0.002					
4/21/2023					<0.002	<0.002	<0.002		
10/24/2023	<0.002		<0.002				<0.002		
10/25/2023				<0.002	<0.002	<0.002			
3/20/2024	<0.002					<0.002			
3/21/2024			<0.002	<0.002	<0.002		<0.002		
10/2/2024	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.001	<0.0013		<0.001	0.00087 (J)	0.0033	<0.001		
5/17/2016	<0.001				<0.0013	0.00089 (J)	<0.001		
5/18/2016		<0.0013		<0.001					
7/12/2016	<0.001						<0.001		
7/13/2016		<0.0013		<0.001	0.00081 (J)	0.0039			
9/13/2016	<0.001					0.0039	<0.001		
9/14/2016		<0.0013		<0.001	0.00069 (J)				
11/19/2016	<0.001	<0.0013		<0.001	0.0013	0.0037	0.0005 (J)		
1/17/2017	<0.001	<0.0013		<0.001			<0.001		
1/18/2017					<0.0013	0.0016			
3/22/2017	<0.001						0.00052 (J)		
3/23/2017		<0.0013		<0.001	0.00078 (J)	0.0017			
5/24/2017	<0.001	<0.0013		<0.001	0.001 (J)	0.0021	<0.001		
3/28/2018	<0.001		<0.001	<0.001	<0.0013	0.0011 (J)			
3/29/2018							<0.001		
6/2/2018	<0.001		<0.001	<0.001	0.00068 (J)	0.0017	<0.001		
11/8/2018	<0.001			<0.001	<0.0013				
11/9/2018			<0.001			0.0021	<0.001		
2/11/2019	<0.001				0.000737 (J)	0.00232			
2/12/2019			<0.001	<0.001			<0.001		
4/17/2019	<0.001		<0.001	<0.001	0.000645 (J)	0.00218			
4/18/2019							<0.001		
9/27/2019	<0.001		<0.001				<0.001		
9/30/2019				<0.001	0.000821 (J)	0.00272			
2/21/2020	<0.001		<0.001	<0.001			<0.001		
2/22/2020					0.000837 (J)	0.00177			
4/14/2020	<0.001		<0.001	<0.001	0.000896 (J)	0.00177	<0.001		
10/30/2020	<0.001		<0.001	<0.001	0.000529 (J)	0.0013			
11/2/2020							<0.001		
3/17/2021					0.000454 (J)	0.00385			
3/26/2021	<0.001		<0.001	<0.001			<0.001		
10/5/2021	<0.001				0.00259		<0.001		
10/6/2021			<0.001	<0.001		0.0125			
3/16/2022	<0.001		<0.001	<0.001	0.00411	0.0101	<0.001		
10/5/2022	<0.001			<0.001	0.00467				
10/6/2022						0.0108	<0.001		
4/20/2023	<0.001		<0.001	<0.001					
4/21/2023					0.00477	0.00683	<0.001		
10/24/2023	<0.001		<0.001				<0.001		
10/25/2023				<0.001	0.00241	0.00575			
3/20/2024	<0.001					0.00515			
3/21/2024			<0.001	<0.001	0.00159		<0.001		
10/2/2024	<0.001		<0.001	<0.001	0.00105	0.00414	<0.001	0.00353	0.0173

Time Series

Constituent: Barium (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	0.00084 (J)	0.027		0.013	0.011	0.044	0.013		
5/17/2016	0.031				0.0085	0.055	0.012		
5/18/2016		0.026		0.012					
7/12/2016	0.031						0.011		
7/13/2016		0.024		0.016	0.0073	0.041			
9/13/2016	0.036					0.046	0.012		
9/14/2016		0.026		0.018	0.0095				
11/19/2016	0.036	0.027		0.021	0.012	0.044	0.012		
1/17/2017	0.036	0.029		0.029			0.014		
1/18/2017					0.0096	0.045			
3/22/2017	0.033						0.012		
3/23/2017		0.027		0.024	0.0093	0.038			
5/24/2017	0.034	0.028		0.022	0.0096	0.046	0.012		
3/28/2018	0.032		0.036	0.026	0.0086	0.043			
3/29/2018							0.011		
6/2/2018	0.033		0.032	0.029	0.0087	0.043	0.011		
11/8/2018	0.032			0.028	0.0091				
11/9/2018			0.033			0.039	0.011		
2/11/2019	0.0308				0.00931	0.0388			
2/12/2019			0.0348	0.0274			0.0102		
4/17/2019	0.0305		0.0396	0.0263	0.00888	0.0378			
4/18/2019							0.0101		
9/27/2019	0.0319		0.0373				0.0121		
9/30/2019				0.0343	0.0103	0.0424			
2/21/2020	0.0327		0.0373	0.0304			0.0117		
2/22/2020					0.0108	0.0453			
4/14/2020	0.0345		0.0394	0.0335	0.00949 (J)	0.0452	0.0124		
10/30/2020	0.0314		0.0334	0.0349	0.0116	0.0428			
11/2/2020							0.0117		
3/17/2021					0.0224	0.0382			
3/26/2021	0.0347		0.0287	0.0253			0.0184		
10/5/2021	0.0391				0.0283		0.02		
10/6/2021			<0.01	0.03		0.0493			
3/16/2022	0.05		0.0314	0.037	0.0326	0.0688	0.0245		
10/5/2022	0.0512			0.0415	0.0248				
10/6/2022						0.0747	0.0937		
4/20/2023	0.0347		0.0345	0.0369					
4/21/2023					0.0223	0.103	0.0355		
10/24/2023	0.0323		0.0244				0.0274		
10/25/2023				0.0427	0.0221	0.0883			
3/20/2024	0.0347					0.0958			
3/21/2024			0.0265	0.0418	0.0246		0.0307		
10/2/2024	0.0399		0.0322	0.0407	0.0174	0.11	0.0264	0.0511	0.0563

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.001	<0.0025		<0.001	<0.001	<0.001	<0.001		
5/17/2016	<0.001				<0.001	<0.001	<0.001		
5/18/2016		<0.0025		<0.001					
7/12/2016	<0.001						<0.001		
7/13/2016		<0.0025		<0.001	<0.001	<0.001			
9/13/2016	<0.001					<0.001	<0.001		
9/14/2016		<0.0025		<0.001	<0.001				
11/19/2016	<0.001	<0.0025		<0.001	<0.001	<0.001	<0.001		
1/17/2017	<0.001	<0.0025		<0.001			<0.001		
1/18/2017					<0.001	<0.001			
3/22/2017	<0.001						<0.001		
3/23/2017		<0.0025		<0.001	<0.001	<0.001			
5/24/2017	<0.001	<0.0025		<0.001	<0.001	<0.001	<0.001		
3/28/2018	<0.001		<0.001	<0.001	<0.001	<0.001			
3/29/2018							<0.001		
11/8/2018	<0.001			<0.001	<0.001				
11/9/2018			<0.001			<0.001	<0.001		
2/11/2019	<0.001				<0.001	<0.001			
2/12/2019			<0.001	<0.001			<0.001		
4/17/2019	<0.001		<0.001	<0.001	<0.001	<0.001			
4/18/2019							<0.001		
2/21/2020	<0.001		0.000207 (J)	<0.001			<0.001		
2/22/2020					<0.001	<0.001			
4/14/2020	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001		
10/30/2020	<0.001		<0.001	<0.001	<0.001	<0.001			
11/2/2020							<0.001		
3/17/2021					<0.001	<0.001			
3/26/2021	<0.001		<0.001	<0.001			<0.001		
10/5/2021	<0.001				<0.001		0.000185 (J)		
10/6/2021			<0.001	<0.001		<0.001			
3/16/2022	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001		
10/5/2022	<0.001			<0.001	<0.001				
10/6/2022						<0.001	<0.001		
4/20/2023	<0.001		<0.001	0.000225 (J)					
4/21/2023					<0.001	<0.001	<0.001		
10/24/2023	<0.001		<0.001				<0.001		
10/25/2023				0.000225 (J)	<0.001	<0.001			
3/20/2024	<0.001					<0.001			
3/21/2024			<0.001	<0.001	<0.001		<0.001		
10/2/2024	<0.001		<0.001	0.000235 (J)	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Boron (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.08	<0.05		<0.08	0.037 (J)	0.22	<0.08		
5/17/2016	<0.08				<0.08	0.35	<0.08		
5/18/2016		<0.05		<0.08					
7/12/2016	<0.08						<0.08		
7/13/2016		<0.05		<0.08	0.032 (J)	0.5			
9/13/2016	<0.08					0.27	<0.08		
9/14/2016		<0.05		<0.08	0.027 (J)				
11/19/2016	<0.08	<0.05		<0.08	0.024 (J)	0.19	<0.08		
1/17/2017	<0.08	<0.05		<0.08			<0.08		
1/18/2017					<0.08	0.19			
3/22/2017	<0.08						<0.08		
3/23/2017		<0.05		<0.08	0.024 (J)	0.19			
5/24/2017	<0.08	<0.05		<0.08	0.027 (J)	0.22	<0.08		
10/16/2017	<0.08	<0.05		<0.08	0.03 (J)	0.19	<0.08		
3/28/2018	<0.08		<0.08	<0.08	<0.08	0.17			
3/29/2018							<0.08		
6/2/2018	<0.08		<0.08	<0.08	0.025 (J)	0.16	<0.08		
11/8/2018	<0.08			<0.08	0.024 (J)				
11/9/2018			<0.08			0.13	<0.08		
2/11/2019	<0.08				<0.08	0.126			
2/12/2019			<0.08	<0.08			<0.08		
4/17/2019	<0.08		<0.08	<0.08	<0.08	0.118			
4/18/2019							<0.08		
9/27/2019	<0.08		<0.08				<0.08		
9/30/2019				<0.08	<0.08	0.14			
2/21/2020	0.0928		0.0589 (J)	<0.08			<0.08		
2/22/2020					<0.08	0.193			
4/14/2020	<0.08		0.0424 (J)	<0.08	<0.08	0.209	<0.08		
10/30/2020	<0.08		0.0495 (J)	<0.08	<0.08	0.194			
11/2/2020							<0.08		
3/17/2021					0.0673 (J)	0.2			
3/26/2021	<0.08		<0.08	<0.08			0.647		
10/5/2021	<0.08				0.168		0.281		
10/6/2021			<0.08	<0.08		0.272			
3/16/2022	<0.08		0.0717 (J)	<0.08	0.084	0.695	0.247		
10/5/2022	<0.08			<0.08	0.0714 (J)				
10/6/2022						0.631	1.82		
4/20/2023	<0.08		0.0711 (J)	<0.08					
4/21/2023					0.058 (J)	0.831	0.271		
10/24/2023	<0.08		0.0502 (J)				0.0336 (J)		
10/25/2023				<0.08	0.122	0.877			
3/20/2024	<0.08					0.686			
3/21/2024			0.0604 (J)	<0.08	0.115		<0.08		
10/2/2024	<0.08		0.0647 (J)	<0.08	0.0389 (J)	0.751	<0.08	0.421	0.477

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.001	<0.0025		0.00041 (J)	<0.001	<0.001	<0.001		
5/17/2016	<0.001				<0.001	<0.001	<0.001		
5/18/2016		<0.0025		<0.0025					
7/12/2016	<0.001						<0.001		
7/13/2016		<0.0025		0.00087 (J)	<0.001	<0.001			
9/13/2016	<0.001					<0.001	<0.001		
9/14/2016		<0.0025		0.00078 (J)	<0.001				
11/19/2016	<0.001	<0.0025		0.00054 (J)	<0.001	<0.001	<0.001		
1/17/2017	<0.001	<0.0025		0.00048 (J)			<0.001		
1/18/2017					<0.001	<0.001			
3/22/2017	<0.001						<0.001		
3/23/2017		<0.0025		0.00059 (J)	<0.001	<0.001			
5/24/2017	<0.001	<0.0025		0.00081 (J)	<0.001	<0.001	<0.001		
3/28/2018	<0.001		<0.001	0.0008 (J)	<0.001	<0.001			
3/29/2018							<0.001		
6/2/2018	<0.001		<0.001	0.001 (J)	<0.001	<0.001	<0.001		
11/8/2018	<0.001			0.00085 (J)	<0.001				
11/9/2018			<0.001			<0.001	<0.001		
2/11/2019	<0.001				<0.001	<0.001			
2/12/2019			0.000143 (J)	0.000877 (J)			<0.001		
4/17/2019	<0.001		<0.001	0.000915 (J)	<0.001	<0.001			
4/18/2019							<0.001		
9/27/2019	<0.001		<0.001				<0.001		
9/30/2019				0.00112 (J)	<0.001	0.000155 (J)			
2/21/2020	<0.001		<0.001	0.000962 (J)			<0.001		
2/22/2020					<0.001	<0.001			
4/14/2020	<0.001		<0.001	0.00107 (J)	<0.001	<0.001	<0.001		
10/30/2020	<0.001		<0.001	0.00084 (J)	<0.001	<0.001			
11/2/2020							<0.001		
3/17/2021					<0.001	<0.001			
3/26/2021	<0.001		<0.001	0.000615 (J)			<0.001		
10/5/2021	<0.001				<0.001		<0.001		
10/6/2021			<0.001	0.000338 (J)		<0.001			
3/16/2022	<0.001		<0.001	0.000252 (J)	<0.001	<0.001	<0.001		
10/5/2022	<0.001			0.000379 (J)	<0.001				
10/6/2022						<0.001	<0.001		
4/20/2023	<0.001		<0.001	0.0004 (J)					
4/21/2023					<0.001	<0.001	<0.001		
10/24/2023	<0.001		<0.001				<0.001		
10/25/2023				0.00035 (J)	<0.001	<0.001			
3/20/2024	<0.001					<0.001			
3/21/2024			<0.001	0.000401 (J)	<0.001		<0.001		
10/2/2024	<0.001		8.5E-05 (J)	0.000605 (J)	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.25	2.6		1.1	3.7	18	0.65		
5/17/2016	0.84				3.4	23	0.68		
5/18/2016		1.3		0.56					
7/12/2016	0.79						0.62		
7/13/2016		1.1		0.95	2.8	18			
9/13/2016	0.42					19	0.25		
9/14/2016		1.1		0.4	2.6				
11/19/2016	1.2	1		0.62	2.7	17	0.36		
1/17/2017	1.4	0.87		1.2			0.66		
1/18/2017					3.1	17			
3/22/2017	0.95						0.65		
3/23/2017		0.74		0.87	2.8	15			
5/24/2017	1.3	0.84		0.81	3.1	19	0.72		
10/16/2017	0.93	0.76		0.86	3.3	17	0.7		
3/28/2018	1		2.8	0.97	2.7	16			
3/29/2018							0.55		
6/2/2018	0.93		0.71	0.86	2.9	15	0.6		
11/8/2018	1			0.84	3				
11/9/2018			0.61			14	0.59		
2/11/2019	1				2.88	12.8			
2/12/2019			0.757	0.856			0.608		
4/17/2019	0.893		0.755	0.711	2.77	13			
4/18/2019							0.55		
9/27/2019	0.8		0.663				0.598		
9/30/2019				0.826	3.08	13.6			
2/21/2020	1.02		0.648	0.841			0.552		
2/22/2020					3.86	15			
4/14/2020	0.887		0.67	0.811	2.95	15.7	0.532		
10/30/2020	0.945		0.672	1	3.84	16.4			
11/2/2020							0.535		
3/17/2021					6.69	15.3			
3/26/2021	0.965		0.644	0.937			0.848		
10/5/2021	0.996				8.57		0.829		
10/6/2021			<0.5	0.532		22.8			
3/16/2022	1.32		0.539	0.78	8.94	23.8	1.28		
10/5/2022	1.42			0.647	5.81				
10/6/2022						28.2	4.84		
4/20/2023	0.996		0.685	0.789					
4/21/2023					4.87	26.8	2.56		
10/24/2023	0.918		0.498 (J)				1.3		
10/25/2023				0.875	5.35	25.9			
3/20/2024	1.05					28.9			
3/21/2024			0.469 (J)	0.818	7.31		1.38		
10/2/2024	1.24		0.681	0.781	5.03	30.5	1.08	13.7	12.1

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	6.5	5.1		7.3	7.6	9	6.5		
5/17/2016	4.9				6.4	13	5.1		
5/18/2016		4.2		6					
7/12/2016	5.3						5		
7/13/2016		4.7		6.6	6.3	10			
9/13/2016	4.8 (F1)					7.9	5.1		
9/14/2016		4.5		5.8	6				
11/19/2016	7.1	6.1		7.8	7	9.3	6.5		
1/17/2017	5.8	5.4		8.4			5.9		
1/18/2017					6.7	8.5			
3/22/2017	4.9						5.1		
3/23/2017		5.1		6.8	6	8.5			
5/24/2017	5.9	5.5		7.9	7.4	11	5.9		
10/16/2017	5.7	6.1		7.7	6.6	9.7	5.6		
3/28/2018	5.7		6.7	7.9	6.5	8.8			
3/29/2018							5.3		
6/2/2018	4.7		5.8	7.7	6.1	8.3	4.6		
11/8/2018	5.6			8.5	6.6				
11/9/2018			7.2			9.7	4.9		
2/11/2019	4.84				6.31	8.84			
2/12/2019			8.4	7.89			4.72		
4/17/2019	4.99		8.03	7.71	6.68	9.24			
4/18/2019							4.64		
9/27/2019	5.08		8.37				5.02		
9/30/2019				7.07	5.45	8.59			
4/14/2020	4.91		7.57	8.75	5.93	8.71	4.68		
10/30/2020	5.55		7.59	9.58	6.49	8.93			
11/2/2020							4.91		
3/17/2021					7.55	9.6			
3/26/2021	5.92		6.21	8.32			8.5		
10/5/2021	6.21				14.3		10.3		
10/6/2021			16.4	6.8		5.44			
3/16/2022	7.85		11.5	7.94	17.9	10.6	13		
10/5/2022	6.75			6.04	8.84				
10/6/2022						9.04	12.7		
4/20/2023	5.22		9.6	5.36					
4/21/2023					6.78	11.3	8.95		
10/24/2023	6.29		10				8.57		
10/25/2023				5.5	7.6	11.3			
3/20/2024	6.17					9			
3/21/2024			9.52	5.21	8.17		8.37		
10/2/2024	6.38		10.7	5.35	6.42	10.7	7.43	9.83	9.97

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.002	<0.0025		<0.002	0.0015 (J)	0.0012 (J)	<0.002		
5/17/2016	<0.002				<0.002	<0.002	<0.002		
5/18/2016		<0.0025		<0.002					
7/12/2016	<0.002						<0.002		
7/13/2016		0.0028		0.003	0.0015 (J)	0.0024 (J)			
9/13/2016	<0.002					<0.002	<0.002		
9/14/2016		0.0014 (J)		<0.002	<0.002				
11/19/2016	<0.002	<0.0025		<0.002	0.0011 (J)	<0.002	<0.002		
1/17/2017	<0.002	<0.0025		<0.002			<0.002		
1/18/2017					<0.002	<0.002			
3/22/2017	<0.002						<0.002		
3/23/2017		<0.0025		<0.002	<0.002	<0.002			
5/24/2017	<0.002	<0.0025		<0.002	<0.002	<0.002	<0.002		
3/28/2018	<0.002		<0.002	<0.002	<0.002	0.005			
3/29/2018							<0.002		
6/2/2018	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002		
11/8/2018	<0.002			<0.002	<0.002				
11/9/2018			<0.002			<0.002	<0.002		
2/11/2019	<0.002				<0.002	<0.002			
2/12/2019			<0.002	0.00165 (J)			<0.002		
4/17/2019	<0.002		<0.002	<0.002	<0.002	<0.002			
4/18/2019							<0.002		
9/27/2019	0.00286		0.00284				0.00206 (J)		
9/30/2019				<0.002	<0.002	<0.002			
2/21/2020	<0.002		<0.002	<0.002			<0.002		
2/22/2020					<0.002	<0.002			
10/30/2020	<0.002		<0.002	<0.002	<0.002	<0.002			
11/2/2020							<0.002		
3/17/2021					<0.002	<0.002			
3/26/2021	<0.002		<0.002	<0.002			<0.002		
10/5/2021	<0.002				<0.002		<0.002		
10/6/2021			<0.002	<0.002		<0.002			
3/16/2022	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002		
10/5/2022	<0.002			0.0191	<0.002				
10/6/2022						<0.002	<0.002		
4/20/2023	<0.002		<0.002	<0.002					
4/21/2023					<0.002	<0.002	<0.002		
10/24/2023	<0.002		<0.002				<0.002		
10/25/2023				<0.002	<0.002	<0.002			
3/20/2024	<0.002					<0.002			
3/21/2024			<0.002	<0.002	<0.002		<0.002		
10/2/2024	0.00229		0.00173 (J)	0.00133 (J)	0.00204	0.00175 (J)	0.00171 (J)	0.0016 (J)	0.00154 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.0025	0.00048 (J)		0.0055	0.00094 (J)	<0.0005	0.0011 (J)		
5/17/2016	0.00099 (J)				0.0007 (J)	<0.0005	0.001 (J)		
5/18/2016		<0.0025		0.0059					
7/12/2016	0.00093 (J)						0.00091 (J)		
7/13/2016		0.001 (J)		0.0048	0.0016 (J)	0.00042 (J)			
9/13/2016	0.0011 (J)					<0.0005	0.001 (J)		
9/14/2016		0.00051 (J)		0.0063	0.0011 (J)				
11/19/2016	0.001 (J)	0.0005 (J)		0.0056	0.0012 (J)	<0.0005	0.00083 (J)		
1/17/2017	0.00088 (J)	0.00049 (J)		0.0046			0.00091 (J)		
1/18/2017					0.0011 (J)	<0.0005			
3/22/2017	0.001 (J)						0.00098 (J)		
3/23/2017		0.00057 (J)		0.0049	0.0011 (J)	<0.0005			
5/24/2017	0.00093 (J)	0.00057 (J)		0.0052	0.0012 (J)	<0.0005	0.00098 (J)		
3/28/2018	0.00092 (J)		0.00098 (J)	0.0063	0.00095 (J)	<0.0005			
3/29/2018							0.00063 (J)		
6/2/2018	0.001 (J)		0.0009 (J)	0.0068	0.0012 (J)	<0.0005	0.00087 (J)		
11/8/2018	0.001 (J)			0.0068	0.0011 (J)				
11/9/2018			0.00075 (J)			<0.0005	0.00076 (J)		
2/11/2019	0.000768 (J)				0.00093 (J)	<0.0005			
2/12/2019			0.000896 (J)	0.00552			0.000661 (J)		
4/17/2019	0.000825 (J)		0.00106 (J)	0.00603	0.00116 (J)	<0.0005			
4/18/2019							0.000705 (J)		
9/27/2019	0.000783 (J)		0.000885 (J)				0.00071 (J)		
9/30/2019				0.0062	0.001 (J)	<0.0005			
2/21/2020	0.00073 (J)		0.000909 (J)	0.00576			0.000634 (J)		
2/22/2020					0.000907 (J)	<0.0005			
4/14/2020	0.000853 (J)		0.000899 (J)	0.00633	0.00105 (J)	<0.0005	0.000684 (J)		
10/30/2020	0.000924 (J)		0.000972 (J)	0.00657	0.00102 (J)	<0.0005			
11/2/2020							0.000729 (J)		
3/17/2021					0.00208	<0.0005			
3/26/2021	0.000961		0.000744	0.00339			0.000995		
10/5/2021	0.00143				0.00187		0.00112		
10/6/2021			<0.0005	0.00336		0.000802			
3/16/2022	0.00177		0.000658	0.00289	0.00182	0.000967	0.00141		
10/5/2022	0.002			0.00821	0.00121				
10/6/2022						0.00143	0.00548		
4/20/2023	0.00142		0.000995	0.0083					
4/21/2023					0.00142	0.00275	0.00216		
10/24/2023	0.00123		0.000565				0.00143		
10/25/2023				0.0092	0.00187	0.000885			
3/20/2024	0.00128					0.00131			
3/21/2024			0.000677	0.00945	0.0016		0.00186		
10/2/2024	0.00155		0.000845	0.0105	0.00163	0.00176	0.00256	0.00256	0.00307

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<5	<5		<5	<5	0.549	<5		
5/17/2016	0.813				<5	0.551	<5		
5/18/2016		0.471		<5					
7/12/2016	-0.00163 (U)						0.165 (U)		
7/13/2016		0.401		0.27 (U)	0.0365 (U)	0.859			
9/13/2016	0.41 (U)					0.367 (U)	0.341 (U)		
9/14/2016		-0.033 (U)		-0.0909 (U)	0.3 (U)				
11/19/2016	0.783	0.358		0.416	<5 (U)	<5 (U)	<5 (U)		
1/17/2017	0.613	0.799		0.412 (U)			0.124 (U)		
1/18/2017					0.235 (U)	0.289 (U)			
3/22/2017	0.241 (U)						0.0719 (U)		
3/23/2017		0.182 (U)		0.0761 (U)	0.168 (U)	0.554			
5/24/2017	0.325	0.404		0.0415 (U)	-0.0607 (U)	0.831	0.441		
3/28/2018	0.318 (U)		0.629	0.398	0.42	0.458			
3/29/2018							0.731		
6/2/2018	0.222 (U)		-0.478 (U)	-0.253 (U)	0.0844 (U)	0.226 (U)	0.303 (U)		
11/8/2018	0.117 (U)			0.343 (U)	0.367 (U)				
11/9/2018			0.179 (U)			0.298 (U)	0.00226 (U)		
2/11/2019	0.493				0.0402 (U)	0.15 (U)			
2/12/2019			0.432	0.581			0.094 (U)		
4/17/2019	0.729		0.648	0.646	0.493	0.326 (U)			
4/18/2019							0.48		
9/27/2019	0.36 (U)		0.422 (U)				0.497		
9/30/2019				1	0.404				
2/21/2020	0.268 (U)		0.23 (U)	0.126 (U)			0.375		
2/22/2020					0.53	0.47			
4/14/2020	0.324 (U)		0.307 (U)	0.338	0.0408 (U)	0.376 (U)	0.329 (U)		
10/30/2020	0.497		1.02	0.485	0.344	0.528			
11/2/2020							0.535		
3/17/2021					0.312 (U)	0.0889 (U)			
3/26/2021	0.804		0.526	0.78			0.813		
10/5/2021	1.53				1.06		0.814		
10/6/2021			0.937	0.503		0.931			
3/16/2022	1.13		0.458	0.286 (U)	0.314 (U)	1.39	1.39		
10/21/2022	0.946			1.29	0.562 (U)	1.36	2.03		
4/20/2023	0.647		0.935	0.884					
4/21/2023					0.158 (U)	1.73	0.802		
10/24/2023	0.563		0.521				0.7		
10/25/2023				0.857	0.472 (U)	1.49			
3/20/2024	0.968					0.758			
3/21/2024			1.11	0.926	0.754		0.606		
10/2/2024	1.03		1.15	-0.14 (U)	-0.111 (U)	1.22	0.813	0.542 (U)	0.0261 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.1	<0.1		<0.1	0.04 (J)	0.06 (J)	<0.1		
5/17/2016	<0.1				0.04 (J)	0.07 (J)	<0.1		
5/18/2016		<0.1		<0.1					
7/12/2016	<0.1						<0.1		
7/13/2016		<0.1		<0.1	0.05 (J)	0.08 (J)			
9/13/2016	<0.1					0.06 (J)	<0.1		
9/14/2016		<0.1		<0.1	0.04 (J)				
11/19/2016	<0.1	<0.1		<0.1	0.04 (J)	0.06 (J)	<0.1		
1/17/2017	<0.1	<0.1		<0.1			<0.1		
1/18/2017					<0.1	0.05 (J)			
3/22/2017	<0.1						<0.1		
3/23/2017		<0.1		<0.1	<0.1	0.05 (J)			
5/24/2017	<0.1	<0.1		<0.1	0.04 (J)	0.06 (J)	<0.1 (D)		
10/16/2017	<0.1	<0.1		<0.1	<0.1	0.06 (J)	<0.1		
3/28/2018	<0.1		<0.1	<0.1	0.04 (J)	0.06 (J)			
3/29/2018							<0.1		
6/2/2018	<0.1		<0.1	<0.1	0.05 (J)	0.06 (J)	<0.1		
11/8/2018	<0.1			<0.1	0.05 (J)				
11/9/2018			<0.1			0.06 (J)	<0.1		
2/11/2019	<0.1				<0.1	0.0368 (J)			
2/12/2019			<0.1	<0.1			<0.1		
4/17/2019	<0.1		<0.1	<0.1	0.033 (J)	0.0421 (J)			
4/18/2019							<0.1		
9/27/2019	<0.1		0.0313 (J)				<0.1		
9/30/2019				<0.1	<0.1	0.045 (J)			
2/21/2020	<0.1		<0.1	<0.1			<0.1		
2/22/2020					0.0317 (J)	0.0434 (J)			
4/14/2020	0.0532 (J)		0.0537 (J)	0.034 (J)	0.0508 (J)	0.059 (J)	0.0415 (J)		
10/30/2020	<0.1		<0.1	<0.1	<0.1	<0.1			
11/2/2020							<0.1		
3/17/2021					0.0544 (J)	0.0575 (J)			
3/26/2021	<0.1		<0.1	<0.1			<0.1		
10/5/2021	0.0499 (J)				0.0505 (J)		<0.1		
10/6/2021			<0.1	<0.1		0.0725 (J)			
3/16/2022	<0.1		<0.1	0.0307 (J)	0.0462 (J)	0.176	0.0266 (J)		
10/5/2022	<0.1			<0.1	0.0322 (J)				
10/6/2022						0.0972 (J)	<0.1		
4/20/2023	<0.1		0.0278 (J)	<0.1					
4/21/2023					0.0441 (J)	0.0665 (J)	<0.1		
10/24/2023	<0.1		0.0276 (J)				<0.1		
10/25/2023				<0.1	0.0393 (J)	0.0858 (J)			
3/20/2024	0.0436 (J)					0.11			
3/21/2024			0.0515 (J)	0.0537 (J)	0.0578 (J)		0.0292 (J)		
10/2/2024	<0.1		0.0284 (J)	0.026 (J)	0.04 (J)	0.0865 (J)	<0.1	0.0642 (J)	0.0861 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.001	<0.0013		<0.001	0.00039 (J)	<0.001	<0.001		
5/17/2016	<0.001				<0.001	<0.001	<0.001		
5/18/2016		<0.0013		<0.001					
7/12/2016	<0.001						<0.001		
7/13/2016		<0.0013		<0.001	<0.001	<0.001			
9/13/2016	<0.001					<0.001	<0.001		
9/14/2016		<0.0013		0.00056 (J)	<0.001				
11/19/2016	<0.001	<0.0013		<0.001	0.00042 (J)	<0.001	<0.001		
1/17/2017	<0.001	<0.0013		<0.001			<0.001		
1/18/2017					<0.001	<0.001			
3/22/2017	<0.001						<0.001		
3/23/2017		<0.0013		0.00038 (J)	<0.001	<0.001			
5/24/2017	<0.001	<0.0013		0.00036 (J)	<0.001	<0.001	<0.001		
3/28/2018	<0.001		<0.001	<0.001	<0.001	<0.001			
3/29/2018							<0.001		
11/8/2018	<0.001			<0.001	<0.001				
11/9/2018			<0.001			<0.001	<0.001		
2/11/2019	<0.001				<0.001	<0.001			
2/12/2019			<0.001	0.000139 (J)			<0.001		
4/17/2019	<0.001		<0.001	<0.001	<0.001	<0.001			
4/18/2019							<0.001		
9/27/2019	<0.001		<0.001				0.000129 (J)		
9/30/2019				0.000322 (J)	0.000191 (J)	0.000152 (J)			
2/21/2020	<0.001		<0.001	0.00015 (J)			<0.001		
2/22/2020					<0.001	<0.001			
4/14/2020	<0.001		<0.001	0.000236 (J)	<0.001	<0.001	<0.001		
10/30/2020	<0.001		<0.001	0.000136 (J)	<0.001	<0.001			
11/2/2020							<0.001		
3/17/2021					0.000153 (J)	<0.001			
3/26/2021	<0.001		<0.001	0.000145 (J)			<0.001		
10/5/2021	<0.001				<0.001		<0.001		
10/6/2021			<0.001	<0.001		<0.001			
3/16/2022	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001		
10/5/2022	<0.001			<0.001	<0.001				
10/6/2022						<0.001	<0.001		
4/20/2023	<0.001		<0.001	<0.001					
4/21/2023					<0.001	<0.001	<0.001		
10/24/2023	<0.001		<0.001				<0.001		
10/25/2023				<0.001	<0.001	<0.001			
3/20/2024	<0.001					<0.001			
3/21/2024			<0.001	<0.001	<0.001		<0.001		
10/2/2024	0.00035 (J)		0.00032 (J)	0.000425 (J)	0.0003 (J)	0.00032 (J)	0.000345 (J)	0.000355 (J)	0.00035 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.005	<0.005		<0.005	0.044	0.17	<0.005		
5/17/2016	0.0037 (J)				0.028	0.2	<0.005		
5/18/2016		<0.005		<0.005					
7/12/2016	0.012 (o)						<0.005		
7/13/2016		<0.005		<0.005	0.026	0.17			
9/13/2016	<0.005					0.17	<0.005		
9/14/2016		<0.005		<0.005	0.026				
11/19/2016	<0.005	<0.005		<0.005	0.026	0.18	0.0035 (J)		
1/17/2017	<0.005	<0.005		<0.005			<0.005		
1/18/2017					0.027	0.2			
3/22/2017	<0.005						<0.005		
3/23/2017		<0.005		<0.005	0.024	0.19			
5/24/2017	<0.005	<0.005		<0.005	0.027	0.21	<0.005		
3/28/2018	<0.005		0.0026 (J)	0.0023 (J)	0.021	0.23			
3/29/2018							0.0026 (J)		
6/2/2018	0.0017 (J)		0.0021 (J)	0.002 (J)	0.022	0.19	0.0029 (J)		
11/8/2018	0.0023 (J)			0.0024 (J)	0.025				
11/9/2018			0.0024 (J)			0.18	0.0027 (J)		
2/11/2019	<0.005				0.0229	0.161			
2/12/2019			<0.005	<0.005			<0.005		
4/17/2019	0.00229 (J)		0.00191 (J)	0.00197 (J)	0.0236	0.174			
4/18/2019							0.00238 (J)		
9/27/2019	0.00346 (J)		<0.005				0.00375 (J)		
9/30/2019				0.00687	0.0249	0.166			
2/21/2020	<0.005		<0.005	<0.005			<0.005		
2/22/2020					0.0211	0.169			
4/14/2020	0.00505		<0.005	<0.005	0.0224	0.192	<0.005		
10/30/2020	<0.005		<0.005	<0.005	0.0267	0.194			
11/2/2020							<0.005		
3/17/2021					0.0174	0.12			
3/26/2021	<0.005		<0.005	<0.005			<0.005		
10/5/2021	<0.005				0.0127		0.0045 (J)		
10/6/2021			<0.005	<0.005		0.0994			
3/16/2022	0.00171 (J)		0.00165 (J)	0.0038 (J)	0.0112	0.0629	0.00437 (J)		
10/5/2022	<0.005			0.00322 (J)	0.00676				
10/6/2022						0.0534	0.0123		
4/20/2023	<0.005		0.00235 (J)	0.00309 (J)					
4/21/2023					0.0091	0.0564	0.0107		
10/24/2023	<0.005		<0.005				0.00555		
10/25/2023				0.0033 (J)	0.0123	0.0679			
3/20/2024	0.00133 (J)					0.0786			
3/21/2024			0.00174 (J)	0.00355 (J)	0.013		0.0037 (J)		
10/2/2024	<0.005		0.00485 (J)	0.00575	0.0119	0.0774	<0.005	0.0589	0.032

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.0002	<0.0002		8.4E-05 (JB)	7.3E-05 (JB)	7.4E-05 (JB)	7.1E-05 (JB)		
5/17/2016	<0.0002				<0.0002	<0.0002	<0.0002		
5/18/2016		<0.0002		<0.0002					
7/12/2016	<0.0002						<0.0002		
7/13/2016		<0.0002		<0.0002	<0.0002	<0.0002			
9/13/2016	<0.0002					<0.0002	<0.0002		
9/14/2016		<0.0002		<0.0002	<0.0002				
11/19/2016	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
1/17/2017	<0.0002	<0.0002		<0.0002			<0.0002		
1/18/2017					<0.0002	<0.0002			
3/22/2017	0.00011 (J)						<0.0002		
3/23/2017		0.00013 (J)		0.00013 (J)	0.00013 (J)	<0.0002			
5/24/2017	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
3/28/2018	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002			
3/29/2018							<0.0002		
2/11/2019	<0.0002				<0.0002	<0.0002			
2/12/2019			<0.0002	<0.0002			<0.0002		
4/17/2019	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002			
4/18/2019							<0.0002		
2/21/2020	<0.0002		<0.0002	<0.0002			<0.0002		
2/22/2020					<0.0002	<0.0002			
10/30/2020	<0.0002		<0.0002	0.000497	<0.0002	<0.0002			
11/2/2020							<0.0002		
3/17/2021					<0.0002	<0.0002			
3/26/2021	<0.0002		<0.0002	<0.0002				0.000235	
10/5/2021	<0.0002				<0.0002			0.000151 (J)	
10/6/2021			<0.0002	<0.0002		<0.0002			
3/16/2022	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		0.0012	
10/5/2022	<0.0002			<0.0002	<0.0002				
10/6/2022						<0.0002	<0.0002		
4/20/2023	<0.0002		<0.0002	<0.0002					
4/21/2023					<0.0002	<0.0002	<0.0002		
10/24/2023	<0.0002		<0.0002				<0.0002		
10/25/2023				<0.0002	<0.0002	<0.0002			
3/20/2024	0.000141 (J)					0.000134 (J)			
3/21/2024			0.00015 (J)	0.000133 (J)	0.000135 (J)		0.000143 (J)		
10/2/2024	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.005	0.0019 (J)		<0.005	<0.005	0.0026 (J)	<0.005		
5/17/2016	<0.005				<0.005	0.0011 (J)	<0.005		
5/18/2016		0.00096 (J)		<0.005					
7/12/2016	<0.005						<0.005		
7/13/2016		0.0017 (J)		<0.005	<0.005	0.0079 (J)			
9/13/2016	<0.005					0.0038 (J)	<0.005		
9/14/2016		0.0018 (J)		<0.005	<0.005				
11/19/2016	<0.005	<0.015		<0.005	<0.005	0.0014 (J)	<0.005		
1/17/2017	<0.005	<0.015		<0.005			<0.005		
1/18/2017					<0.005	0.001 (J)			
3/22/2017	<0.005						0.0038 (J)		
3/23/2017		<0.015		<0.005	<0.005	<0.015			
5/24/2017	<0.005	<0.015		<0.005	<0.005	0.0014 (J)	<0.005		
3/28/2018	<0.005		<0.005	<0.005	<0.005	<0.015			
3/29/2018							<0.005		
11/8/2018	<0.005			<0.005	<0.005				
11/9/2018			<0.005			<0.015	<0.005		
2/11/2019	<0.005				<0.005	<0.015			
2/12/2019			<0.005	<0.005			<0.005		
4/17/2019	<0.005		<0.005	<0.005	<0.005	<0.015			
4/18/2019							<0.005		
2/21/2020	<0.005		<0.005	<0.005			<0.005		
2/22/2020					0.000616 (J)	0.000627 (J)			
4/14/2020	<0.005		<0.005	<0.005	<0.005	0.000747 (J)	<0.005		
10/30/2020	<0.005		<0.005	<0.005	<0.005	<0.015			
11/2/2020							<0.005		
3/17/2021					0.0032 (J)	0.00328 (J)			
3/26/2021	<0.005		<0.005	<0.005			<0.005		
10/5/2021	<0.005				0.00109 (J)		<0.005		
10/6/2021			<0.005	<0.005		0.00364 (J)			
3/16/2022	<0.005		<0.005	<0.005	0.000916 (J)	0.00533	<0.005		
10/5/2022	<0.005			<0.005	0.000939 (J)				
10/6/2022						0.00424 (J)	<0.005		
4/20/2023	<0.005		<0.005	<0.005					
4/21/2023					0.00109 (J)	0.00651	<0.005		
10/24/2023	<0.005		<0.005				<0.005		
10/25/2023				<0.005	<0.005	0.0036 (J)			
3/20/2024	<0.005					0.00366 (J)			
3/21/2024			<0.005	<0.005	0.000937 (J)		<0.005		
10/2/2024	<0.005		<0.005	<0.005	0.00108 (J)	0.00335 (J)	<0.005	0.00213 (J)	0.0115

Time Series

Constituent: pH (SU) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	5.12	5.52		5.05	5.38	6.64	4.89		
5/17/2016	5.23				5.32	6.52	4.92		
5/18/2016		5.24		4.86					
7/12/2016	5.77						4.93		
7/13/2016		5.17		5.11	5.31	6.63			
9/13/2016	4.98					6.46	4.76		
9/14/2016		5.04		4.84	5.21				
11/19/2016	4.82	4.88		4.74	5.12	6.38	4.56		
1/17/2017	5.04	5.04		4.95			4.86		
1/18/2017					5.22	6.47			
3/22/2017	4.73						4.66		
3/23/2017		4.66		4.66	5.01	6.19			
5/24/2017	5.01	4.93		4.86	5.19	6.34	4.83		
10/16/2017	4.59	4.65		4.47	4.96	6.23	4.53		
3/28/2018	4.87		5.39	4.93	5.23	6.22			
3/29/2018							4.87		
6/2/2018	4.92		5.06	4.83	5.22	6.24	4.87		
11/8/2018	5			4.83	5.29				
11/9/2018			4.92			6.27	4.92		
2/11/2019	4.7				5	6.08			
2/12/2019			4.86	4.65			4.79		
4/17/2019	4.9		4.79	4.71	5.13	6.14			
4/18/2019							4.9		
2/21/2020	4.86		4.73	4.55			4.8		
2/22/2020					5.3	6.13			
4/14/2020	5.23		4.87	4.7	5.45	6.26	4.94		
10/30/2020	5		4.87	4.8	5.32	6.19			
11/2/2020							4.92		
3/17/2021					5.62	6.14			
3/26/2021	4.86		4.7	4.54			4.67		
10/5/2021	5				5.72		4.84		
10/6/2021			4.77	4.63		6.03			
3/16/2022	4.92		4.91	4.64	5.56	6.2	4.75		
10/5/2022	4.91			4.51	5.57				
10/6/2022						6.27	4.71		
4/20/2023	4.89		4.83	4.49					
4/21/2023					5.45	6.09	4.95		
10/24/2023	4.99		4.98				4.91		
10/25/2023				4.43	5.42	6.11			
3/20/2024	4.93					6.2			
3/21/2024			4.86	4.39	5.47		4.89		
10/2/2024	4.94		4.95	4.52	5.51	6.14	4.87	6.02	6.14

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.005	0.00041 (J)		0.00033 (J)	<0.005	<0.005	<0.005		
5/17/2016	<0.005				<0.005	<0.005	0.00026 (J)		
5/18/2016		<0.0013		<0.005					
7/12/2016	<0.005						<0.005		
7/13/2016		<0.0013		0.00041 (J)	<0.005	<0.005			
9/13/2016	<0.005					<0.005	0.00031 (J)		
9/14/2016		<0.0013		0.00079 (J)	<0.005				
11/19/2016	<0.005	<0.0013		<0.005	<0.005	<0.005	<0.005		
1/17/2017	<0.005	<0.0013		<0.005			<0.005		
1/18/2017					<0.005	<0.005			
3/22/2017	<0.005						0.0021		
3/23/2017		<0.0013		<0.005	<0.005	<0.005			
5/24/2017	<0.005	0.00026 (J)		0.00028 (J)	<0.005	0.00033 (J)	0.00026 (J)		
3/28/2018	<0.005		0.00024 (J)	0.00038 (J)	<0.005	<0.005			
3/29/2018							0.00036 (J)		
6/2/2018	0.00064 (J)		<0.005	0.00031 (J)	<0.005	<0.005	<0.005		
11/8/2018	0.0025			0.00088 (J)	<0.005				
11/9/2018			0.00098 (J)			<0.005	<0.005		
2/11/2019	<0.005				<0.005	<0.005			
2/12/2019			<0.005	<0.005			<0.005		
4/17/2019	<0.005		<0.005	<0.005	<0.005	<0.005			
4/18/2019							<0.005		
2/21/2020	<0.005		<0.005	<0.005			<0.005		
2/22/2020					<0.005	<0.005			
10/30/2020	<0.005		<0.005	<0.005	<0.005	<0.005			
11/2/2020							<0.005		
3/17/2021					<0.005	<0.005			
3/26/2021	<0.005		<0.005	<0.005			<0.005		
10/5/2021	<0.005				<0.005		<0.005		
10/6/2021			<0.005	<0.005		<0.005			
3/16/2022	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005		
10/5/2022	<0.005			<0.005	<0.005				
10/6/2022						<0.005	<0.005		
4/20/2023	<0.005		<0.005	<0.005					
4/21/2023					<0.005	<0.005	<0.005		
10/24/2023	<0.005		<0.005				<0.005		
10/25/2023				<0.005	<0.005	<0.005			
3/20/2024	<0.005					<0.005			
3/21/2024			<0.005	<0.005	<0.005		<0.005		
10/2/2024	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<5	<5		<5	2.3 (J)	4.5 (J)	<5		
5/17/2016	<5				2.3 (J)	17	<5		
5/18/2016		<5		<5					
7/12/2016	<5						<5		
7/13/2016		<5		1.5 (J)	2.4 (J)	15			
9/13/2016	<5					3.4 (J)	<5		
9/14/2016		<5		1.6 (J)	2.4 (J)				
11/19/2016	<5	<5		1.8 (J)	3.3 (J)	3.5 (J)	1.5 (J)		
1/17/2017	<5	<5		<5			<5		
1/18/2017					2.3 (J)	3.2 (J)			
3/22/2017	<5						1.9 (J)		
3/23/2017		1.8 (J)		2.3 (J)	3.2 (J)	3.7 (J)			
5/24/2017	<5	1.5 (J)		1.6 (J)	2.4 (J)	8.8	<5		
10/16/2017	<5	<5		<5	2 (J)	4 (J)	<5		
3/28/2018	<5		1.7 (J)	1.6 (J)	2.4 (J)	3.3 (J)			
3/29/2018							<5		
6/2/2018	1.9 (J)		3 (J)	2.9 (J)	3.7 (J)	4.3 (J)	2.8 (J)		
11/8/2018	<5			1.6 (J)	2.7 (J)				
11/9/2018			<5			2.3 (J)	<5		
2/11/2019	0.774 (J)				2.5	2.64			
2/12/2019			1.97	1.97			1.35		
4/17/2019	1.43		2.82	2.5	3.15	3.27			
4/18/2019							1.82		
9/27/2019	1.03		2.19				1.22		
9/30/2019				1.64	2.34	2.82			
4/14/2020	0.928 (J)		2.71	1.62	2.99	4.2	1.18		
10/30/2020	0.91 (J)		3.97	1.44	2.84	4.76			
11/2/2020							1.08		
3/17/2021					4.35	4.07			
3/26/2021	1.49		2.04	3.25			2		
10/5/2021	1.13				5.02		2.55		
10/6/2021			5.37	5.07		14.5			
3/16/2022	3.6		5.37	6.85	5.64	23.1	5.93		
10/5/2022	1.34			6.07	4.12				
10/6/2022						19.5	61.4		
4/20/2023	2.6		7.32	8.2					
4/21/2023					5	47.2	8.82		
10/24/2023	1.8		7.68				2.11		
10/25/2023				8.72	12.5	37.5			
3/20/2024	1.41					30			
3/21/2024			6.92	7.6	12.1		1.66		
10/2/2024	1.79		6.73	7.63	5.89	40.1	1.61	19	24.6

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	<0.001	<0.0005		<0.001	<0.001	<0.001	<0.001		
5/17/2016	<0.001				<0.001	<0.001	<0.001		
5/18/2016		<0.0005		<0.001					
7/12/2016	<0.001						<0.001		
7/13/2016		<0.0005		<0.001	<0.001	<0.001			
9/13/2016	<0.001					<0.001	<0.001		
9/14/2016		<0.0005		9.5E-05 (J)	<0.001				
11/19/2016	<0.001	<0.0005		<0.001	<0.001	<0.001	<0.001		
1/17/2017	<0.001	<0.0005		<0.001			<0.001		
1/18/2017					<0.001	<0.001			
3/22/2017	<0.001						<0.001		
3/23/2017		<0.0005		<0.001	<0.001	<0.001			
5/24/2017	<0.001	<0.0005		<0.001	<0.001	<0.001	<0.001		
3/28/2018	<0.001		<0.001	<0.001	<0.001	<0.001			
3/29/2018							<0.001		
11/8/2018	<0.001			8.5E-05 (J)	<0.001				
11/9/2018			<0.001			<0.001	<0.001		
2/11/2019	<0.001				<0.001	<0.001			
2/12/2019			<0.001	<0.001			<0.001		
4/17/2019	<0.001		<0.001	<0.001	<0.001	<0.001			
4/18/2019							<0.001		
2/21/2020	<0.001		0.000486 (J)	0.000276 (J)			<0.001		
2/22/2020					<0.001	<0.001			
4/14/2020	<0.001		<0.001	0.000158 (J)	<0.001	<0.001	<0.001		
10/30/2020	<0.001		<0.001	<0.001	<0.001	<0.001			
11/2/2020							<0.001		
3/17/2021					<0.001	<0.001			
3/26/2021	<0.001		<0.001	<0.001			<0.001		
10/5/2021	<0.001				<0.001		0.000153 (J)		
10/6/2021			<0.001	<0.001		<0.001			
3/16/2022	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001		
10/5/2022	<0.001			<0.001	<0.001				
10/6/2022						<0.001	<0.001		
4/20/2023	<0.001		<0.001	<0.001					
4/21/2023					<0.001	<0.001	<0.001		
10/24/2023	<0.001		<0.001				<0.001		
10/25/2023				<0.001	<0.001	<0.001			
3/20/2024	0.000549 (J)					<0.001			
3/21/2024			<0.001	<0.001	<0.001		<0.001		
10/2/2024	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

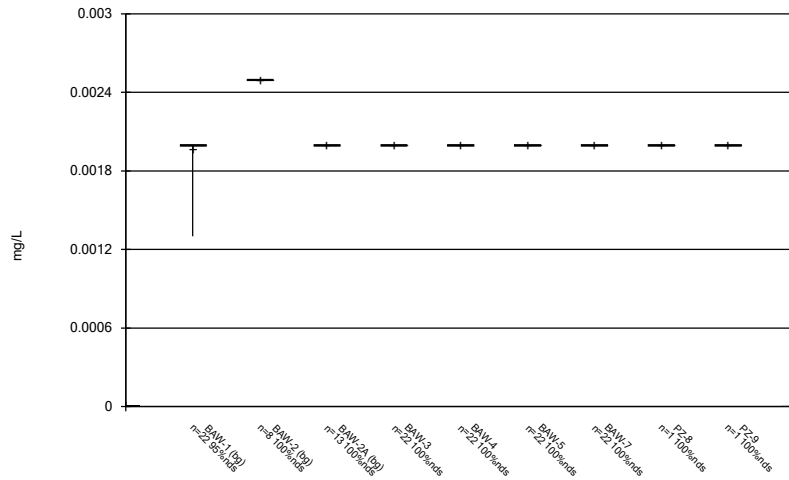
Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/11/2024 2:45 PM

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-2 (bg)	BAW-2A (bg)	BAW-3	BAW-4	BAW-5	BAW-7	PZ-8	PZ-9
3/23/2016	20	30		30	46	88	22		
5/17/2016	24				52	110	30		
5/18/2016		20		20					
7/12/2016	24						26		
7/13/2016		40		40	36	120			
9/13/2016	18					92	28		
9/14/2016		10		<10	38				
11/19/2016	20	28		22	50	94	38		
1/17/2017	<10	14		14			10		
1/18/2017					18	68			
3/22/2017	12						22		
3/23/2017		16		28	32	80			
5/24/2017	16 (D)	12		18	32	90	22		
10/16/2017	58	50		36	64	110	34		
3/28/2018	18		30	36	56	86			
3/29/2018							50		
6/2/2018	6		26	6	22	72	<10		
11/8/2018	12			34	170				
11/9/2018			94			38	20		
2/11/2019	<10				23	60			
2/12/2019			22	12			<10		
4/17/2019	16		22	27	37	82			
4/18/2019							39		
9/27/2019	26		25				<10		
9/30/2019				<10	<10	55			
4/14/2020	25		38	31	30	77	24		
10/30/2020	34		48	40	40	88			
11/2/2020							28		
3/17/2021					44	79			
3/26/2021	24		24	37			38		
10/5/2021	26				75		45		
10/6/2021			61	30		114			
3/16/2022	30		26	26	66	133	37		
10/5/2022	30			32	52				
10/6/2022						155	135		
4/20/2023	26		30	31					
4/21/2023					50	204	47		
10/24/2023	28		35				42		
10/25/2023				19	47	161			
3/20/2024	29					164			
3/21/2024			38	31	64		40		
10/2/2024	28		49	30	40	195	33	108	137

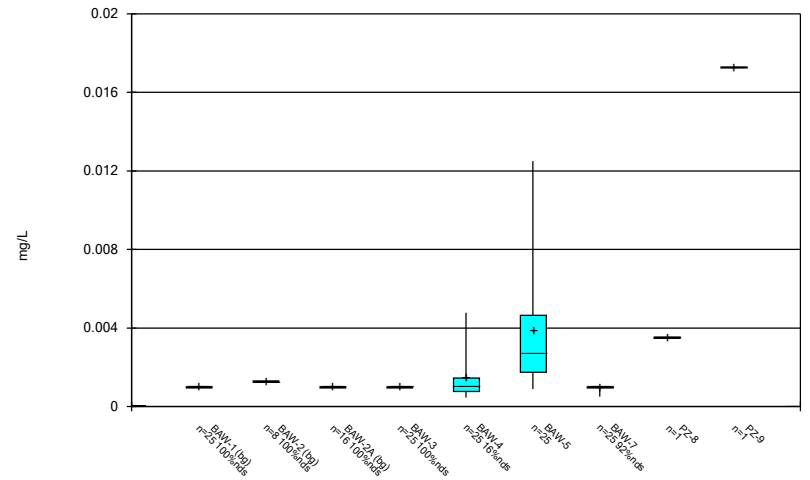
Box Plots

Box & Whiskers Plot



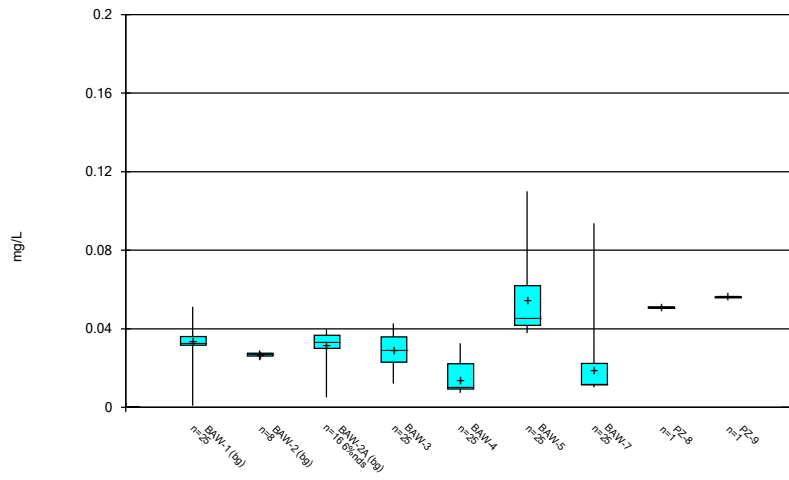
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



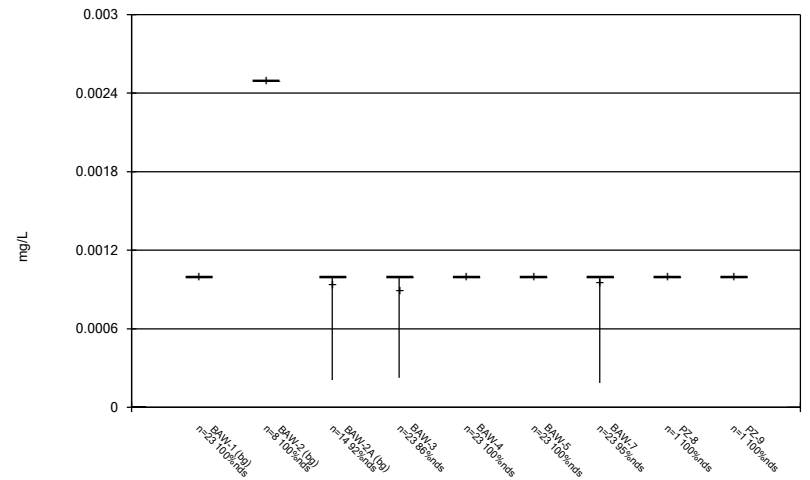
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



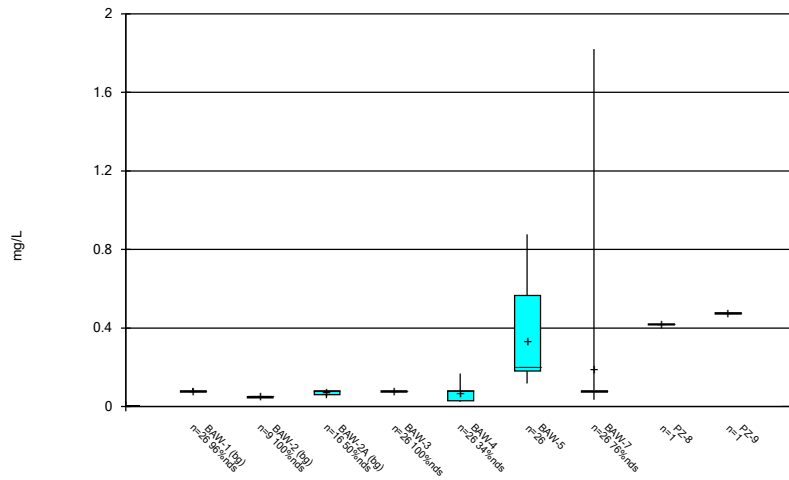
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



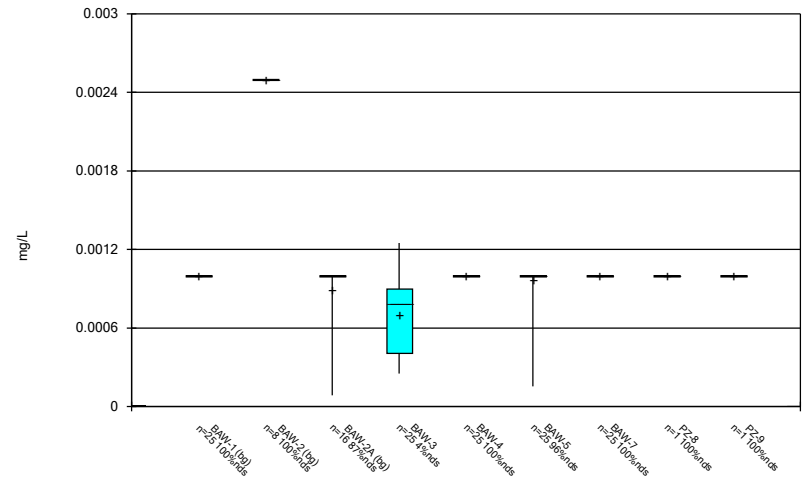
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



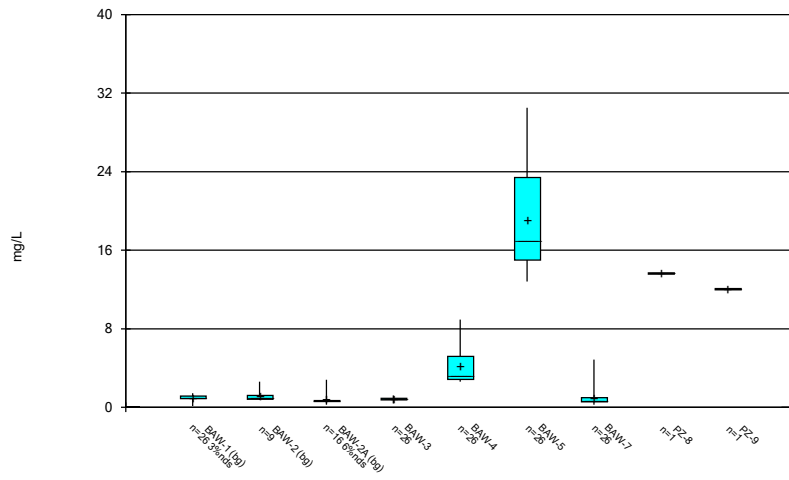
Constituent: Boron Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



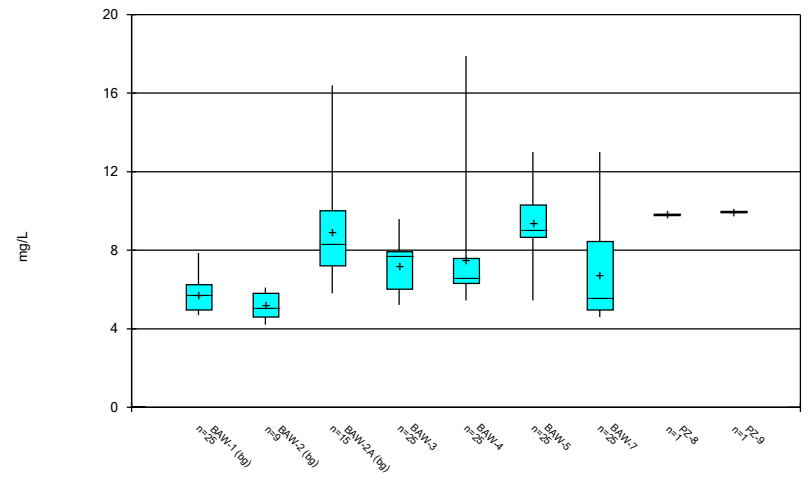
Constituent: Cadmium Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



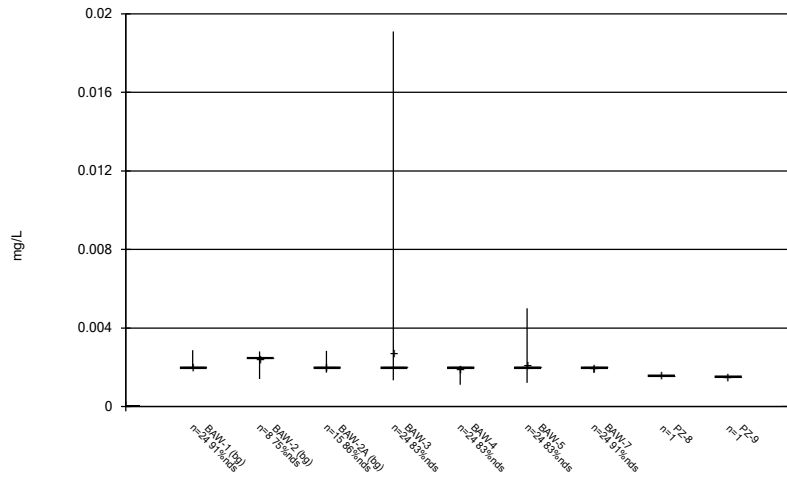
Constituent: Calcium Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



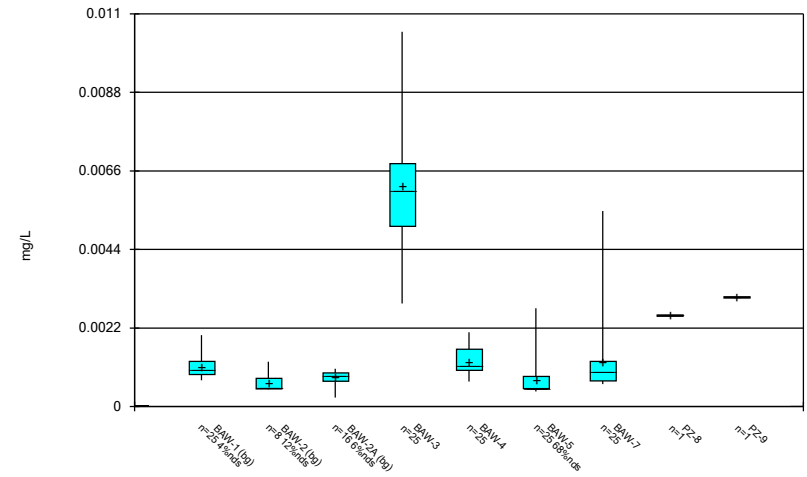
Constituent: Chloride Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



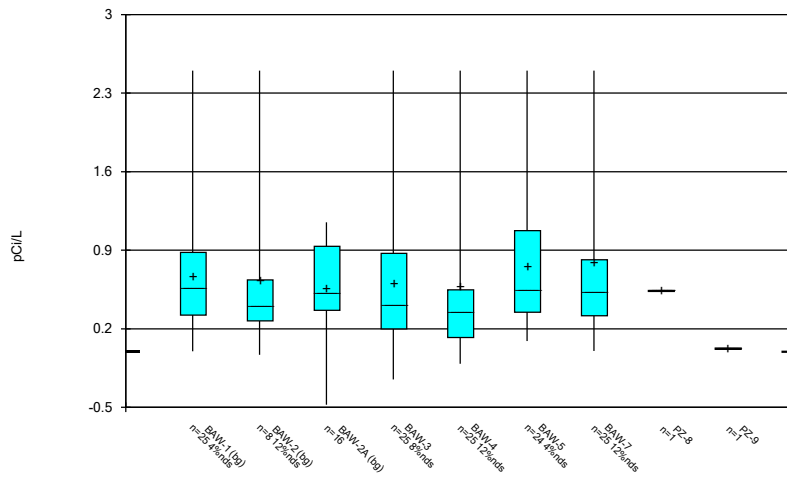
Constituent: Chromium Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



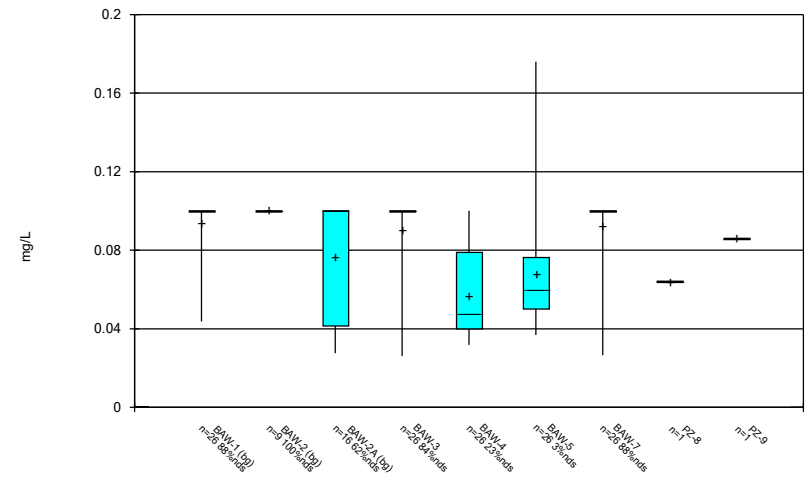
Constituent: Cobalt Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



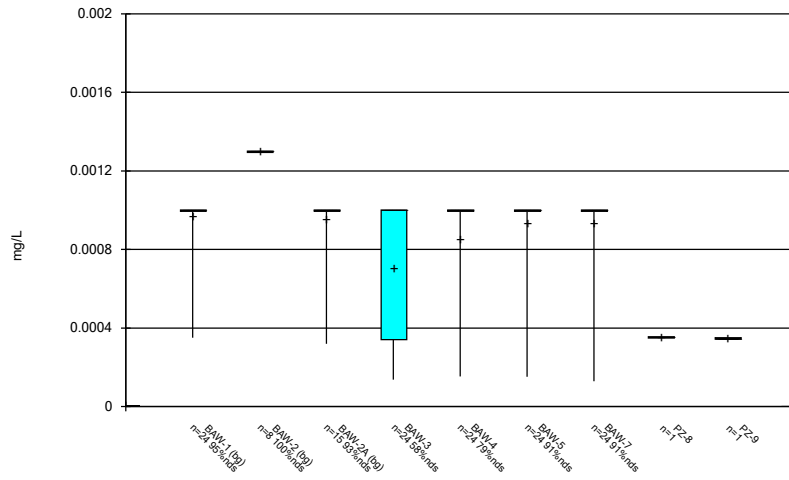
Constituent: Combined Radium 226 + 228 Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



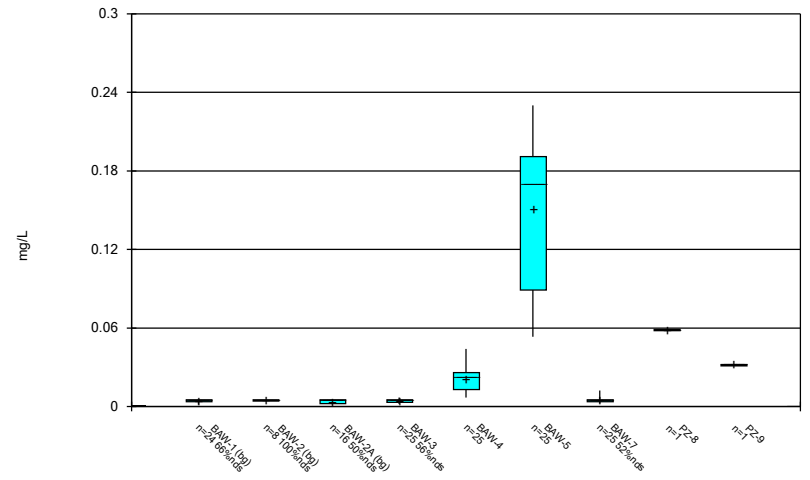
Constituent: Fluoride Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



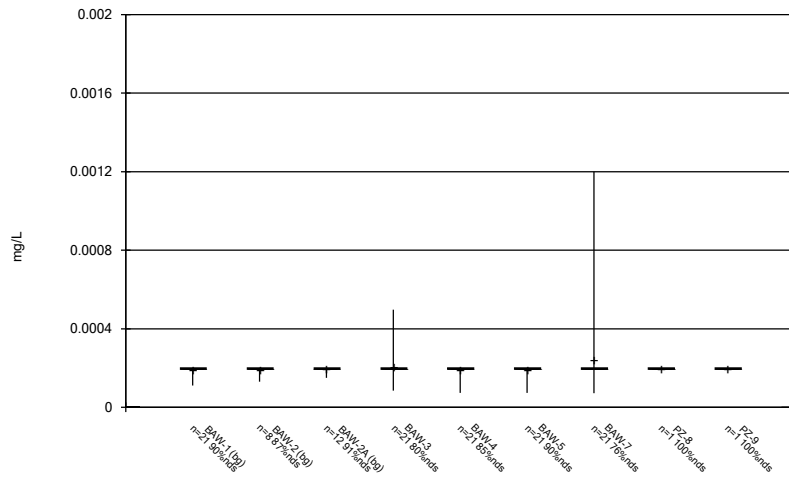
Constituent: Lead Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



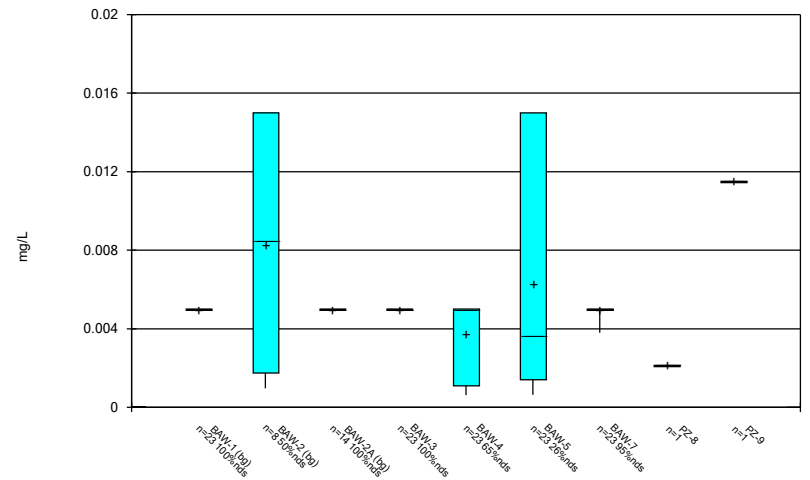
Constituent: Lithium Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



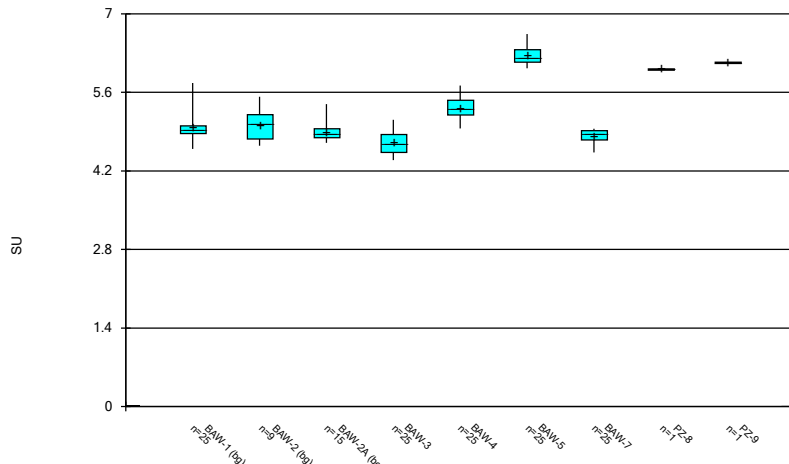
Constituent: Mercury Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



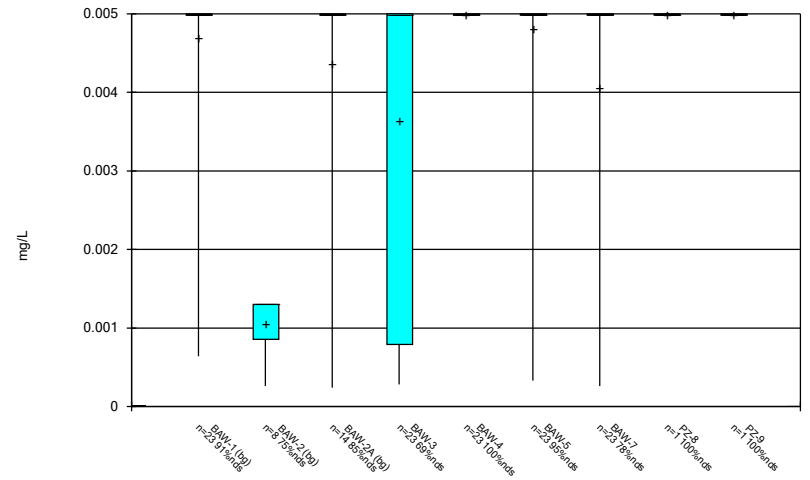
Constituent: Molybdenum Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



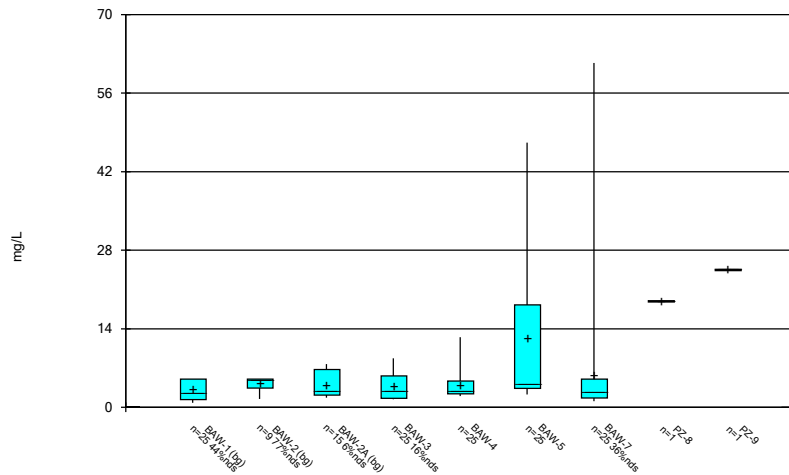
Constituent: pH Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



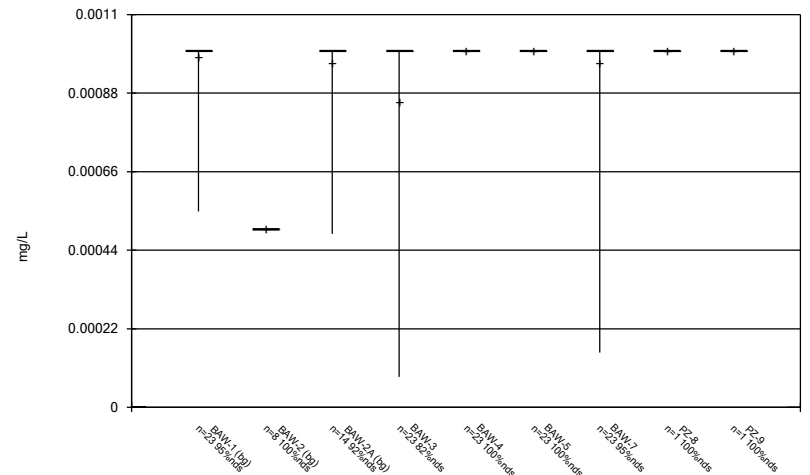
Constituent: Selenium Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



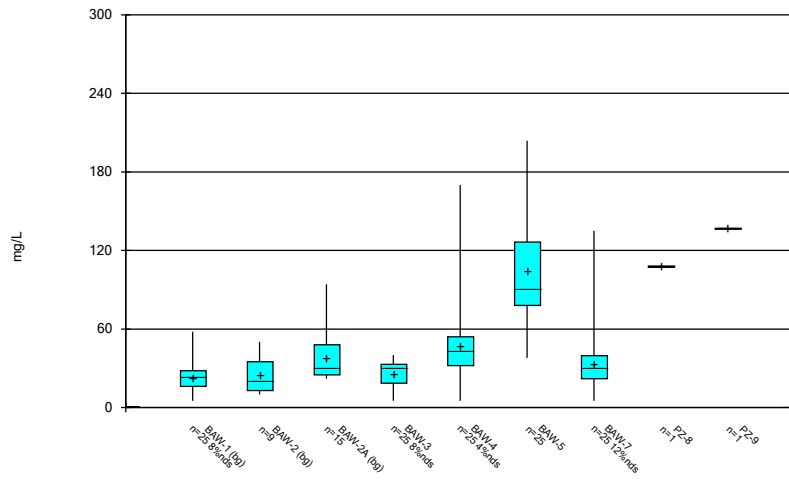
Constituent: Sulfate Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/11/2024 2:45 PM
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/11/2024 2:45 PM
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Outlier Summary

Outlier Summary

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:39 PM

BAW-1 Lithium (mg/L)

7/12/2016

0.012 (o)

Prediction Limits - Interwell

Appendix III - Interwell Prediction Limits - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BAW-5	0.0928	n/a	10/2/2024	0.751	Yes	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BAW-4	2.8	n/a	10/2/2024	5.03	Yes	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Calcium (mg/L)	BAW-5	2.8	n/a	10/2/2024	30.5	Yes	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
pH (SU)	BAW-3	5.77	4.59	10/2/2024	4.52	Yes	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
pH (SU)	BAW-5	5.77	4.59	10/2/2024	6.14	Yes	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-5	7.68	n/a	10/2/2024	40.1	Yes	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BAW-5	57.74	n/a	10/2/2024	195	Yes	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2

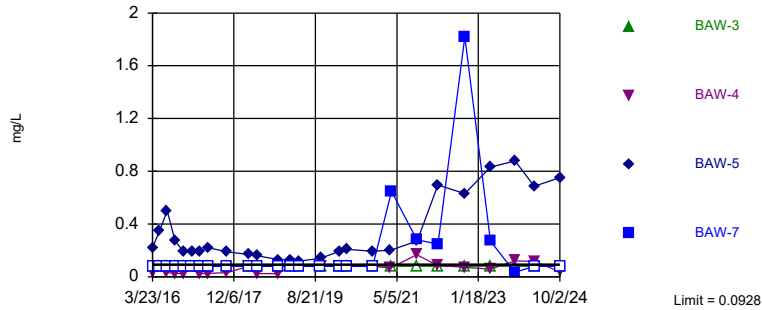
Appendix III - Interwell Prediction Limits - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BAW-3	0.0928	n/a	10/2/2024	0.08ND	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-4	0.0928	n/a	10/2/2024	0.0389J	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-5	0.0928	n/a	10/2/2024	0.751	Yes	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Boron (mg/L)	BAW-7	0.0928	n/a	10/2/2024	0.08ND	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BAW-3	2.8	n/a	10/2/2024	0.781	No	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Calcium (mg/L)	BAW-4	2.8	n/a	10/2/2024	5.03	Yes	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Calcium (mg/L)	BAW-5	2.8	n/a	10/2/2024	30.5	Yes	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Calcium (mg/L)	BAW-7	2.8	n/a	10/2/2024	1.08	No	51	3.922	n/a	n/a	0.0007231	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-3	16.4	n/a	10/2/2024	5.35	No	49	0	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-4	16.4	n/a	10/2/2024	6.42	No	49	0	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-5	16.4	n/a	10/2/2024	10.7	No	49	0	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Chloride (mg/L)	BAW-7	16.4	n/a	10/2/2024	7.43	No	49	0	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BAW-3	0.1	n/a	10/2/2024	0.026J	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-4	0.1	n/a	10/2/2024	0.04J	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-5	0.1	n/a	10/2/2024	0.0865J	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BAW-7	0.1	n/a	10/2/2024	0.1ND	No	51	82.35	n/a	n/a	0.0007231	NP Inter (NDs) 1 of 2
pH (SU)	BAW-3	5.77	4.59	10/2/2024	4.52	Yes	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
pH (SU)	BAW-4	5.77	4.59	10/2/2024	5.51	No	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
pH (SU)	BAW-5	5.77	4.59	10/2/2024	6.14	Yes	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
pH (SU)	BAW-7	5.77	4.59	10/2/2024	4.87	No	49	0	n/a	n/a	0.001569	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-3	7.68	n/a	10/2/2024	7.63	No	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-4	7.68	n/a	10/2/2024	5.89	No	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-5	7.68	n/a	10/2/2024	40.1	Yes	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BAW-7	7.68	n/a	10/2/2024	1.61	No	49	38.78	n/a	n/a	0.0007847	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BAW-3	57.74	n/a	10/2/2024	30	No	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-4	57.74	n/a	10/2/2024	40	No	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-5	57.74	n/a	10/2/2024	195	Yes	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	BAW-7	57.74	n/a	10/2/2024	33	No	49	4.082	None	sqrt(x)	0.00188	Param Inter 1 of 2

Exceeds Limit: BAW-5

Prediction Limit
 Interwell Non-parametric

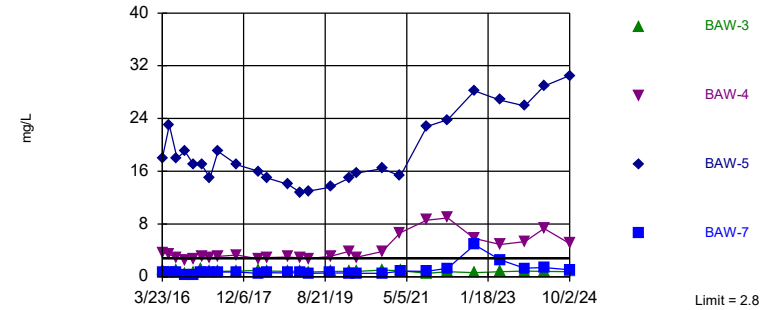


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 51 background values. 82.35% NDs. Annual per-constituent alpha = 0.00577. Individual comparison alpha = 0.0007231 (1 of 2). Comparing 4 points to limit.

Constituent: Boron Analysis Run 11/11/2024 2:47 PM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Exceeds Limit: BAW-4, BAW-5

Prediction Limit
 Interwell Non-parametric

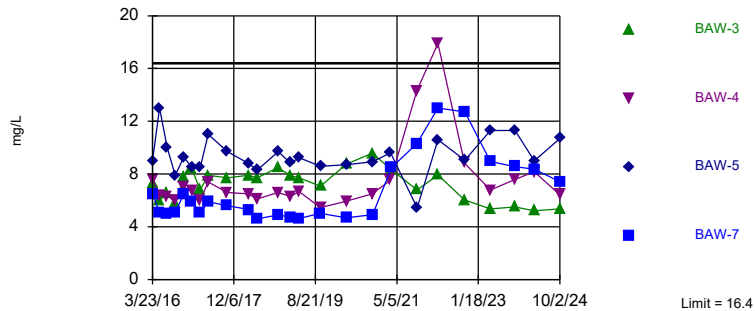


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 51 background values. 3.922% NDs. Annual per-constituent alpha = 0.00577. Individual comparison alpha = 0.0007231 (1 of 2). Comparing 4 points to limit.

Constituent: Calcium Analysis Run 11/11/2024 2:47 PM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Within Limit

Prediction Limit
 Interwell Non-parametric

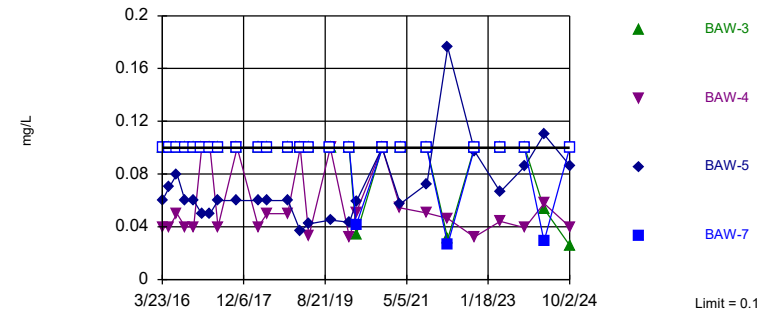


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. Annual per-constituent alpha = 0.006261. Individual comparison alpha = 0.0007847 (1 of 2). Comparing 4 points to limit.

Constituent: Chloride Analysis Run 11/11/2024 2:47 PM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Within Limit

Prediction Limit
 Interwell Non-parametric

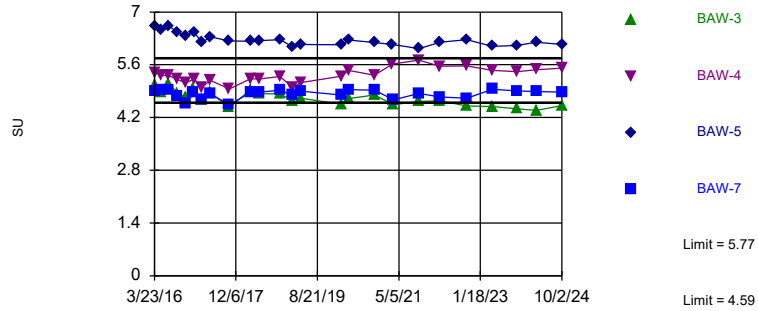


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 51 background values. 82.35% NDs. Annual per-constituent alpha = 0.00577. Individual comparison alpha = 0.0007231 (1 of 2). Comparing 4 points to limit.

Constituent: Fluoride Analysis Run 11/11/2024 2:47 PM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Exceeds Limits: BAW-3, BAW-5

Prediction Limit
Interwell Non-parametric

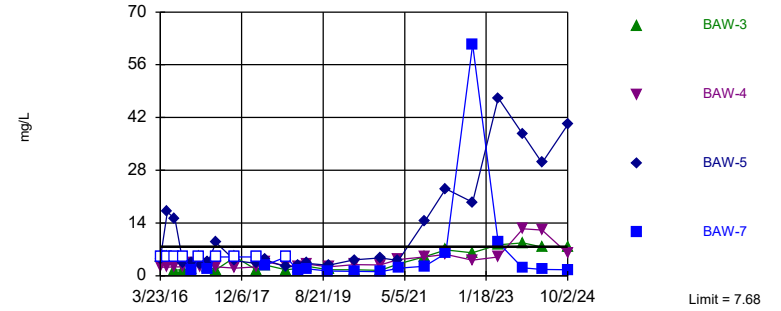


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 49 background values. Annual per-constituent alpha = 0.01252. Individual comparison alpha = 0.001569 (1 of 2). Comparing 4 points to limit.

Constituent: pH Analysis Run 11/11/2024 2:47 PM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Exceeds Limit: BAW-5

Prediction Limit
Interwell Non-parametric



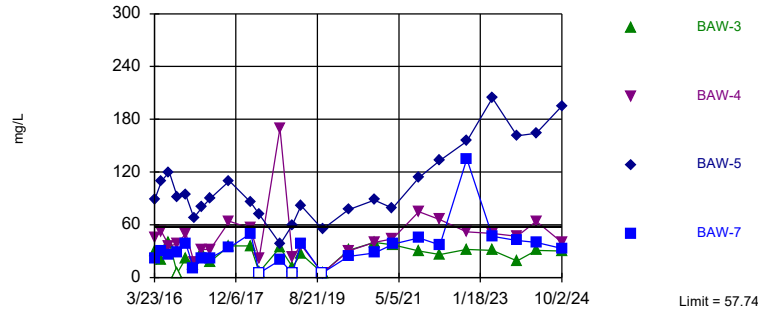
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. 38.78% NDs. Annual per-constituent alpha = 0.006261. Individual comparison alpha = 0.0007847 (1 of 2). Comparing 4 points to limit.

Constituent: Sulfate Analysis Run 11/11/2024 2:47 PM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Hollow symbols indicate censored values.

Exceeds Limit: BAW-5

Prediction Limit
Interwell Parametric



Background Data Summary (based on square root transformation): Mean=5.056, Std. Dev.=1.409, n=49, 4.082% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9578, critical = 0.929. Kappa = 1.805 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Comparing 4 points to limit.

Constituent: Total Dissolved Solids Analysis Run 11/11/2024 2:47 PM View: Interwell
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/11/2024 2:48 PM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	<0.08	<0.08	0.22	<0.08	<0.08	0.037 (J)	
5/17/2016	<0.08	<0.08	0.35			<0.08	
5/18/2016				<0.08	<0.08		
7/12/2016	<0.08	<0.08					
7/13/2016			0.5	<0.08	<0.08	0.032 (J)	
9/13/2016	<0.08	<0.08	0.27				
9/14/2016				<0.08	<0.08	0.027 (J)	
11/19/2016	<0.08	<0.08	0.19	<0.08	<0.08	0.024 (J)	
1/17/2017	<0.08	<0.08		<0.08	<0.08		
1/18/2017			0.19			<0.08	
3/22/2017	<0.08	<0.08					
3/23/2017			0.19	<0.08	<0.08	0.024 (J)	
5/24/2017	<0.08	<0.08	0.22	<0.08	<0.08	0.027 (J)	
10/16/2017	<0.08	<0.08	0.19	<0.08	<0.08	0.03 (J)	
3/28/2018	<0.08		0.17	<0.08		<0.08	<0.08
3/29/2018		<0.08					
6/2/2018	<0.08	<0.08	0.16	<0.08		0.025 (J)	<0.08
11/8/2018	<0.08			<0.08		0.024 (J)	
11/9/2018		<0.08	0.13				<0.08
2/11/2019	<0.08		0.126			<0.08	
2/12/2019		<0.08		<0.08			<0.08
4/17/2019	<0.08		0.118	<0.08		<0.08	<0.08
4/18/2019		<0.08					
9/27/2019	<0.08	<0.08					<0.08
9/30/2019			0.14	<0.08		<0.08	
2/21/2020	0.0928	<0.08		<0.08			0.0589 (J)
2/22/2020			0.193			<0.08	
4/14/2020	<0.08	<0.08	0.209	<0.08		<0.08	0.0424 (J)
10/30/2020	<0.08		0.194	<0.08		<0.08	0.0495 (J)
11/2/2020		<0.08					
3/17/2021			0.2			0.0673 (J)	
3/26/2021	<0.08	0.647		<0.08			<0.08
10/5/2021	<0.08	0.281				0.168	
10/6/2021			0.272	<0.08			<0.08
3/16/2022	<0.08	0.247	0.695	<0.08		0.084	0.0717 (J)
10/5/2022	<0.08			<0.08		0.0714 (J)	
10/6/2022		1.82	0.631				
4/20/2023	<0.08			<0.08			0.0711 (J)
4/21/2023		0.271	0.831			0.058 (J)	
10/24/2023	<0.08	0.0336 (J)					0.0502 (J)
10/25/2023			0.877	<0.08		0.122	
3/20/2024	<0.08		0.686				
3/21/2024		<0.08		<0.08		0.115	0.0604 (J)
10/2/2024	<0.08	<0.08	0.751	<0.08		0.0389 (J)	0.0647 (J)

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/11/2024 2:48 PM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	<0.5	0.65	18	1.1	2.6	3.7	
5/17/2016	0.84	0.68	23			3.4	
5/18/2016				0.56	1.3		
7/12/2016	0.79	0.62					
7/13/2016			18	0.95	1.1	2.8	
9/13/2016	0.42	0.25	19				
9/14/2016				0.4	1.1	2.6	
11/19/2016	1.2	0.36	17	0.62	1	2.7	
1/17/2017	1.4	0.66		1.2	0.87		
1/18/2017			17			3.1	
3/22/2017	0.95	0.65					
3/23/2017			15	0.87	0.74	2.8	
5/24/2017	1.3	0.72	19	0.81	0.84	3.1	
10/16/2017	0.93	0.7	17	0.86	0.76	3.3	
3/28/2018	1		16	0.97		2.7	2.8
3/29/2018		0.55					
6/2/2018	0.93	0.6	15	0.86		2.9	0.71
11/8/2018	1			0.84		3	
11/9/2018		0.59	14				0.61
2/11/2019	1		12.8			2.88	
2/12/2019		0.608		0.856			0.757
4/17/2019	0.893		13	0.711		2.77	0.755
4/18/2019		0.55					
9/27/2019	0.8	0.598					0.663
9/30/2019			13.6	0.826		3.08	
2/21/2020	1.02	0.552		0.841			0.648
2/22/2020			15			3.86	
4/14/2020	0.887	0.532	15.7	0.811		2.95	0.67
10/30/2020	0.945		16.4	1		3.84	0.672
11/2/2020		0.535					
3/17/2021			15.3			6.69	
3/26/2021	0.965	0.848		0.937			0.644
10/5/2021	0.996	0.829				8.57	
10/6/2021			22.8	0.532			<0.5
3/16/2022	1.32	1.28	23.8	0.78		8.94	0.539
10/5/2022	1.42			0.647		5.81	
10/6/2022		4.84	28.2				
4/20/2023	0.996			0.789			0.685
4/21/2023		2.56	26.8			4.87	
10/24/2023	0.918	1.3					0.498 (J)
10/25/2023			25.9	0.875		5.35	
3/20/2024	1.05		28.9				
3/21/2024		1.38		0.818		7.31	0.469 (J)
10/2/2024	1.24	1.08	30.5	0.781		5.03	0.681

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/11/2024 2:48 PM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	6.5	6.5	9	7.3	5.1	7.6	
5/17/2016	4.9	5.1	13			6.4	
5/18/2016				6	4.2		
7/12/2016	5.3	5					
7/13/2016			10	6.6	4.7	6.3	
9/13/2016	4.8 (F1)	5.1	7.9				
9/14/2016				5.8	4.5	6	
11/19/2016	7.1	6.5	9.3	7.8	6.1	7	
1/17/2017	5.8	5.9		8.4	5.4		
1/18/2017			8.5			6.7	
3/22/2017	4.9	5.1					
3/23/2017			8.5	6.8	5.1	6	
5/24/2017	5.9	5.9	11	7.9	5.5	7.4	
10/16/2017	5.7	5.6	9.7	7.7	6.1	6.6	
3/28/2018	5.7		8.8	7.9		6.5	6.7
3/29/2018		5.3					
6/2/2018	4.7	4.6	8.3	7.7		6.1	5.8
11/8/2018	5.6			8.5		6.6	
11/9/2018		4.9	9.7				7.2
2/11/2019	4.84		8.84			6.31	
2/12/2019		4.72		7.89			8.4
4/17/2019	4.99		9.24	7.71		6.68	8.03
4/18/2019		4.64					
9/27/2019	5.08	5.02					8.37
9/30/2019			8.59	7.07		5.45	
4/14/2020	4.91	4.68	8.71	8.75		5.93	7.57
10/30/2020	5.55		8.93	9.58		6.49	7.59
11/2/2020		4.91					
3/17/2021			9.6			7.55	
3/26/2021	5.92	8.5		8.32			6.21
10/5/2021	6.21	10.3				14.3	
10/6/2021			5.44	6.8			16.4
3/16/2022	7.85	13	10.6	7.94		17.9	11.5
10/5/2022	6.75			6.04		8.84	
10/6/2022		12.7	9.04				
4/20/2023	5.22			5.36			9.6
4/21/2023		8.95	11.3			6.78	
10/24/2023	6.29	8.57					10
10/25/2023			11.3	5.5		7.6	
3/20/2024	6.17		9				
3/21/2024		8.37		5.21		8.17	9.52
10/2/2024	6.38	7.43	10.7	5.35		6.42	10.7

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/11/2024 2:48 PM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	<0.1	<0.1	0.06 (J)	<0.1	<0.1	0.04 (J)	
5/17/2016	<0.1	<0.1	0.07 (J)			0.04 (J)	
5/18/2016				<0.1	<0.1		
7/12/2016	<0.1	<0.1					
7/13/2016			0.08 (J)	<0.1	<0.1	0.05 (J)	
9/13/2016	<0.1	<0.1	0.06 (J)				
9/14/2016				<0.1	<0.1	0.04 (J)	
11/19/2016	<0.1	<0.1	0.06 (J)	<0.1	<0.1	0.04 (J)	
1/17/2017	<0.1	<0.1		<0.1	<0.1		
1/18/2017			0.05 (J)			<0.1	
3/22/2017	<0.1	<0.1					
3/23/2017			0.05 (J)	<0.1	<0.1	<0.1	
5/24/2017	<0.1	<0.1 (D)	0.06 (J)	<0.1	<0.1	0.04 (J)	
10/16/2017	<0.1	<0.1	0.06 (J)	<0.1	<0.1	<0.1	
3/28/2018	<0.1		0.06 (J)	<0.1		0.04 (J)	<0.1
3/29/2018		<0.1					
6/2/2018	<0.1	<0.1	0.06 (J)	<0.1		0.05 (J)	<0.1
11/8/2018	<0.1			<0.1		0.05 (J)	
11/9/2018		<0.1	0.06 (J)				<0.1
2/11/2019	<0.1		0.0368 (J)			<0.1	
2/12/2019		<0.1		<0.1			<0.1
4/17/2019	<0.1		0.0421 (J)	<0.1		0.033 (J)	<0.1
4/18/2019		<0.1					
9/27/2019	<0.1	<0.1					0.0313 (J)
9/30/2019			0.045 (J)	<0.1		<0.1	
2/21/2020	<0.1	<0.1		<0.1			<0.1
2/22/2020			0.0434 (J)			0.0317 (J)	
4/14/2020	0.0532 (J)	0.0415 (J)	0.059 (J)	0.034 (J)		0.0508 (J)	0.0537 (J)
10/30/2020	<0.1		<0.1	<0.1		<0.1	<0.1
11/2/2020		<0.1					
3/17/2021			0.0575 (J)			0.0544 (J)	
3/26/2021	<0.1	<0.1		<0.1			<0.1
10/5/2021	0.0499 (J)	<0.1				0.0505 (J)	
10/6/2021			0.0725 (J)	<0.1			<0.1
3/16/2022	<0.1	0.0266 (J)	0.176	0.0307 (J)		0.0462 (J)	<0.1
10/5/2022	<0.1			<0.1		0.0322 (J)	
10/6/2022		<0.1	0.0972 (J)				
4/20/2023	<0.1			<0.1			0.0278 (J)
4/21/2023		<0.1	0.0665 (J)			0.0441 (J)	
10/24/2023	<0.1	<0.1					0.0276 (J)
10/25/2023			0.0858 (J)	<0.1		0.0393 (J)	
3/20/2024	0.0436 (J)		0.11				
3/21/2024		0.0292 (J)		0.0537 (J)		0.0578 (J)	0.0515 (J)
10/2/2024	<0.1	<0.1	0.0865 (J)	0.026 (J)		0.04 (J)	0.0284 (J)

Prediction Limit

Constituent: pH (SU) Analysis Run 11/11/2024 2:48 PM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	5.12	4.89	6.64	5.05	5.52	5.38	
5/17/2016	5.23	4.92	6.52			5.32	
5/18/2016				4.86	5.24		
7/12/2016	5.77	4.93					
7/13/2016			6.63	5.11	5.17	5.31	
9/13/2016	4.98	4.76	6.46				
9/14/2016				4.84	5.04	5.21	
11/19/2016	4.82	4.56	6.38	4.74	4.88	5.12	
1/17/2017	5.04	4.86		4.95	5.04		
1/18/2017			6.47			5.22	
3/22/2017	4.73	4.66					
3/23/2017			6.19	4.66	4.66	5.01	
5/24/2017	5.01	4.83	6.34	4.86	4.93	5.19	
10/16/2017	4.59	4.53	6.23	4.47	4.65	4.96	
3/28/2018	4.87		6.22	4.93		5.23	5.39
3/29/2018		4.87					
6/2/2018	4.92	4.87	6.24	4.83		5.22	5.06
11/8/2018	5			4.83		5.29	
11/9/2018		4.92	6.27				4.92
2/11/2019	4.7		6.08			5	
2/12/2019		4.79		4.65			4.86
4/17/2019	4.9		6.14	4.71		5.13	4.79
4/18/2019		4.9					
2/21/2020	4.86	4.8		4.55			4.73
2/22/2020			6.13			5.3	
4/14/2020	5.23	4.94	6.26	4.7		5.45	4.87
10/30/2020	5		6.19	4.8		5.32	4.87
11/2/2020		4.92					
3/17/2021			6.14			5.62	
3/26/2021	4.86	4.67		4.54			4.7
10/5/2021	5	4.84				5.72	
10/6/2021			6.03	4.63			4.77
3/16/2022	4.92	4.75	6.2	4.64		5.56	4.91
10/5/2022	4.91			4.51		5.57	
10/6/2022		4.71	6.27				
4/20/2023	4.89			4.49			4.83
4/21/2023		4.95	6.09			5.45	
10/24/2023	4.99	4.91					4.98
10/25/2023			6.11	4.43		5.42	
3/20/2024	4.93		6.2				
3/21/2024		4.89		4.39		5.47	4.86
10/2/2024	4.94	4.87	6.14	4.52		5.51	4.95

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/11/2024 2:48 PM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	<5	<5	4.5 (J)	<5	<5	2.3 (J)	
5/17/2016	<5	<5	17			2.3 (J)	
5/18/2016				<5	<5		
7/12/2016	<5	<5					
7/13/2016			15	1.5 (J)	<5	2.4 (J)	
9/13/2016	<5	<5	3.4 (J)				
9/14/2016				1.6 (J)	<5	2.4 (J)	
11/19/2016	<5	1.5 (J)	3.5 (J)	1.8 (J)	<5	3.3 (J)	
1/17/2017	<5	<5		<5	<5		
1/18/2017			3.2 (J)			2.3 (J)	
3/22/2017	<5	1.9 (J)					
3/23/2017			3.7 (J)	2.3 (J)	1.8 (J)	3.2 (J)	
5/24/2017	<5	<5	8.8	1.6 (J)	1.5 (J)	2.4 (J)	
10/16/2017	<5	<5	4 (J)	<5	<5	2 (J)	
3/28/2018	<5		3.3 (J)	1.6 (J)		2.4 (J)	1.7 (J)
3/29/2018		<5					
6/2/2018	1.9 (J)	2.8 (J)	4.3 (J)	2.9 (J)		3.7 (J)	3 (J)
11/8/2018	<5			1.6 (J)		2.7 (J)	
11/9/2018		<5	2.3 (J)				<5
2/11/2019	0.774 (J)		2.64			2.5	
2/12/2019		1.35		1.97			1.97
4/17/2019	1.43		3.27	2.5		3.15	2.82
4/18/2019		1.82					
9/27/2019	1.03	1.22					2.19
9/30/2019			2.82	1.64		2.34	
4/14/2020	0.928 (J)	1.18	4.2	1.62		2.99	2.71
10/30/2020	0.91 (J)		4.76	1.44		2.84	3.97
11/2/2020		1.08					
3/17/2021			4.07			4.35	
3/26/2021	1.49	2		3.25			2.04
10/5/2021	1.13	2.55				5.02	
10/6/2021			14.5	5.07			5.37
3/16/2022	3.6	5.93	23.1	6.85		5.64	5.37
10/5/2022	1.34			6.07		4.12	
10/6/2022		61.4	19.5				
4/20/2023	2.6			8.2			7.32
4/21/2023		8.82	47.2			5	
10/24/2023	1.8	2.11					7.68
10/25/2023			37.5	8.72		12.5	
3/20/2024	1.41		30				
3/21/2024		1.66		7.6		12.1	6.92
10/2/2024	1.79	1.61	40.1	7.63		5.89	6.73

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/11/2024 2:48 PM View: Interwell

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-1 (bg)	BAW-7	BAW-5	BAW-3	BAW-2 (bg)	BAW-4	BAW-2A (bg)
3/23/2016	20	22	88	30	30	46	
5/17/2016	24	30	110			52	
5/18/2016				20	20		
7/12/2016	24	26					
7/13/2016			120	40	40	36	
9/13/2016	18	28	92				
9/14/2016				<10	10	38	
11/19/2016	20	38	94	22	28	50	
1/17/2017	<10	10		14	14		
1/18/2017			68			18	
3/22/2017	12	22					
3/23/2017			80	28	16	32	
5/24/2017	16 (D)	22	90	18	12	32	
10/16/2017	58	34	110	36	50	64	
3/28/2018	18		86	36		56	30
3/29/2018		50					
6/2/2018	6	<10	72	6		22	26
11/8/2018	12			34		170	
11/9/2018		20	38				94
2/11/2019	<10		60			23	
2/12/2019		<10		12			22
4/17/2019	16		82	27		37	22
4/18/2019		39					
9/27/2019	26	<10					25
9/30/2019			55	<10		<10	
4/14/2020	25	24	77	31		30	38
10/30/2020	34		88	40		40	48
11/2/2020		28					
3/17/2021			79			44	
3/26/2021	24	38		37			24
10/5/2021	26	45				75	
10/6/2021			114	30			61
3/16/2022	30	37	133	26		66	26
10/5/2022	30			32		52	
10/6/2022		135	155				
4/20/2023	26			31			30
4/21/2023		47	204			50	
10/24/2023	28	42					35
10/25/2023			161	19		47	
3/20/2024	29		164				
3/21/2024		40		31		64	38
10/2/2024	28	33	195	30		40	49

Trend Tests - Prediction Limit Exceedances

Appendix III - Trend Test Summary - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	BAW-2 (bg)	-0.5725	-31	-25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-4	0.3324	152	118	Yes	26	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2 (bg)	-0.5393	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
pH (SU)	BAW-3	-0.05979	-196	-111	Yes	25	0	n/a	n/a	0.01	NP
pH (SU)	BAW-5	-0.04626	-164	-111	Yes	25	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-1 (bg)	-0.3965	-127	-111	Yes	25	44	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2A (bg)	0.872	64	53	Yes	15	6.667	n/a	n/a	0.01	NP

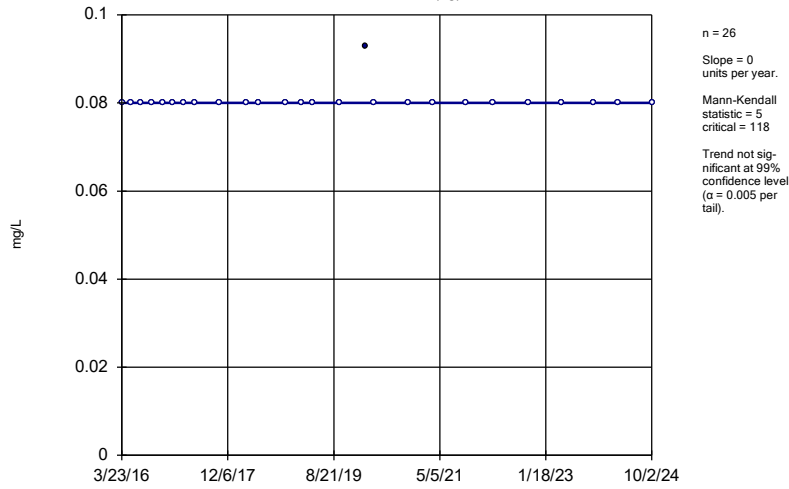
Appendix III - Trend Test Summary - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 2:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	BAW-1 (bg)	0	5	118	No	26	96.15	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-2 (bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-2A (bg)	-0.002283	-44	-58	No	16	50	n/a	n/a	0.01	NP
Boron (mg/L)	BAW-5	0.02419	82	118	No	26	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-1 (bg)	0.02641	90	118	No	26	3.846	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2 (bg)	-0.5725	-31	-25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-2A (bg)	-0.04117	-50	-58	No	16	6.25	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-4	0.3324	152	118	Yes	26	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BAW-5	1.022	63	118	No	26	0	n/a	n/a	0.01	NP
pH (SU)	BAW-1 (bg)	-0.008992	-38	-111	No	25	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2 (bg)	-0.5393	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
pH (SU)	BAW-2A (bg)	-0.01118	-13	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	BAW-3	-0.05979	-196	-111	Yes	25	0	n/a	n/a	0.01	NP
pH (SU)	BAW-5	-0.04626	-164	-111	Yes	25	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-1 (bg)	-0.3965	-127	-111	Yes	25	44	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2 (bg)	0	-11	-25	No	9	77.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-2A (bg)	0.872	64	53	Yes	15	6.667	n/a	n/a	0.01	NP
Sulfate (mg/L)	BAW-5	1.329	102	111	No	25	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-1 (bg)	1.236	105	111	No	25	8	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-2 (bg)	-5.236	-4	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-2A (bg)	1.911	27	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BAW-5	8.394	80	111	No	25	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

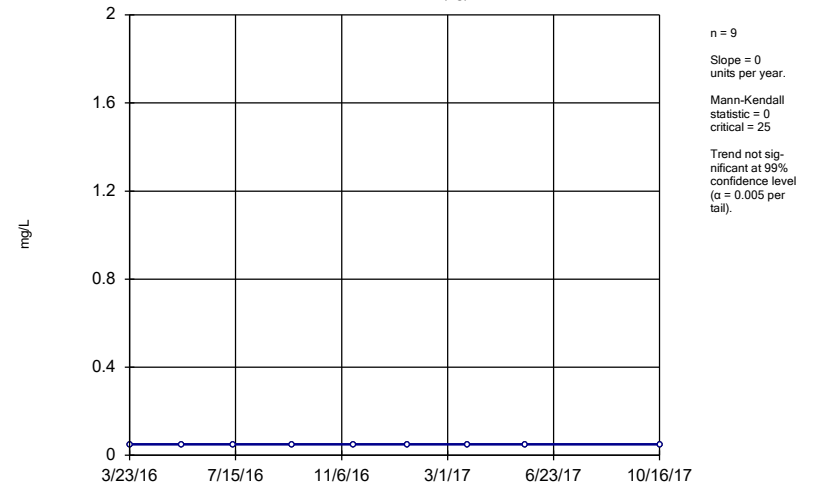
BAW-1 (bg)



Constituent: Boron Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

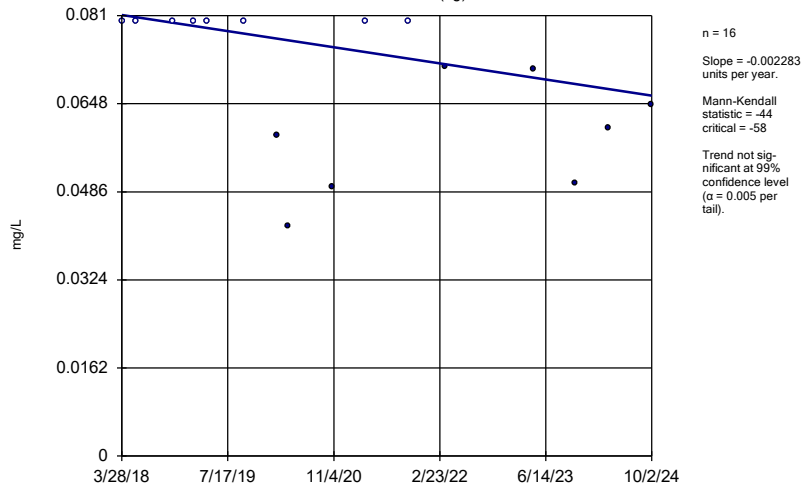
BAW-2 (bg)



Constituent: Boron Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

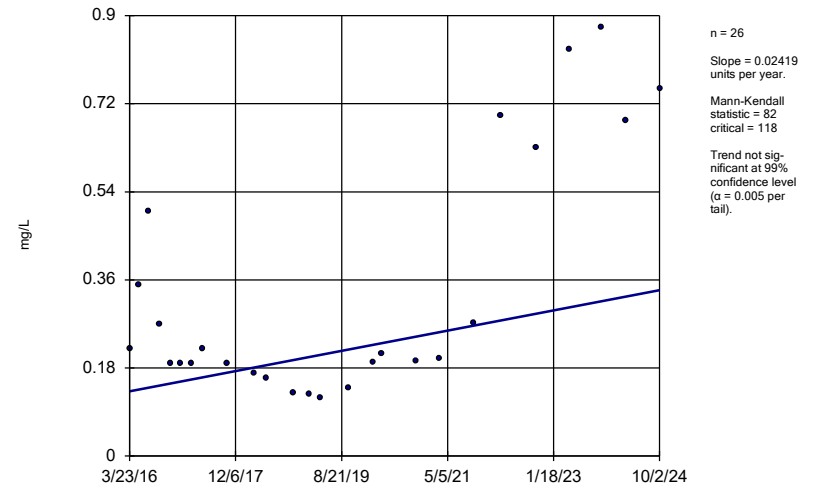
BAW-2A (bg)



Constituent: Boron Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

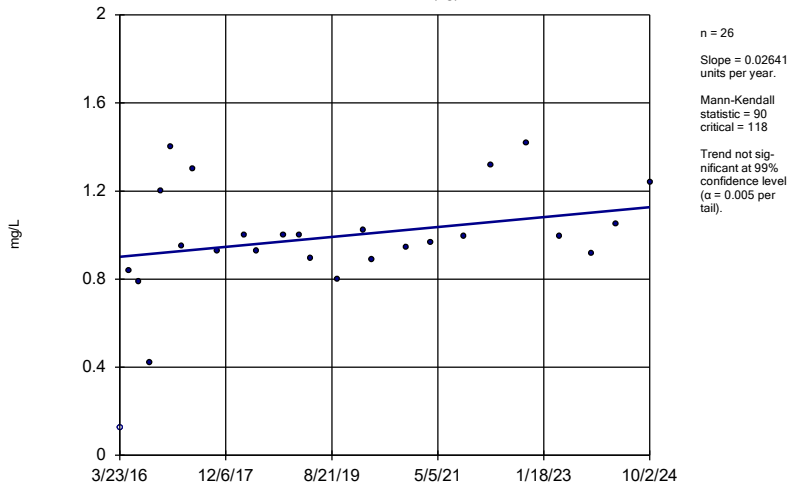
BAW-5



Constituent: Boron Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

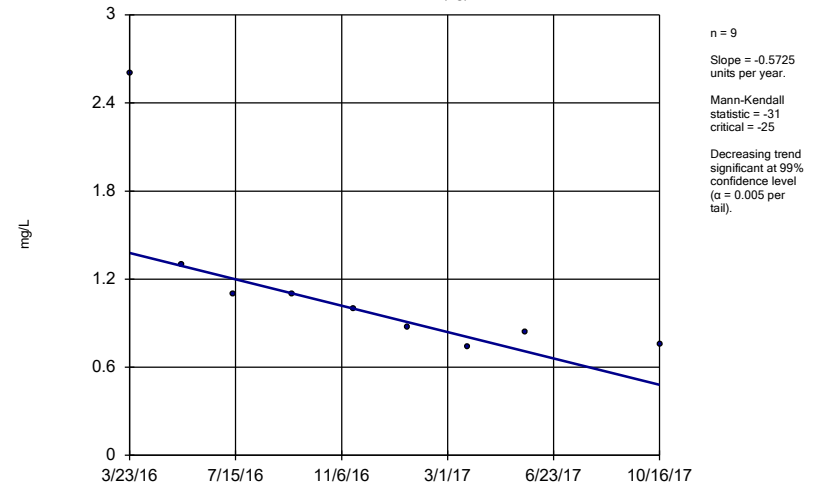
BAW-1 (bg)



Constituent: Calcium Analysis Run 11/11/2024 2:53 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

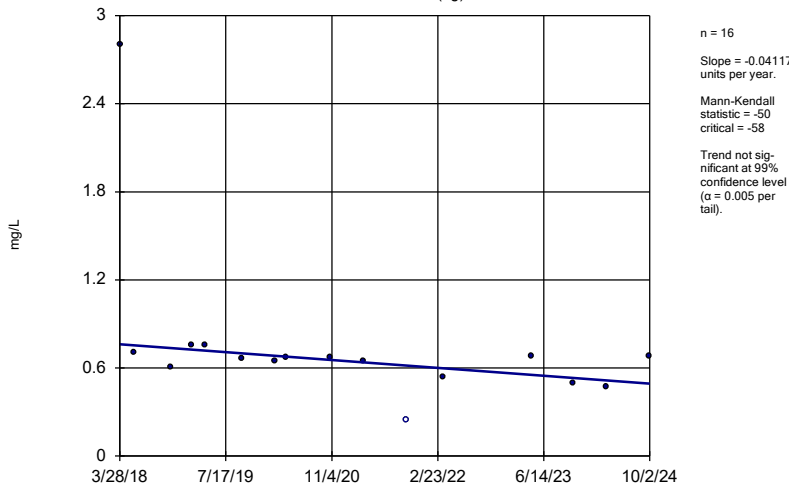
BAW-2 (bg)



Constituent: Calcium Analysis Run 11/11/2024 2:53 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

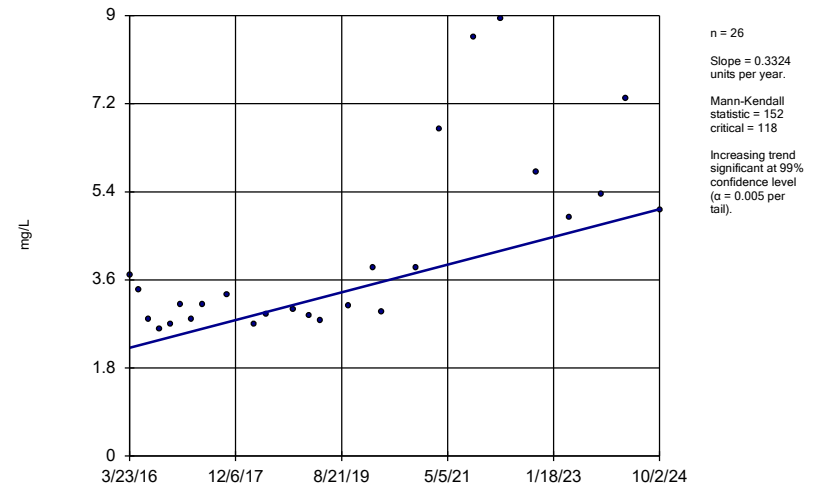
BAW-2A (bg)



Constituent: Calcium Analysis Run 11/11/2024 2:53 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

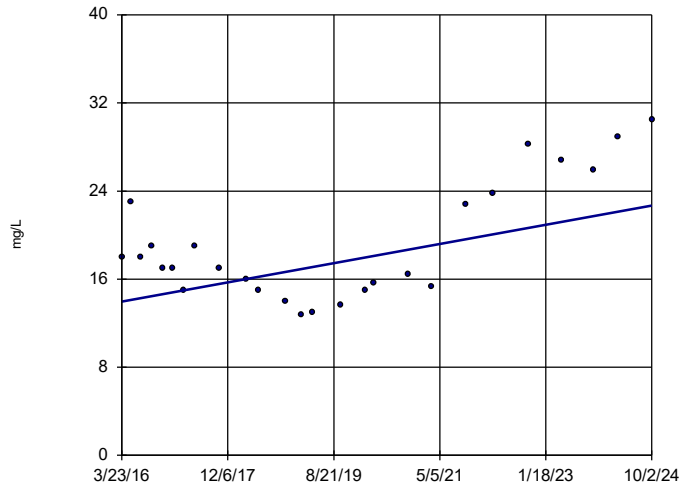
BAW-4



Constituent: Calcium Analysis Run 11/11/2024 2:53 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5

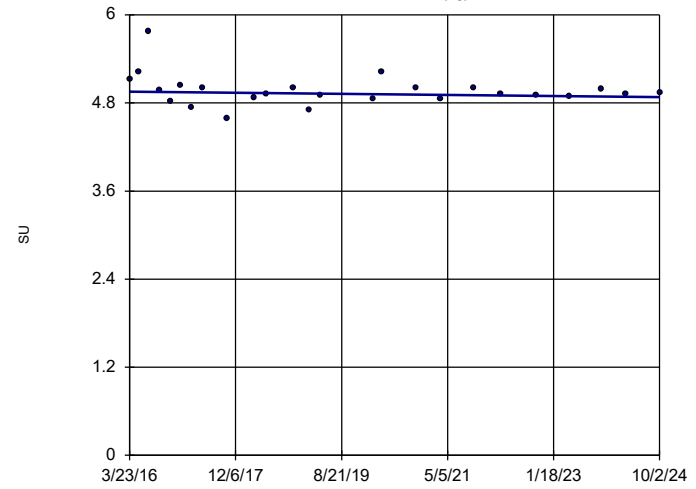


n = 26
 Slope = 1.022
 units per year.
 Mann-Kendall
 statistic = 63
 critical = 118
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-1 (bg)

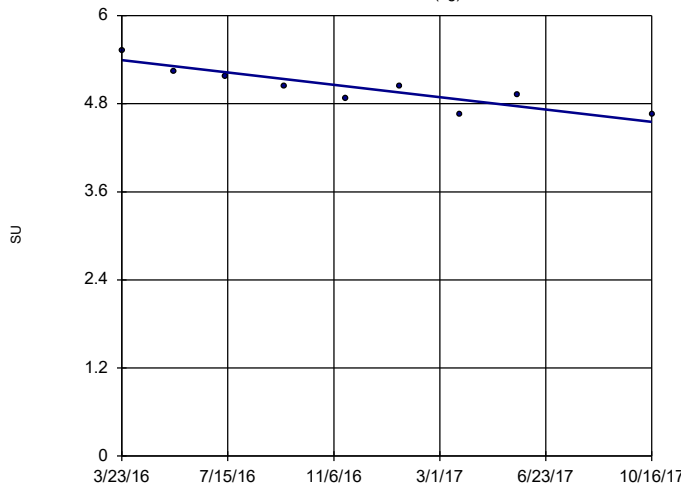


n = 25
 Slope = -0.008992
 units per year.
 Mann-Kendall
 statistic = -38
 critical = -111
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: pH Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2 (bg)

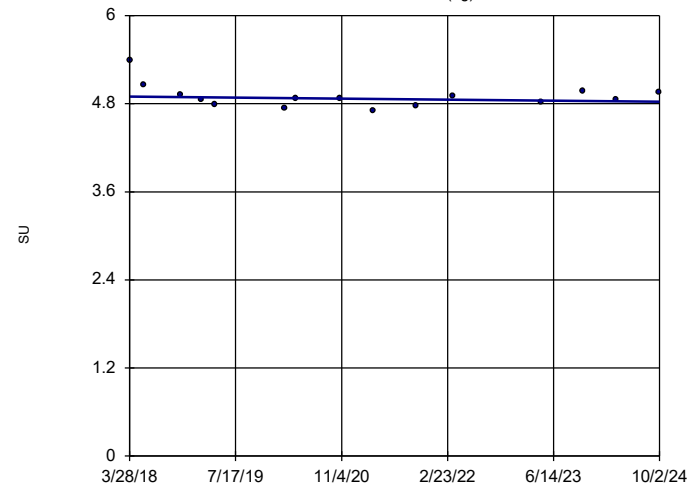


n = 9
 Slope = -0.5393
 units per year.
 Mann-Kendall
 statistic = -29
 critical = -25
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: pH Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2A (bg)

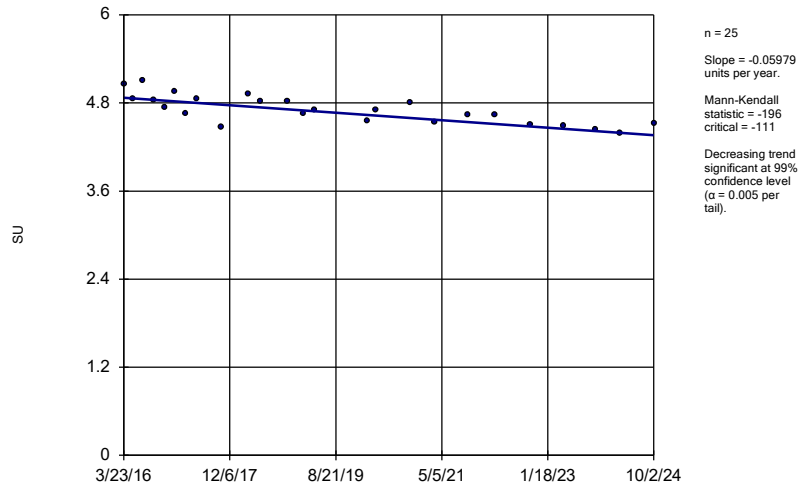


n = 15
 Slope = -0.01118
 units per year.
 Mann-Kendall
 statistic = -13
 critical = -53
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: pH Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

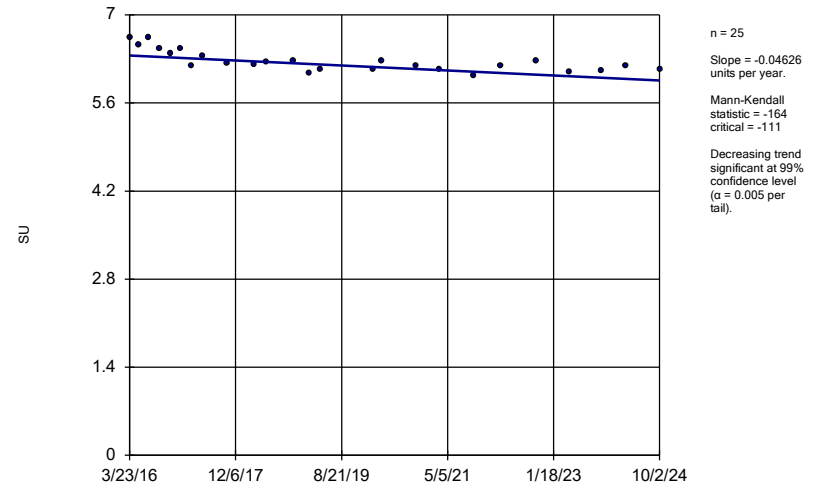
BAW-3



Constituent: pH Analysis Run 11/11/2024 2:53 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

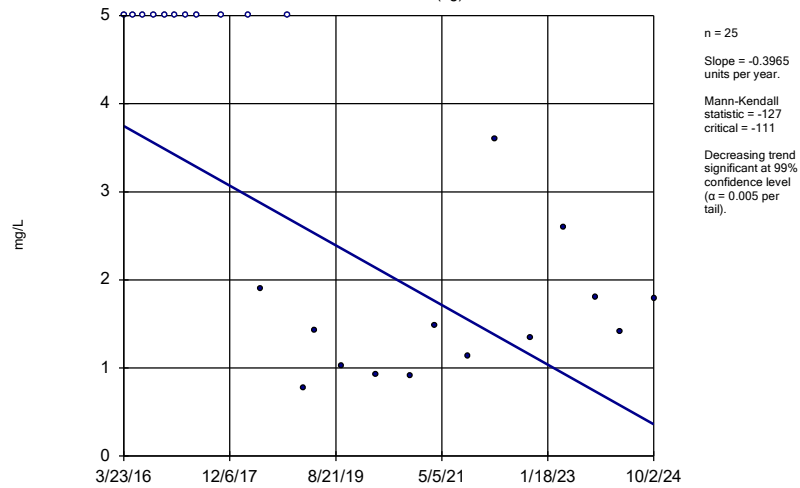
BAW-5



Constituent: pH Analysis Run 11/11/2024 2:53 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

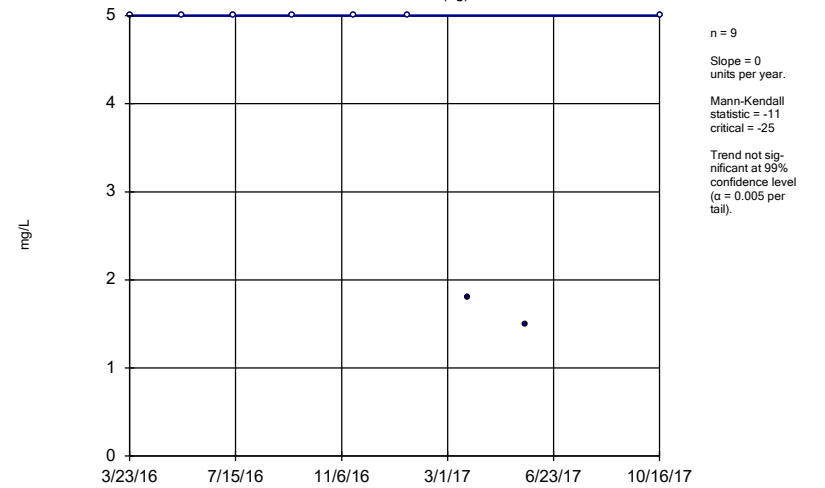
BAW-1 (bg)



Constituent: Sulfate Analysis Run 11/11/2024 2:53 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

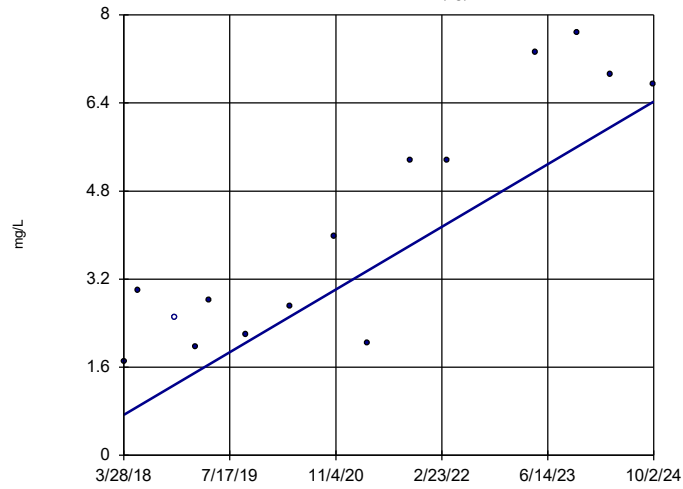
BAW-2 (bg)



Constituent: Sulfate Analysis Run 11/11/2024 2:53 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2A (bg)

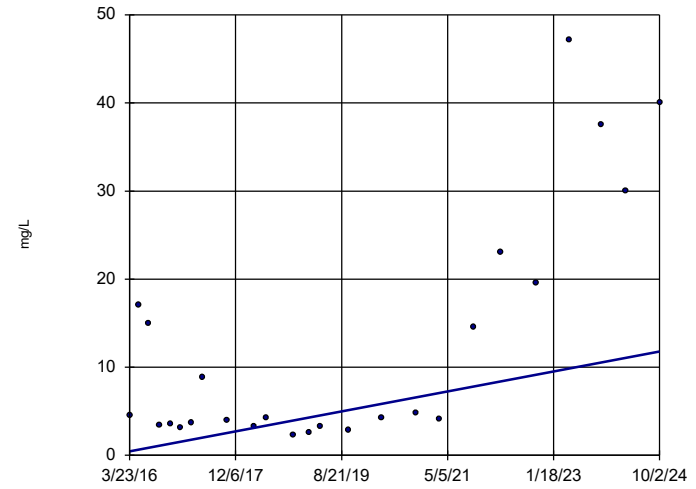


n = 15
 Slope = 0.872
 units per year.
 Mann-Kendall
 statistic = 64
 critical = 53
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5

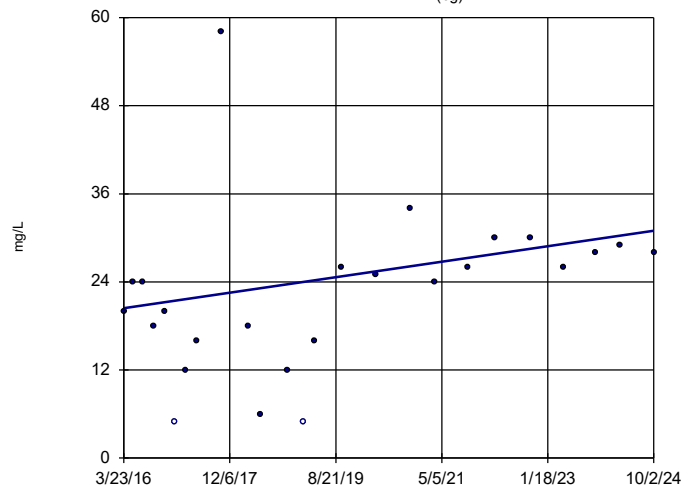


n = 25
 Slope = 1.329
 units per year.
 Mann-Kendall
 statistic = 102
 critical = 111
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-1 (bg)

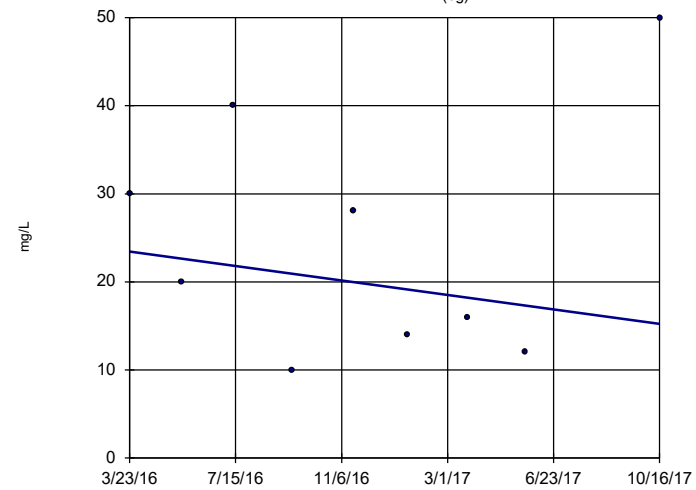


n = 25
 Slope = 1.236
 units per year.
 Mann-Kendall
 statistic = 105
 critical = 111
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-2 (bg)

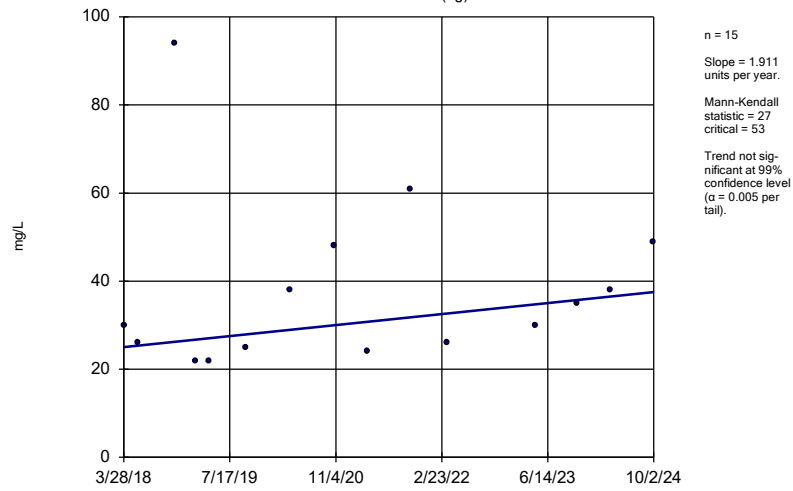


n = 9
 Slope = -5.236
 units per year.
 Mann-Kendall
 statistic = -4
 critical = -25
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 11/11/2024 2:53 PM View: Trend Tests
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

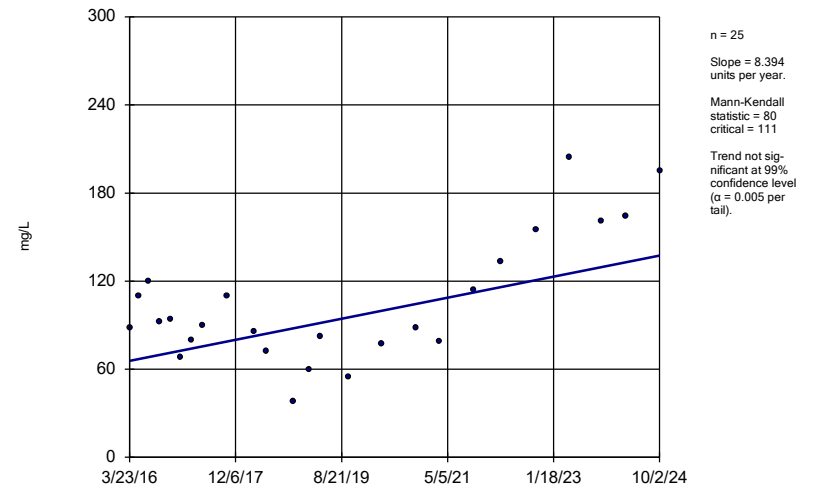
BAW-2A (bg)



Constituent: Total Dissolved Solids Analysis Run 11/11/2024 2:54 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator

BAW-5



Constituent: Total Dissolved Solids Analysis Run 11/11/2024 2:54 PM View: Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

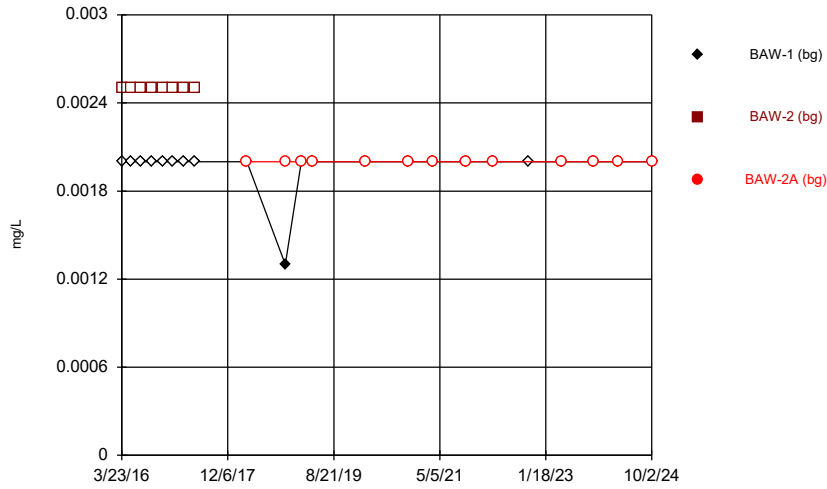
Upper Tolerance Limits

Upper Tolerance Limit Summary Table

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:00 PM

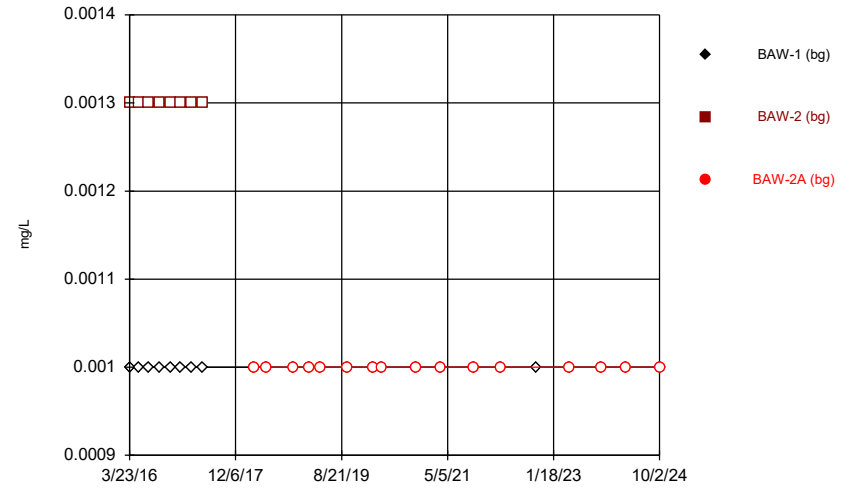
Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.002	n/a	n/a	n/a	n/a	43	97.67	n/a	n/a	0.1102	NP Inter(NDs)
Arsenic (mg/L)	0.001	n/a	n/a	n/a	n/a	49	100	n/a	n/a	0.08099	NP Inter(NDs)
Barium (mg/L)	0.0512	n/a	n/a	n/a	n/a	49	2.041	n/a	n/a	0.08099	NP Inter(normality)
Beryllium (mg/L)	0.001	n/a	n/a	n/a	n/a	45	97.78	n/a	n/a	0.09944	NP Inter(NDs)
Cadmium (mg/L)	0.001	n/a	n/a	n/a	n/a	49	95.92	n/a	n/a	0.08099	NP Inter(NDs)
Chromium (mg/L)	0.00286	n/a	n/a	n/a	n/a	47	87.23	n/a	n/a	0.08974	NP Inter(NDs)
Cobalt (mg/L)	0.001617	n/a	n/a	n/a	n/a	49	6.122	None	No	0.05	Inter
Combined Radium 226 + 228 (pCi/L)	2.5	n/a	n/a	n/a	n/a	49	4.082	n/a	n/a	0.08099	NP Inter(normality)
Fluoride (mg/L)	0.1	n/a	n/a	n/a	n/a	51	82.35	n/a	n/a	0.0731	NP Inter(NDs)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	47	95.74	n/a	n/a	0.08974	NP Inter(NDs)
Lithium (mg/L)	0.00505	n/a	n/a	n/a	n/a	48	66.67	n/a	n/a	0.08526	NP Inter(NDs)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	41	90.24	n/a	n/a	0.1221	NP Inter(NDs)
Molybdenum (mg/L)	0.005	n/a	n/a	n/a	n/a	45	91.11	n/a	n/a	0.09944	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	45	86.67	n/a	n/a	0.09944	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	45	95.56	n/a	n/a	0.09944	NP Inter(NDs)

Time Series



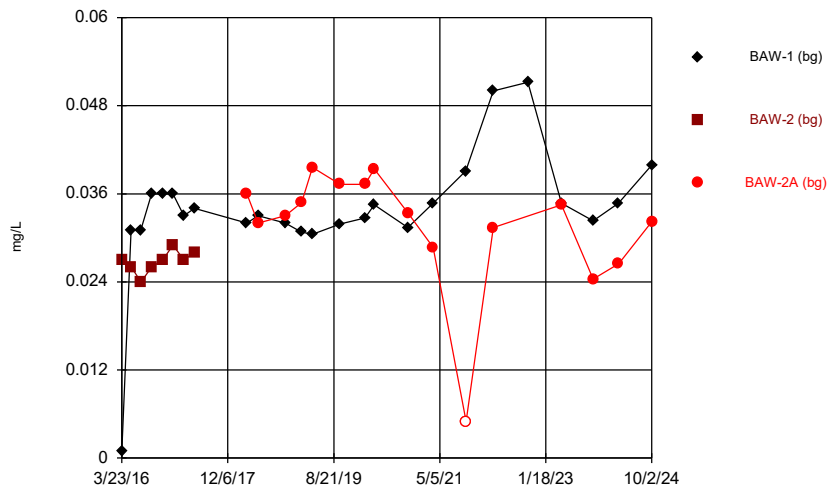
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



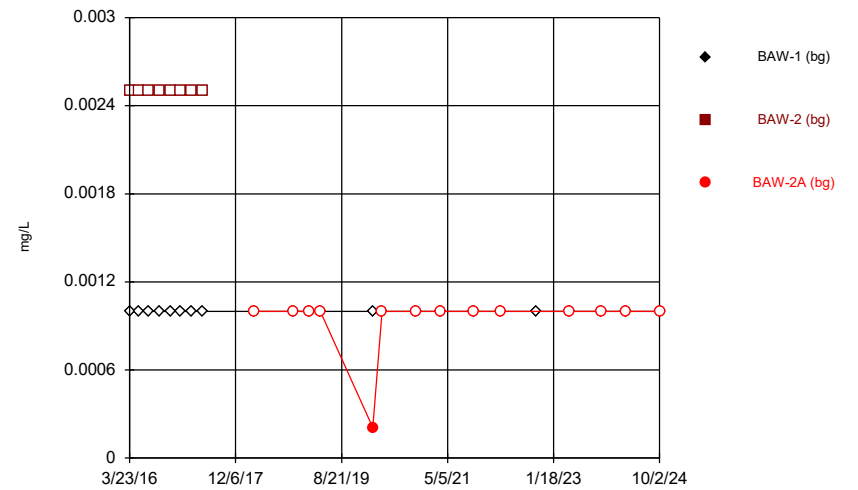
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



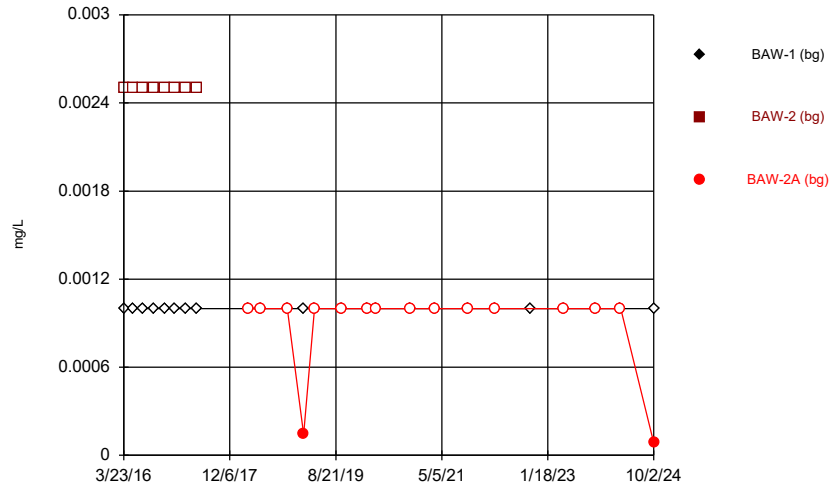
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Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



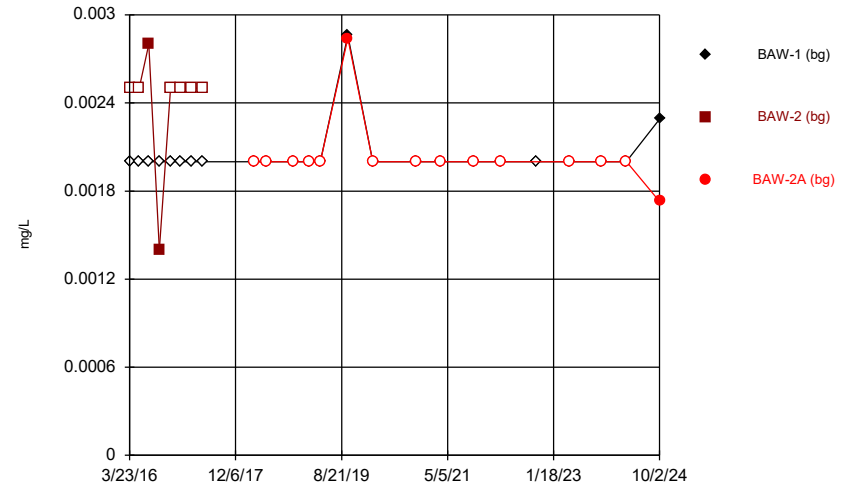
Constituent: Beryllium Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



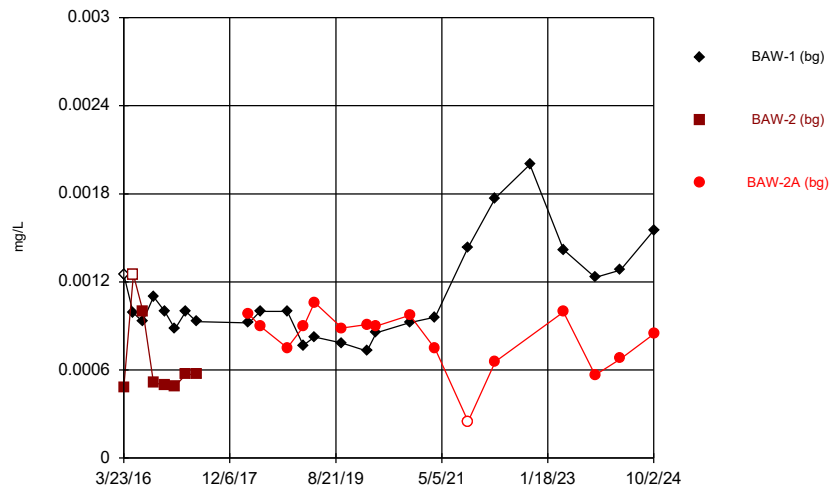
Constituent: Cadmium Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



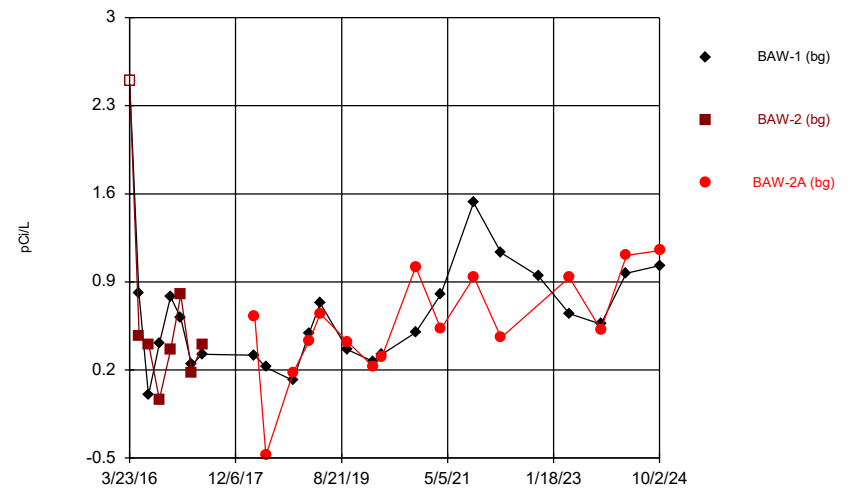
Constituent: Chromium Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



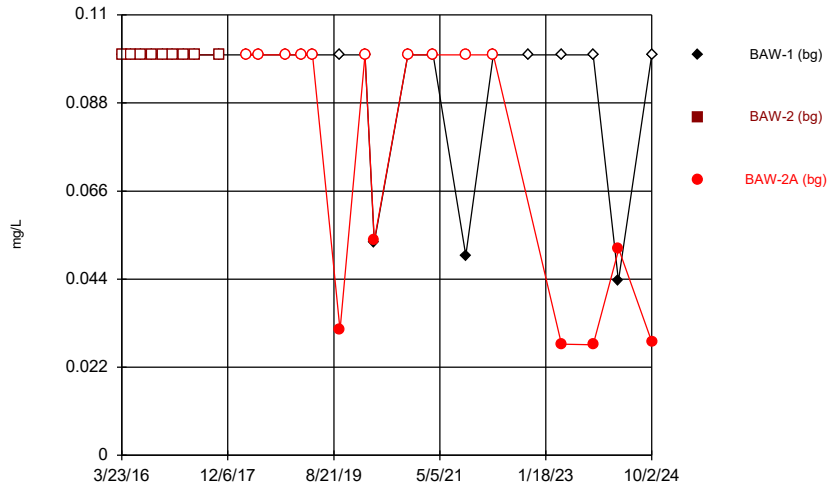
Constituent: Cobalt Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



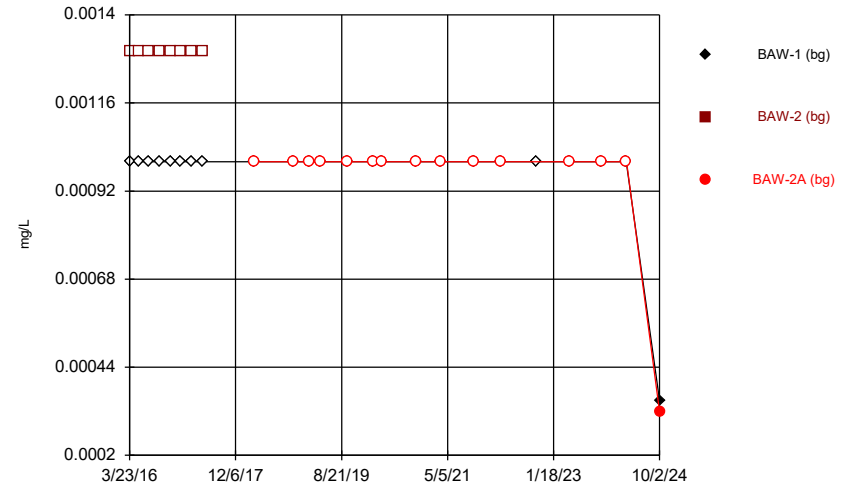
Constituent: Combined Radium 226 + 228 Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



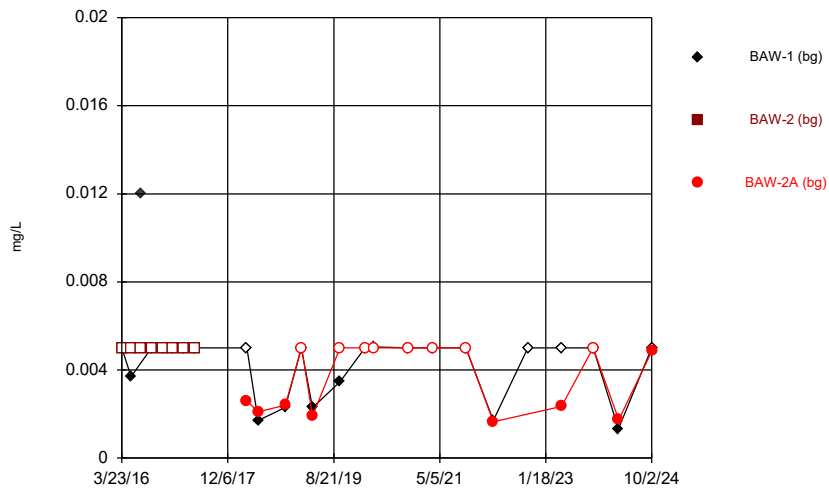
Constituent: Fluoride Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



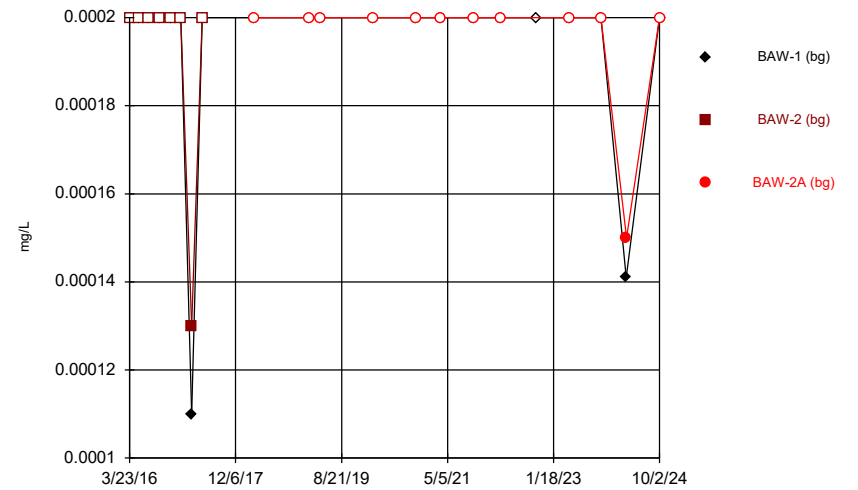
Constituent: Lead Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



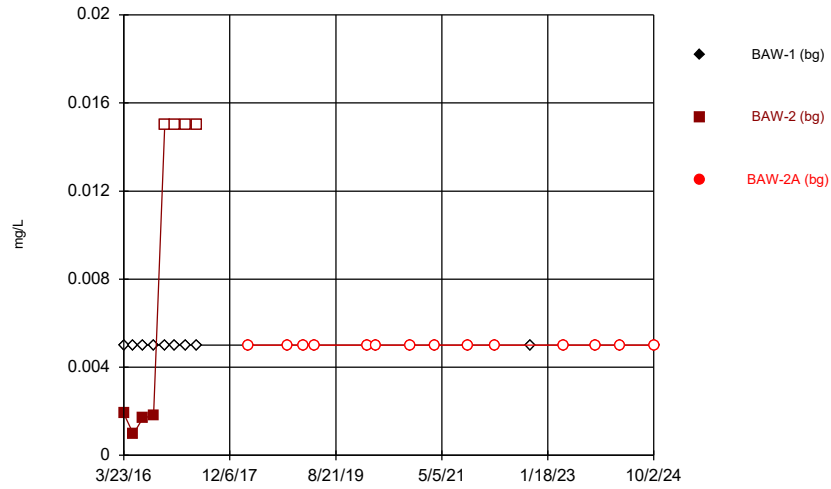
Constituent: Lithium Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



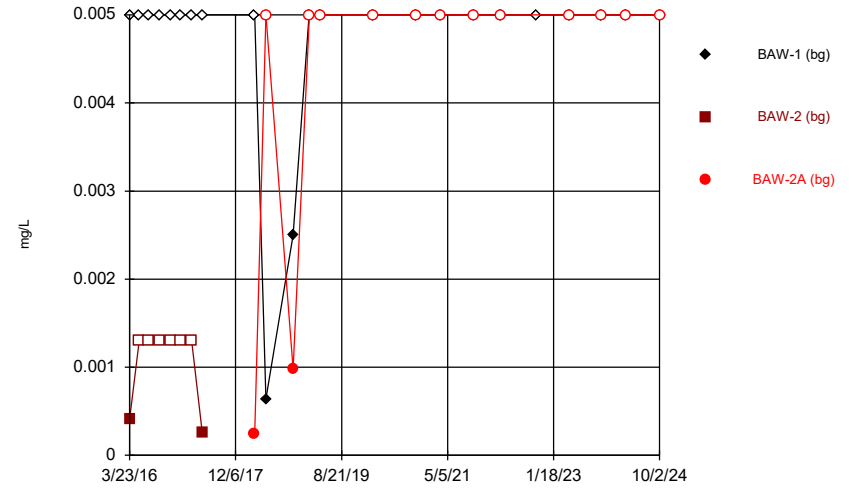
Constituent: Mercury Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



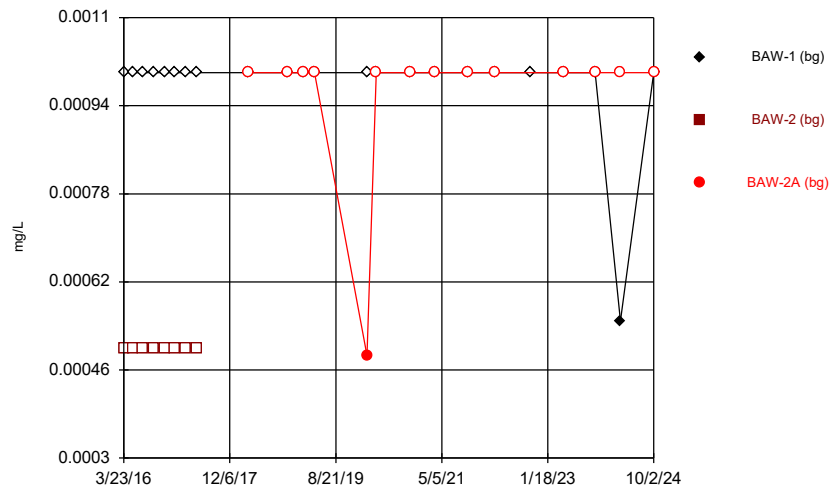
Constituent: Molybdenum Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



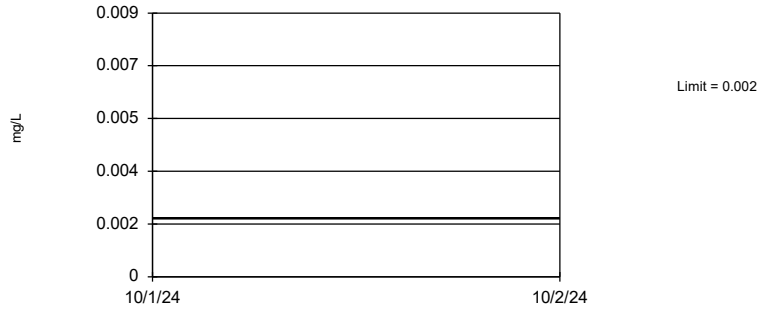
Constituent: Selenium Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Time Series



Constituent: Thallium Analysis Run 11/11/2024 2:59 PM View: Appendix IV - UTLs
 Plant Daniel Client: Southern Company Data: Bottom Ash CCR

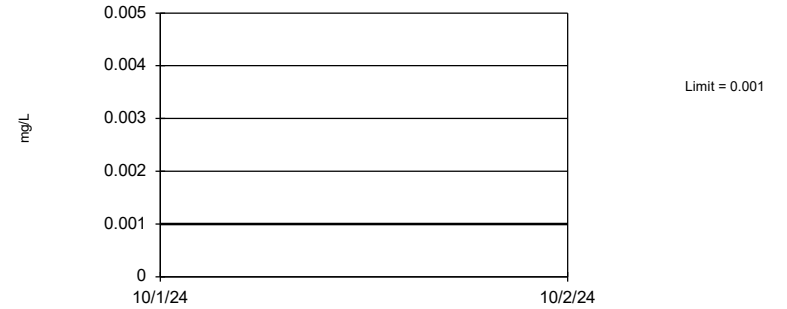
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. 90.04% coverage at alpha=0.01; 93.16% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1102.

Constituent: Antimony Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

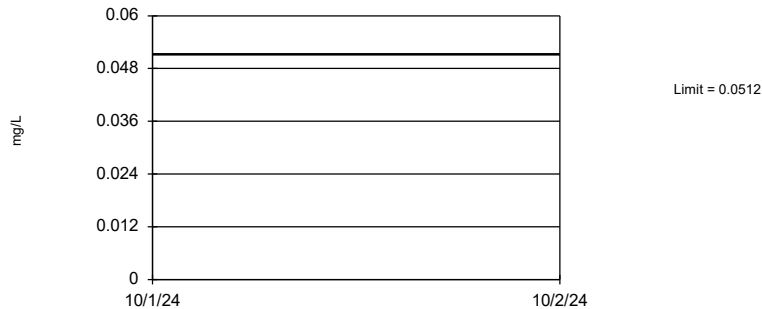
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored, limit is most recent reporting limit. 91.21% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08099.

Constituent: Arsenic Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. 2.041% NDs. 91.21% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08099.

Constituent: Barium Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

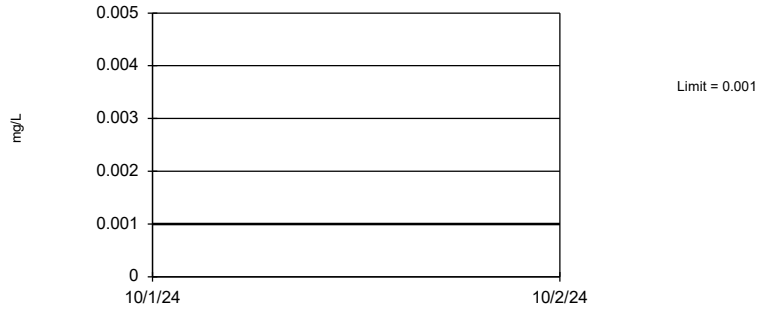
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 45 background values. 97.78% NDs. 90.43% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.09944.

Constituent: Beryllium Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

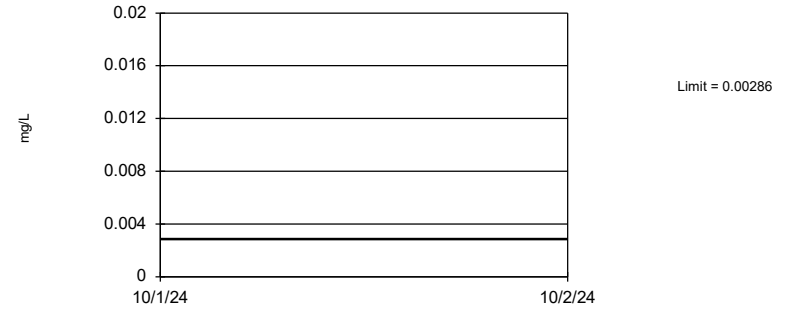
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 49 background values. 95.92% NDs. 91.21% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08099.

Constituent: Cadmium Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

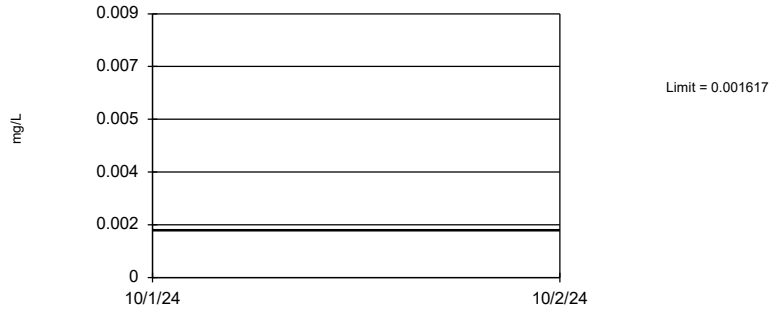
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 47 background values. 87.23% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Chromium Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

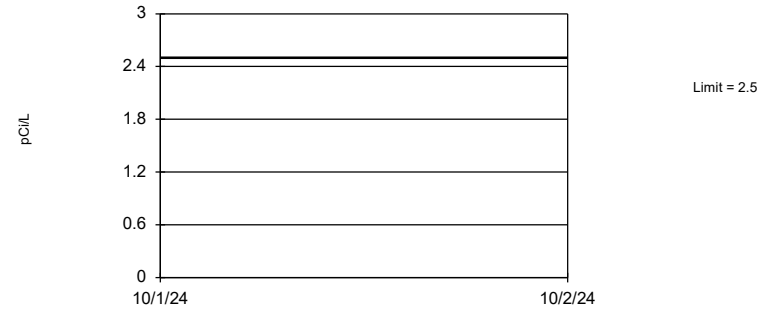
Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary: Mean=0.0008955, Std. Dev.=0.0003483, n=49, 6.122% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9319, critical = 0.929. Report alpha = 0.05.

Constituent: Cobalt Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

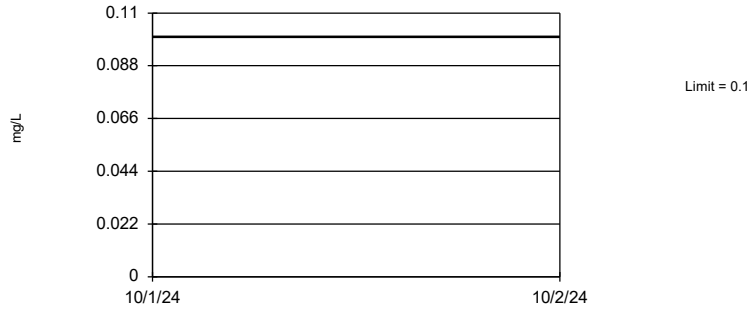
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. 4.082% NDs. 91.21% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08099.

Constituent: Combined Radium 226 + 228 Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

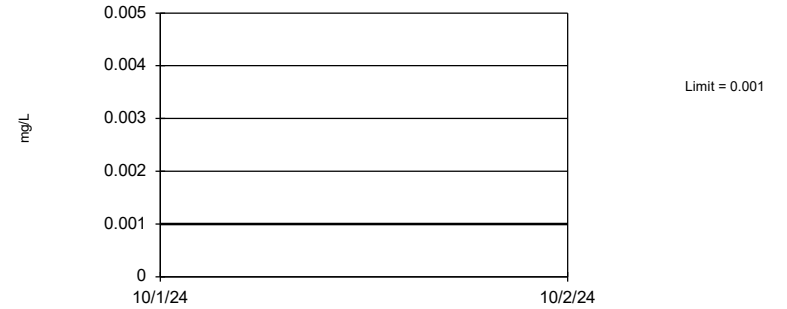
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 51 background values. 82.35% NDs. 91.21% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.0731.

Constituent: Fluoride Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

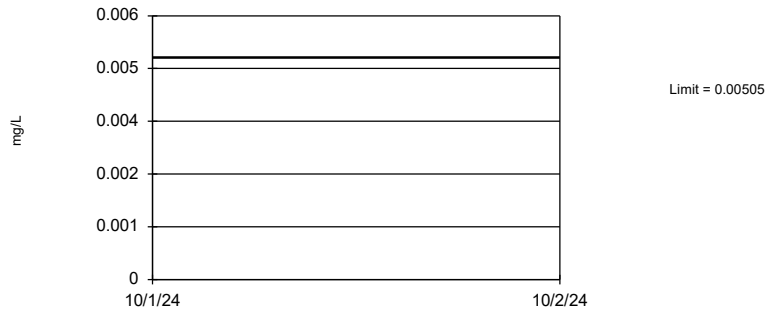
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 47 background values. 95.74% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Lead Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

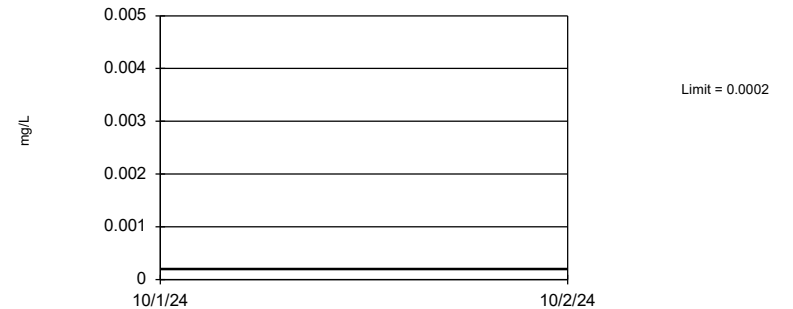
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 48 background values. 66.67% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Lithium Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 41 background values. 90.24% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1221.

Constituent: Mercury Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

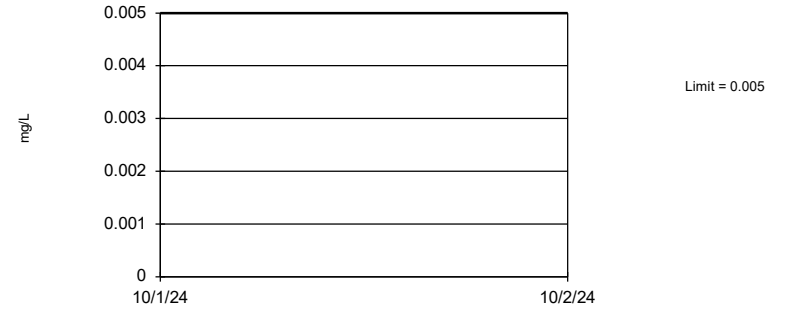
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 45 background values. 91.11% NDs. 90.43% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.09944.

Constituent: Molybdenum Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

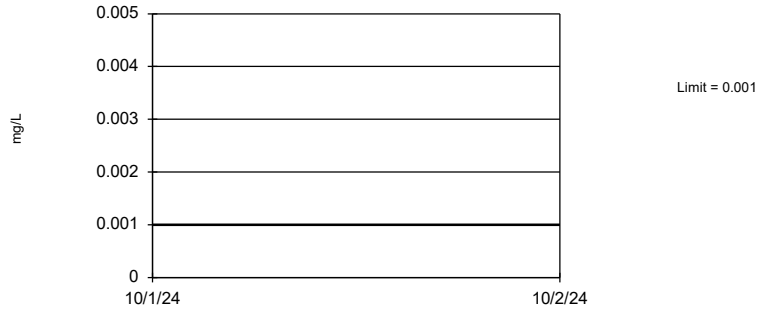
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 45 background values. 86.67% NDs. 90.43% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.09944.

Constituent: Selenium Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 45 background values. 95.56% NDs. 90.43% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.09944.

Constituent: Thallium Analysis Run 11/11/2024 2:58 PM View: Appendix IV - UTLs
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Groundwater Protection Standards

PLANT DANIEL BOTTOM ASH 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		0.001	0.01
Barium, Total (mg/L)	2		0.051	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		0.0029	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0016	0.006
Combined Radium, Total (pCi/L)	5		2.5	5
Fluoride, Total (mg/L)	4		0.1	4
Lead, Total (mg/L)	0.015		0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.0051	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

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

Confidence Intervals

Appendix IV - Confidence Intervals - Significant Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	BAW-5	0.1814	0.1349	0.04	Yes	25	0.1505	0.05495	0	None	x^2	0.01	Param.

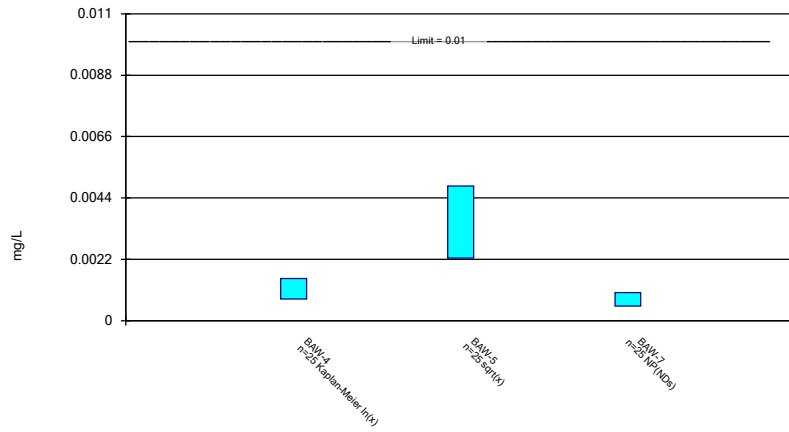
Appendix IV - Confidence Intervals - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	ComplianceSig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method	
Arsenic (mg/L)	BAW-4	0.001505	0.0007783	0.01	No	25	0.001498	0.001251	16	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	BAW-5	0.00483	0.00224	0.01	No	25	0.003887	0.00313	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	BAW-7	0.001	0.00052	0.01	No	25	0.0009608	0.0001357	92	None	No	0.01	NP (NDs)
Barium (mg/L)	BAW-3	0.03322	0.02444	2	No	25	0.02883	0.00881	0	None	No	0.01	Param.
Barium (mg/L)	BAW-4	0.0221	0.0093	2	No	25	0.01432	0.007478	0	None	No	0.01	NP (normality)
Barium (mg/L)	BAW-5	0.055	0.0424	2	No	25	0.05458	0.02197	0	None	No	0.01	NP (normality)
Barium (mg/L)	BAW-7	0.02	0.0117	2	No	25	0.01903	0.01715	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	BAW-3	0.001	0.000235	0.004	No	23	0.0008993	0.0002657	86.96	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BAW-7	0.001	0.000185	0.004	No	23	0.0009646	0.0001699	95.65	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BAW-3	0.0008395	0.0005609	0.005	No	25	0.0007002	0.0002795	4	None	No	0.01	Param.
Cadmium (mg/L)	BAW-5	0.001	0.000155	0.005	No	25	0.0009662	0.000169	96	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-3	0.003	0.00165	0.1	No	24	0.002712	0.0035	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-4	0.002	0.0015	0.1	No	24	0.001923	0.0002253	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-5	0.0024	0.00175	0.1	No	24	0.002098	0.0006471	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BAW-7	0.00206	0.00171	0.1	No	24	0.00199	0.00006097	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BAW-3	0.007104	0.005249	0.006	No	25	0.006176	0.001861	0	None	No	0.01	Param.
Cobalt (mg/L)	BAW-4	0.001451	0.001089	0.006	No	25	0.00127	0.000363	0	None	No	0.01	Param.
Cobalt (mg/L)	BAW-5	0.000802	0.0005	0.006	No	25	0.000753	0.0005414	68	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BAW-7	0.00112	0.000729	0.006	No	25	0.001244	0.001007	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-3	0.857	0.27	5	No	25	0.607	0.6826	8	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-4	0.53	0.158	5	No	25	0.5769	0.7692	12	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAW-5	0.9563	0.4286	5	No	24	0.7625	0.5863	4.167	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAW-7	1.005	0.3488	5	No	25	0.7983	0.7736	12	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BAW-3	0.1	0.0537	4	No	26	0.09017	0.02389	84.62	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BAW-4	0.0578	0.04	4	No	26	0.05654	0.02512	23.08	None	No	0.01	NP (normality)
Fluoride (mg/L)	BAW-5	0.07485	0.05423	4	No	26	0.06763	0.02797	3.846	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BAW-7	0.1	0.0415	4	No	26	0.0922	0.02213	88.46	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-3	0.001	0.000322	0.015	No	24	0.0007022	0.0003715	58.33	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-4	0.001	0.00042	0.015	No	24	0.0008523	0.0002983	79.17	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-5	0.001	0.00032	0.015	No	24	0.0009363	0.0002171	91.67	None	No	0.01	NP (NDs)
Lead (mg/L)	BAW-7	0.001	0.000345	0.015	No	24	0.0009364	0.0002178	91.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	BAW-3	0.005	0.0033	0.04	No	25	0.00433	0.001264	56	None	No	0.01	NP (NDs)
Lithium (mg/L)	BAW-4	0.02529	0.01727	0.04	No	25	0.02128	0.008046	0	None	No	0.01	Param.
Lithium (mg/L)	BAW-5	0.1814	0.1349	0.04	Yes	25	0.1505	0.05495	0	None	x^2	0.01	Param.
Lithium (mg/L)	BAW-7	0.005	0.00375	0.04	No	25	0.004958	0.002184	52	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-3	0.000497	0.000133	0.002	No	21	0.0002021	0.00007449	80.95	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-4	0.0002	0.000135	0.002	No	21	0.0001875	0.00003316	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-5	0.0002	0.000134	0.002	No	21	0.0001909	0.00003039	90.48	None	No	0.01	NP (NDs)
Mercury (mg/L)	BAW-7	0.000235	0.000151	0.002	No	21	0.0002381	0.0002228	76.19	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BAW-4	0.005	0.00109	0.1	No	23	0.00369	0.00189	65.22	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BAW-5	0.003795	0.00176	0.1	No	23	0.006269	0.005589	26.09	Kaplan-Meier	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	BAW-7	0.005	0.0038	0.1	No	23	0.004948	0.0002502	95.65	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-3	0.005	0.00079	0.05	No	23	0.003625	0.002129	69.57	None	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-5	0.005	0.00033	0.05	No	23	0.004797	0.0009738	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	BAW-7	0.005	0.0021	0.05	No	23	0.004056	0.001863	78.26	None	No	0.01	NP (NDs)
Thallium (mg/L)	BAW-3	0.001	0.000276	0.002	No	23	0.0008528	0.0003297	82.61	None	No	0.01	NP (NDs)
Thallium (mg/L)	BAW-7	0.001	0.000153	0.002	No	23	0.0009632	0.0001766	95.65	None	No	0.01	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

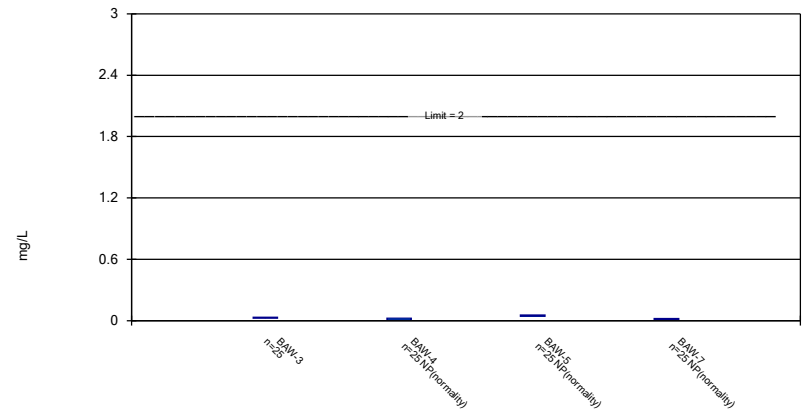
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

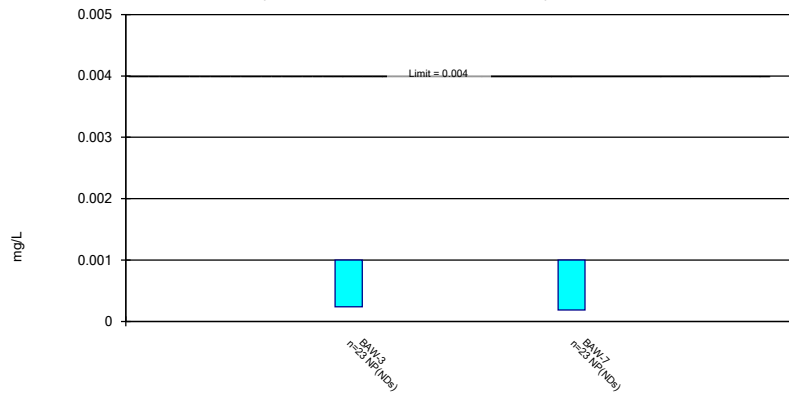
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

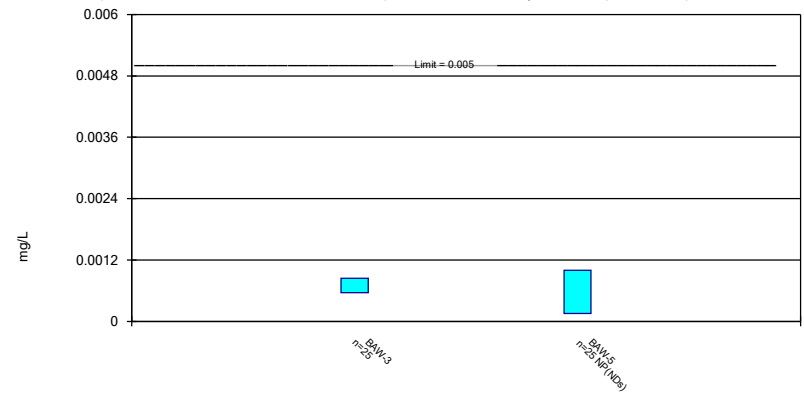
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

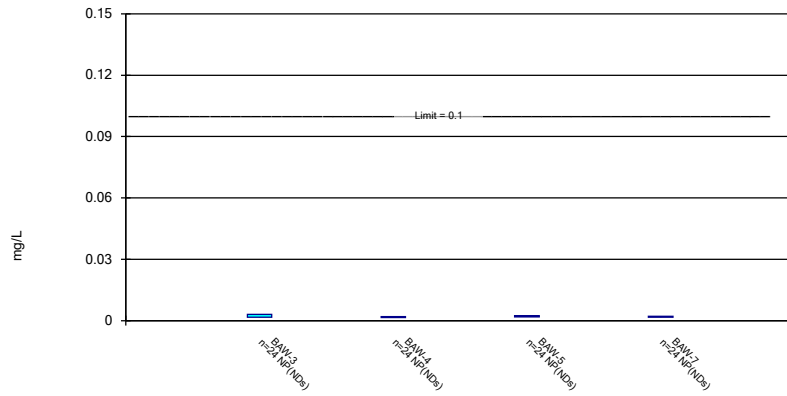
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

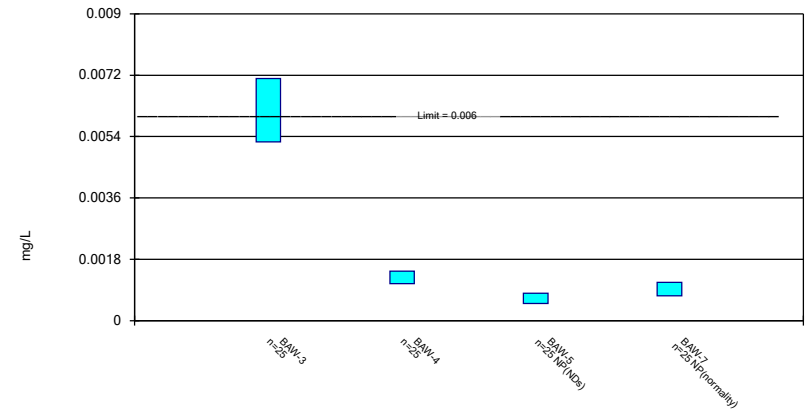
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

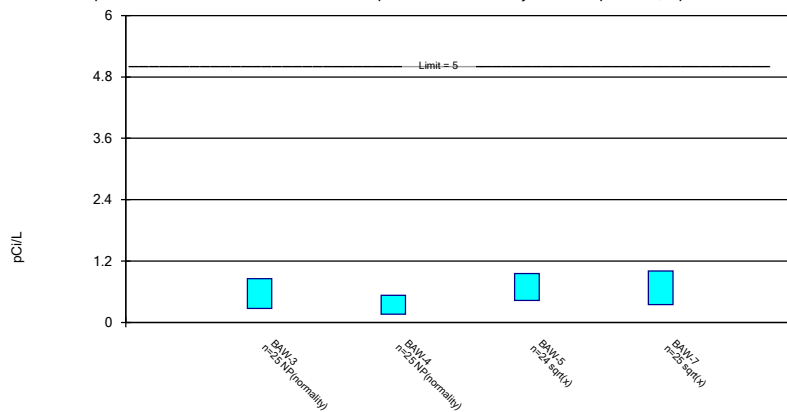
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

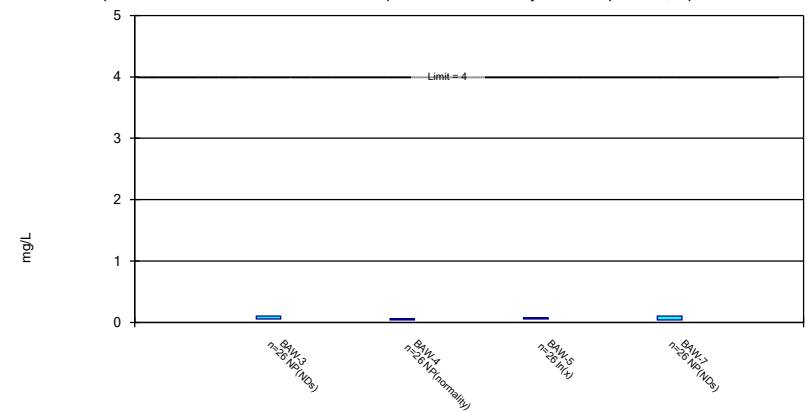
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

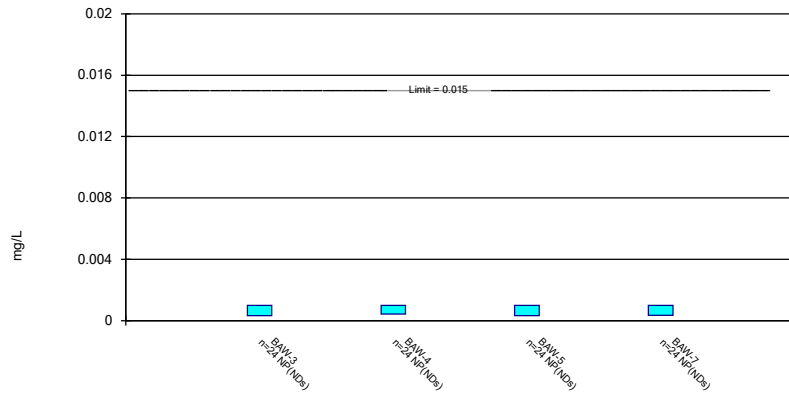
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

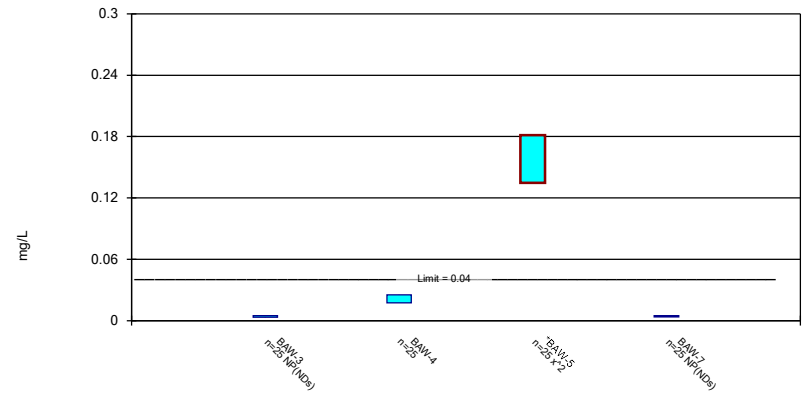
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

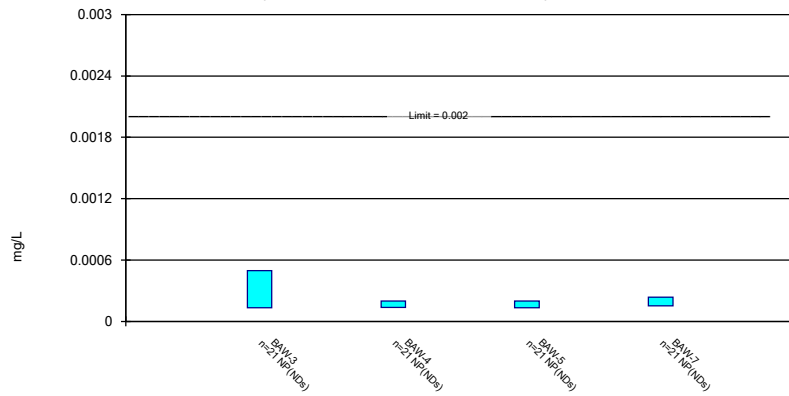
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

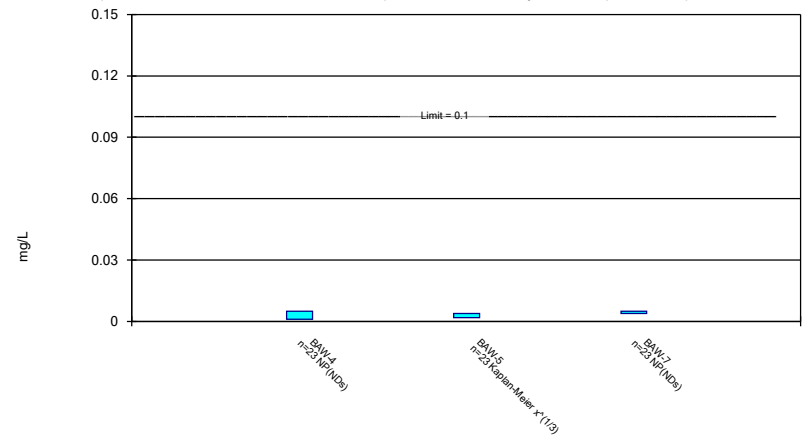
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Parametric and Non-Parametric (NP) Confidence Interval

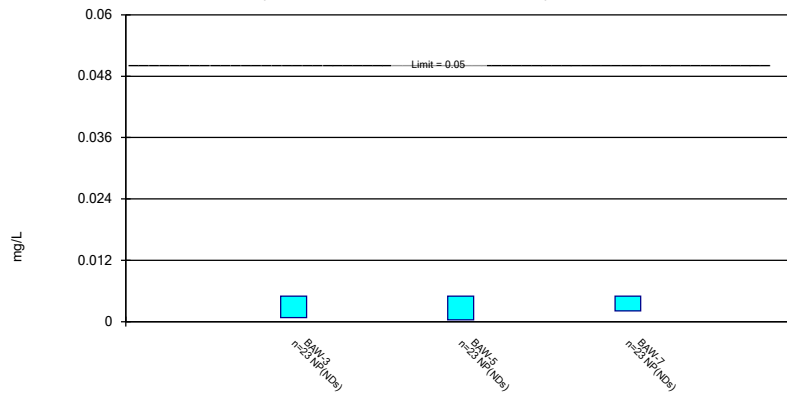
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

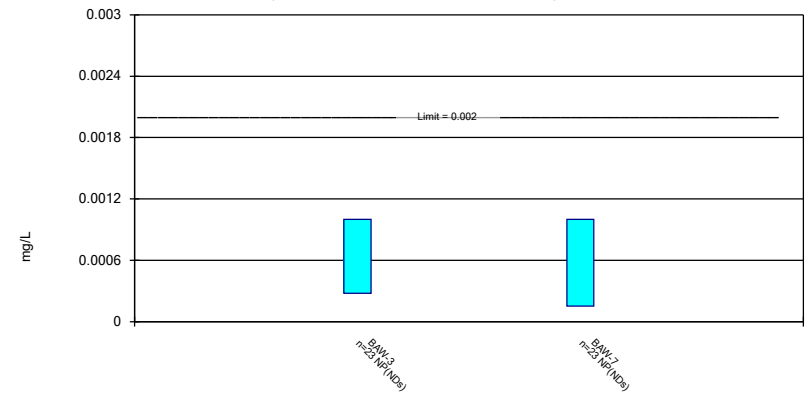
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 11/11/2024 3:04 PM View: Confidence Intervals
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-4	BAW-5	BAW-7
3/23/2016	0.00087 (J)	0.0033	<0.001
5/17/2016	<0.0013	0.00089 (J)	<0.001
7/12/2016			<0.001
7/13/2016	0.00081 (J)	0.0039	
9/13/2016		0.0039	<0.001
9/14/2016	0.00069 (J)		
11/19/2016	0.0013	0.0037	0.0005 (J)
1/17/2017			<0.001
1/18/2017	<0.0013	0.0016	
3/22/2017			0.00052 (J)
3/23/2017	0.00078 (J)	0.0017	
5/24/2017	0.001 (J)	0.0021	<0.001
3/28/2018	<0.0013	0.0011 (J)	
3/29/2018			<0.001
6/2/2018	0.00068 (J)	0.0017	<0.001
11/8/2018	<0.0013		
11/9/2018		0.0021	<0.001
2/11/2019	0.000737 (J)	0.00232	
2/12/2019			<0.001
4/17/2019	0.000645 (J)	0.00218	
4/18/2019			<0.001
9/27/2019			<0.001
9/30/2019	0.000821 (J)	0.00272	
2/21/2020			<0.001
2/22/2020	0.000837 (J)	0.00177	
4/14/2020	0.000896 (J)	0.00177	<0.001
10/30/2020	0.000529 (J)	0.0013	
11/2/2020			<0.001
3/17/2021	0.000454 (J)	0.00385	
3/26/2021			<0.001
10/5/2021	0.00259		<0.001
10/6/2021		0.0125	
3/16/2022	0.00411	0.0101	<0.001
10/5/2022	0.00467		
10/6/2022		0.0108	<0.001
4/21/2023	0.00477	0.00683	<0.001
10/24/2023			<0.001
10/25/2023	0.00241	0.00575	
3/20/2024		0.00515	
3/21/2024	0.00159		<0.001
10/2/2024	0.00105	0.00414	<0.001
Mean	0.001498	0.003887	0.0009608
Std. Dev.	0.001251	0.00313	0.0001357
Upper Lim.	0.001505	0.00483	0.001
Lower Lim.	0.0007783	0.00224	0.00052

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	0.013	0.011	0.044	0.013
5/17/2016		0.0085	0.055	0.012
5/18/2016	0.012			
7/12/2016				0.011
7/13/2016	0.016	0.0073	0.041	
9/13/2016			0.046	0.012
9/14/2016	0.018	0.0095		
11/19/2016	0.021	0.012	0.044	0.012
1/17/2017	0.029			0.014
1/18/2017		0.0096	0.045	
3/22/2017				0.012
3/23/2017	0.024	0.0093	0.038	
5/24/2017	0.022	0.0096	0.046	0.012
3/28/2018	0.026	0.0086	0.043	
3/29/2018				0.011
6/2/2018	0.029	0.0087	0.043	0.011
11/8/2018	0.028	0.0091		
11/9/2018			0.039	0.011
2/11/2019		0.00931	0.0388	
2/12/2019	0.0274			0.0102
4/17/2019	0.0263	0.00888	0.0378	
4/18/2019				0.0101
9/27/2019				0.0121
9/30/2019	0.0343	0.0103	0.0424	
2/21/2020	0.0304			0.0117
2/22/2020		0.0108	0.0453	
4/14/2020	0.0335	0.00949 (J)	0.0452	0.0124
10/30/2020	0.0349	0.0116	0.0428	
11/2/2020				0.0117
3/17/2021		0.0224	0.0382	
3/26/2021	0.0253			0.0184
10/5/2021		0.0283		0.02
10/6/2021	0.03		0.0493	
3/16/2022	0.037	0.0326	0.0688	0.0245
10/5/2022	0.0415	0.0248		
10/6/2022			0.0747	0.0937
4/20/2023	0.0369			
4/21/2023		0.0223	0.103	0.0355
10/24/2023				0.0274
10/25/2023	0.0427	0.0221	0.0883	
3/20/2024			0.0958	
3/21/2024	0.0418	0.0246		0.0307
10/2/2024	0.0407	0.0174	0.11	0.0264
Mean	0.02883	0.01432	0.05458	0.01903
Std. Dev.	0.00881	0.007478	0.02197	0.01715
Upper Lim.	0.03322	0.0221	0.055	0.02
Lower Lim.	0.02444	0.0093	0.0424	0.0117

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-7
3/23/2016	<0.001	<0.001
5/17/2016		<0.001
5/18/2016	<0.001	
7/12/2016		<0.001
7/13/2016	<0.001	
9/13/2016		<0.001
9/14/2016	<0.001	
11/19/2016	<0.001	<0.001
1/17/2017	<0.001	<0.001
3/22/2017		<0.001
3/23/2017	<0.001	
5/24/2017	<0.001	<0.001
3/28/2018	<0.001	
3/29/2018		<0.001
11/8/2018	<0.001	
11/9/2018		<0.001
2/12/2019	<0.001	<0.001
4/17/2019	<0.001	
4/18/2019		<0.001
2/21/2020	<0.001	<0.001
4/14/2020	<0.001	<0.001
10/30/2020	<0.001	
11/2/2020		<0.001
3/26/2021	<0.001	<0.001
10/5/2021		0.000185 (J)
10/6/2021	<0.001	
3/16/2022	<0.001	<0.001
10/5/2022	<0.001	
10/6/2022		<0.001
4/20/2023	0.000225 (J)	
4/21/2023		<0.001
10/24/2023		<0.001
10/25/2023	0.000225 (J)	
3/21/2024	<0.001	<0.001
10/2/2024	0.000235 (J)	<0.001
Mean	0.0008993	0.0009646
Std. Dev.	0.0002657	0.0001699
Upper Lim.	0.001	0.001
Lower Lim.	0.000235	0.000185

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-5
3/23/2016	0.00041 (J)	<0.001
5/17/2016		<0.001
5/18/2016	<0.0025	
7/13/2016	0.00087 (J)	<0.001
9/13/2016		<0.001
9/14/2016	0.00078 (J)	
11/19/2016	0.00054 (J)	<0.001
1/17/2017	0.00048 (J)	
1/18/2017		<0.001
3/23/2017	0.00059 (J)	<0.001
5/24/2017	0.00081 (J)	<0.001
3/28/2018	0.0008 (J)	<0.001
6/2/2018	0.001 (J)	<0.001
11/8/2018	0.00085 (J)	
11/9/2018		<0.001
2/11/2019		<0.001
2/12/2019	0.000877 (J)	
4/17/2019	0.000915 (J)	<0.001
9/30/2019	0.00112 (J)	0.000155 (J)
2/21/2020	0.000962 (J)	
2/22/2020		<0.001
4/14/2020	0.00107 (J)	<0.001
10/30/2020	0.00084 (J)	<0.001
3/17/2021		<0.001
3/26/2021	0.000615 (J)	
10/6/2021	0.000338 (J)	<0.001
3/16/2022	0.000252 (J)	<0.001
10/5/2022	0.000379 (J)	
10/6/2022		<0.001
4/20/2023	0.0004 (J)	
4/21/2023		<0.001
10/25/2023	0.00035 (J)	<0.001
3/20/2024		<0.001
3/21/2024	0.000401 (J)	
10/2/2024	0.000605 (J)	<0.001
Mean	0.0007002	0.0009662
Std. Dev.	0.0002795	0.000169
Upper Lim.	0.0008395	0.001
Lower Lim.	0.0005609	0.000155

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.002	0.0015 (J)	0.0012 (J)	<0.002
5/17/2016		<0.002	<0.002	<0.002
5/18/2016	<0.002			
7/12/2016				<0.002
7/13/2016	0.003	0.0015 (J)	0.0024 (J)	
9/13/2016			<0.002	<0.002
9/14/2016	<0.002	<0.002		
11/19/2016	<0.002	0.0011 (J)	<0.002	<0.002
1/17/2017	<0.002			<0.002
1/18/2017		<0.002	<0.002	
3/22/2017				<0.002
3/23/2017	<0.002	<0.002	<0.002	
5/24/2017	<0.002	<0.002	<0.002	<0.002
3/28/2018	<0.002	<0.002	0.005	
3/29/2018				<0.002
6/2/2018	<0.002	<0.002	<0.002	<0.002
11/8/2018	<0.002	<0.002		
11/9/2018			<0.002	<0.002
2/11/2019		<0.002	<0.002	
2/12/2019	0.00165 (J)			<0.002
4/17/2019	<0.002	<0.002	<0.002	
4/18/2019				<0.002
9/27/2019				0.00206 (J)
9/30/2019	<0.002	<0.002	<0.002	
2/21/2020	<0.002			<0.002
2/22/2020		<0.002	<0.002	
10/30/2020	<0.002	<0.002	<0.002	
11/2/2020				<0.002
3/17/2021		<0.002	<0.002	
3/26/2021	<0.002			<0.002
10/5/2021		<0.002		<0.002
10/6/2021	<0.002		<0.002	
3/16/2022	<0.002	<0.002	<0.002	<0.002
10/5/2022	0.0191	<0.002		
10/6/2022			<0.002	<0.002
4/20/2023	<0.002			
4/21/2023		<0.002	<0.002	<0.002
10/24/2023				<0.002
10/25/2023	<0.002	<0.002	<0.002	
3/20/2024			<0.002	
3/21/2024	<0.002	<0.002		<0.002
10/2/2024	0.00133 (J)	0.00204	0.00175 (J)	0.00171 (J)
Mean	0.002712	0.001923	0.002098	0.00199
Std. Dev.	0.0035	0.0002253	0.0006471	6.097E-05
Upper Lim.	0.003	0.002	0.0024	0.00206
Lower Lim.	0.00165	0.0015	0.00175	0.00171

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	0.0055	0.00094 (J)	<0.0005	0.0011 (J)
5/17/2016		0.0007 (J)	<0.0005	0.001 (J)
5/18/2016	0.0059			
7/12/2016				0.00091 (J)
7/13/2016	0.0048	0.0016 (J)	0.00042 (J)	
9/13/2016			<0.0005	0.001 (J)
9/14/2016	0.0063	0.0011 (J)		
11/19/2016	0.0056	0.0012 (J)	<0.0005	0.00083 (J)
1/17/2017	0.0046			0.00091 (J)
1/18/2017		0.0011 (J)	<0.0005	
3/22/2017				0.00098 (J)
3/23/2017	0.0049	0.0011 (J)	<0.0005	
5/24/2017	0.0052	0.0012 (J)	<0.0005	0.00098 (J)
3/28/2018	0.0063	0.00095 (J)	<0.0005	
3/29/2018				0.00063 (J)
6/2/2018	0.0068	0.0012 (J)	<0.0005	0.00087 (J)
11/8/2018	0.0068	0.0011 (J)		
11/9/2018			<0.0005	0.00076 (J)
2/11/2019		0.00093 (J)	<0.0005	
2/12/2019	0.00552			0.000661 (J)
4/17/2019	0.00603	0.00116 (J)	<0.0005	
4/18/2019				0.000705 (J)
9/27/2019				0.00071 (J)
9/30/2019	0.0062	0.001 (J)	<0.0005	
2/21/2020	0.00576			0.000634 (J)
2/22/2020		0.000907 (J)	<0.0005	
4/14/2020	0.00633	0.00105 (J)	<0.0005	0.000684 (J)
10/30/2020	0.00657	0.00102 (J)	<0.0005	
11/2/2020				0.000729 (J)
3/17/2021		0.00208	<0.0005	
3/26/2021	0.00339			0.000995
10/5/2021		0.00187		0.00112
10/6/2021	0.00336		0.000802	
3/16/2022	0.00289	0.00182	0.000967	0.00141
10/5/2022	0.00821	0.00121		
10/6/2022			0.00143	0.00548
4/20/2023	0.0083			
4/21/2023		0.00142	0.00275	0.00216
10/24/2023				0.00143
10/25/2023	0.0092	0.00187	0.000885	
3/20/2024			0.00131	
3/21/2024	0.00945	0.0016		0.00186
10/2/2024	0.0105	0.00163	0.00176	0.00256
Mean	0.006176	0.00127	0.000753	0.001244
Std. Dev.	0.001861	0.000363	0.0005414	0.001007
Upper Lim.	0.007104	0.001451	0.000802	0.00112
Lower Lim.	0.005249	0.001089	0.0005	0.000729

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<5	<5	0.549	<5
5/17/2016		<5	0.551	<5
5/18/2016	<5			
7/12/2016				0.165 (U)
7/13/2016	0.27 (U)	0.0365 (U)	0.859	
9/13/2016			0.367 (U)	0.341 (U)
9/14/2016	-0.0909 (U)	0.3 (U)		
11/19/2016	0.416	<5 (U)	<5 (U)	<5 (U)
1/17/2017	0.412 (U)			0.124 (U)
1/18/2017		0.235 (U)	0.289 (U)	
3/22/2017				0.0719 (U)
3/23/2017	0.0761 (U)	0.168 (U)	0.554	
5/24/2017	0.0415 (U)	-0.0607 (U)	0.831	0.441
3/28/2018	0.398	0.42	0.458	
3/29/2018				0.731
6/2/2018	-0.253 (U)	0.0844 (U)	0.226 (U)	0.303 (U)
11/8/2018	0.343 (U)	0.367 (U)		
11/9/2018			0.298 (U)	0.00226 (U)
2/11/2019		0.0402 (U)	0.15 (U)	
2/12/2019	0.581			0.094 (U)
4/17/2019	0.646	0.493	0.326 (U)	
4/18/2019				0.48
9/27/2019				0.497
9/30/2019	1	0.404		
2/21/2020	0.126 (U)			0.375
2/22/2020		0.53	0.47	
4/14/2020	0.338	0.0408 (U)	0.376 (U)	0.329 (U)
10/30/2020	0.485	0.344	0.528	
11/2/2020				0.535
3/17/2021		0.312 (U)	0.0889 (U)	
3/26/2021	0.78			0.813
10/5/2021		1.06		0.814
10/6/2021	0.503		0.931	
3/16/2022	0.286 (U)	0.314 (U)	1.39	1.39
10/21/2022	1.29	0.562 (U)	1.36	2.03
4/20/2023	0.884			
4/21/2023		0.158 (U)	1.73	0.802
10/24/2023				0.7
10/25/2023	0.857	0.472 (U)	1.49	
3/20/2024			0.758	
3/21/2024	0.926	0.754		0.606
10/2/2024	-0.14 (U)	-0.111 (U)	1.22	0.813
Mean	0.607	0.5769	0.7625	0.7983
Std. Dev.	0.6826	0.7692	0.5863	0.7736
Upper Lim.	0.857	0.53	0.9563	1.005
Lower Lim.	0.27	0.158	0.4286	0.3488

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.1	0.04 (J)	0.06 (J)	<0.1
5/17/2016		0.04 (J)	0.07 (J)	<0.1
5/18/2016	<0.1			
7/12/2016				<0.1
7/13/2016	<0.1	0.05 (J)	0.08 (J)	
9/13/2016			0.06 (J)	<0.1
9/14/2016	<0.1	0.04 (J)		
11/19/2016	<0.1	0.04 (J)	0.06 (J)	<0.1
1/17/2017	<0.1			<0.1
1/18/2017		<0.1	0.05 (J)	
3/22/2017				<0.1
3/23/2017	<0.1	<0.1	0.05 (J)	
5/24/2017	<0.1	0.04 (J)	0.06 (J)	<0.1 (D)
10/16/2017	<0.1	<0.1	0.06 (J)	<0.1
3/28/2018	<0.1	0.04 (J)	0.06 (J)	
3/29/2018				<0.1
6/2/2018	<0.1	0.05 (J)	0.06 (J)	<0.1
11/8/2018	<0.1	0.05 (J)		
11/9/2018			0.06 (J)	<0.1
2/11/2019		<0.1	0.0368 (J)	
2/12/2019	<0.1			<0.1
4/17/2019	<0.1	0.033 (J)	0.0421 (J)	
4/18/2019				<0.1
9/27/2019				<0.1
9/30/2019	<0.1	<0.1	0.045 (J)	
2/21/2020	<0.1			<0.1
2/22/2020		0.0317 (J)	0.0434 (J)	
4/14/2020	0.034 (J)	0.0508 (J)	0.059 (J)	0.0415 (J)
10/30/2020	<0.1	<0.1	<0.1	
11/2/2020				<0.1
3/17/2021		0.0544 (J)	0.0575 (J)	
3/26/2021	<0.1			<0.1
10/5/2021		0.0505 (J)		<0.1
10/6/2021	<0.1		0.0725 (J)	
3/16/2022	0.0307 (J)	0.0462 (J)	0.176	0.0266 (J)
10/5/2022	<0.1	0.0322 (J)		
10/6/2022			0.0972 (J)	<0.1
4/20/2023	<0.1			
4/21/2023		0.0441 (J)	0.0665 (J)	<0.1
10/24/2023				<0.1
10/25/2023	<0.1	0.0393 (J)	0.0858 (J)	
3/20/2024			0.11	
3/21/2024	0.0537 (J)	0.0578 (J)		0.0292 (J)
10/2/2024	0.026 (J)	0.04 (J)	0.0865 (J)	<0.1
Mean	0.09017	0.05654	0.06763	0.0922
Std. Dev.	0.02389	0.02512	0.02797	0.02213
Upper Lim.	0.1	0.0578	0.07485	0.1
Lower Lim.	0.0537	0.04	0.05423	0.0415

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.001	0.00039 (J)	<0.001	<0.001
5/17/2016		<0.001	<0.001	<0.001
5/18/2016	<0.001			
7/12/2016				<0.001
7/13/2016	<0.001	<0.001	<0.001	
9/13/2016			<0.001	<0.001
9/14/2016	0.00056 (J)	<0.001		
11/19/2016	<0.001	0.00042 (J)	<0.001	<0.001
1/17/2017	<0.001			<0.001
1/18/2017		<0.001	<0.001	
3/22/2017				<0.001
3/23/2017	0.00038 (J)	<0.001	<0.001	
5/24/2017	0.00036 (J)	<0.001	<0.001	<0.001
3/28/2018	<0.001	<0.001	<0.001	
3/29/2018				<0.001
11/8/2018	<0.001	<0.001		
11/9/2018			<0.001	<0.001
2/11/2019		<0.001	<0.001	
2/12/2019	0.000139 (J)			<0.001
4/17/2019	<0.001	<0.001	<0.001	
4/18/2019				<0.001
9/27/2019				0.000129 (J)
9/30/2019	0.000322 (J)	0.000191 (J)	0.000152 (J)	
2/21/2020	0.00015 (J)			<0.001
2/22/2020		<0.001	<0.001	
4/14/2020	0.000236 (J)	<0.001	<0.001	<0.001
10/30/2020	0.000136 (J)	<0.001	<0.001	
11/2/2020				<0.001
3/17/2021		0.000153 (J)	<0.001	
3/26/2021	0.000145 (J)			<0.001
10/5/2021		<0.001		<0.001
10/6/2021	<0.001		<0.001	
3/16/2022	<0.001	<0.001	<0.001	<0.001
10/5/2022	<0.001	<0.001		
10/6/2022			<0.001	<0.001
4/20/2023	<0.001			
4/21/2023		<0.001	<0.001	<0.001
10/24/2023				<0.001
10/25/2023	<0.001	<0.001	<0.001	
3/20/2024			<0.001	
3/21/2024	<0.001	<0.001		<0.001
10/2/2024	0.000425 (J)	0.0003 (J)	0.00032 (J)	0.000345 (J)
Mean	0.0007022	0.0008523	0.0009363	0.0009364
Std. Dev.	0.0003715	0.0002983	0.0002171	0.0002178
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	0.000322	0.00042	0.00032	0.000345

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	<0.005	0.044	0.17	<0.005
5/17/2016		0.028	0.2	<0.005
5/18/2016	<0.005			
7/12/2016				<0.005
7/13/2016	<0.005	0.026	0.17	
9/13/2016			0.17	<0.005
9/14/2016	<0.005	0.026		
11/19/2016	<0.005	0.026	0.18	0.0035 (J)
1/17/2017	<0.005			<0.005
1/18/2017		0.027	0.2	
3/22/2017				<0.005
3/23/2017	<0.005	0.024	0.19	
5/24/2017	<0.005	0.027	0.21	<0.005
3/28/2018	0.0023 (J)	0.021	0.23	
3/29/2018				0.0026 (J)
6/2/2018	0.002 (J)	0.022	0.19	0.0029 (J)
11/8/2018	0.0024 (J)	0.025		
11/9/2018			0.18	0.0027 (J)
2/11/2019		0.0229	0.161	
2/12/2019	<0.005			<0.005
4/17/2019	0.00197 (J)	0.0236	0.174	
4/18/2019				0.00238 (J)
9/27/2019				0.00375 (J)
9/30/2019	0.00687	0.0249	0.166	
2/21/2020	<0.005			<0.005
2/22/2020		0.0211	0.169	
4/14/2020	<0.005	0.0224	0.192	<0.005
10/30/2020	<0.005	0.0267	0.194	
11/2/2020				<0.005
3/17/2021		0.0174	0.12	
3/26/2021	<0.005			<0.005
10/5/2021		0.0127		0.0045 (J)
10/6/2021	<0.005		0.0994	
3/16/2022	0.0038 (J)	0.0112	0.0629	0.00437 (J)
10/5/2022	0.00322 (J)	0.00676		
10/6/2022			0.0534	0.0123
4/20/2023	0.00309 (J)			
4/21/2023		0.0091	0.0564	0.0107
10/24/2023				0.00555
10/25/2023	0.0033 (J)	0.0123	0.0679	
3/20/2024			0.0786	
3/21/2024	0.00355 (J)	0.013		0.0037 (J)
10/2/2024	0.00575	0.0119	0.0774	<0.005
Mean	0.00433	0.02128	0.1505	0.004958
Std. Dev.	0.001264	0.008046	0.05495	0.002184
Upper Lim.	0.005	0.02529	0.1814	0.005
Lower Lim.	0.0033	0.01727	0.1349	0.00375

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-4	BAW-5	BAW-7
3/23/2016	8.4E-05 (JB)	7.3E-05 (JB)	7.4E-05 (JB)	7.1E-05 (JB)
5/17/2016		<0.0002	<0.0002	<0.0002
5/18/2016	<0.0002			
7/12/2016				<0.0002
7/13/2016	<0.0002	<0.0002	<0.0002	
9/13/2016			<0.0002	<0.0002
9/14/2016	<0.0002	<0.0002		
11/19/2016	<0.0002	<0.0002	<0.0002	<0.0002
1/17/2017	<0.0002			<0.0002
1/18/2017		<0.0002	<0.0002	
3/22/2017				<0.0002
3/23/2017	0.00013 (J)	0.00013 (J)	<0.0002	
5/24/2017	<0.0002	<0.0002	<0.0002	<0.0002
3/28/2018	<0.0002	<0.0002	<0.0002	
3/29/2018				<0.0002
2/11/2019		<0.0002	<0.0002	
2/12/2019	<0.0002			<0.0002
4/17/2019	<0.0002	<0.0002	<0.0002	
4/18/2019				<0.0002
2/21/2020	<0.0002			<0.0002
2/22/2020		<0.0002	<0.0002	
10/30/2020	0.000497	<0.0002	<0.0002	
11/2/2020				<0.0002
3/17/2021		<0.0002	<0.0002	
3/26/2021	<0.0002			0.000235
10/5/2021		<0.0002		0.000151 (J)
10/6/2021	<0.0002		<0.0002	
3/16/2022	<0.0002	<0.0002	<0.0002	0.0012
10/5/2022	<0.0002	<0.0002		
10/6/2022			<0.0002	<0.0002
4/20/2023	<0.0002			
4/21/2023		<0.0002	<0.0002	<0.0002
10/24/2023				<0.0002
10/25/2023	<0.0002	<0.0002	<0.0002	
3/20/2024			0.000134 (J)	
3/21/2024	0.000133 (J)	0.000135 (J)		0.000143 (J)
10/2/2024	<0.0002	<0.0002	<0.0002	<0.0002
Mean	0.0002021	0.0001875	0.0001909	0.0002381
Std. Dev.	7.449E-05	3.316E-05	3.039E-05	0.0002228
Upper Lim.	0.000497	0.0002	0.0002	0.000235
Lower Lim.	0.000133	0.000135	0.000134	0.000151

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-4	BAW-5	BAW-7
3/23/2016	<0.005	0.0026 (J)	<0.005
5/17/2016	<0.005	0.0011 (J)	<0.005
7/12/2016			<0.005
7/13/2016	<0.005	0.0079 (J)	
9/13/2016		0.0038 (J)	<0.005
9/14/2016	<0.005		
11/19/2016	<0.005	0.0014 (J)	<0.005
1/17/2017			<0.005
1/18/2017	<0.005	0.001 (J)	
3/22/2017			0.0038 (J)
3/23/2017	<0.005	<0.015	
5/24/2017	<0.005	0.0014 (J)	<0.005
3/28/2018	<0.005	<0.015	
3/29/2018			<0.005
11/8/2018	<0.005		
11/9/2018		<0.015	<0.005
2/11/2019	<0.005	<0.015	
2/12/2019			<0.005
4/17/2019	<0.005	<0.015	
4/18/2019			<0.005
2/21/2020			<0.005
2/22/2020	0.000616 (J)	0.000627 (J)	
4/14/2020	<0.005	0.000747 (J)	<0.005
10/30/2020	<0.005	<0.015	
11/2/2020			<0.005
3/17/2021	0.0032 (J)	0.00328 (J)	
3/26/2021			<0.005
10/5/2021	0.00109 (J)		<0.005
10/6/2021		0.00364 (J)	
3/16/2022	0.000916 (J)	0.00533	<0.005
10/5/2022	0.000939 (J)		
10/6/2022		0.00424 (J)	<0.005
4/21/2023	0.00109 (J)	0.00651	<0.005
10/24/2023			<0.005
10/25/2023	<0.005	0.0036 (J)	
3/20/2024		0.00366 (J)	
3/21/2024	0.000937 (J)		<0.005
10/2/2024	0.00108 (J)	0.00335 (J)	<0.005
Mean	0.00369	0.006269	0.004948
Std. Dev.	0.00189	0.005589	0.0002502
Upper Lim.	0.005	0.003795	0.005
Lower Lim.	0.00109	0.00176	0.0038

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-5	BAW-7
3/23/2016	0.00033 (J)	<0.005	<0.005
5/17/2016		<0.005	0.00026 (J)
5/18/2016	<0.005		
7/12/2016			<0.005
7/13/2016	0.00041 (J)	<0.005	
9/13/2016		<0.005	0.00031 (J)
9/14/2016	0.00079 (J)		
11/19/2016	<0.005	<0.005	<0.005
1/17/2017	<0.005		<0.005
1/18/2017		<0.005	
3/22/2017			0.0021
3/23/2017	<0.005	<0.005	
5/24/2017	0.00028 (J)	0.00033 (J)	0.00026 (J)
3/28/2018	0.00038 (J)	<0.005	
3/29/2018			0.00036 (J)
6/2/2018	0.00031 (J)	<0.005	<0.005
11/8/2018	0.00088 (J)		
11/9/2018		<0.005	<0.005
2/11/2019		<0.005	
2/12/2019	<0.005		<0.005
4/17/2019	<0.005	<0.005	
4/18/2019			<0.005
2/21/2020	<0.005		<0.005
2/22/2020		<0.005	
10/30/2020	<0.005	<0.005	
11/2/2020			<0.005
3/17/2021		<0.005	
3/26/2021	<0.005		<0.005
10/5/2021			<0.005
10/6/2021	<0.005	<0.005	
3/16/2022	<0.005	<0.005	<0.005
10/5/2022	<0.005		
10/6/2022		<0.005	<0.005
4/20/2023	<0.005		
4/21/2023		<0.005	<0.005
10/24/2023			<0.005
10/25/2023	<0.005	<0.005	
3/20/2024		<0.005	
3/21/2024	<0.005		<0.005
10/2/2024	<0.005	<0.005	<0.005
Mean	0.003625	0.004797	0.004056
Std. Dev.	0.002129	0.0009738	0.001863
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.00079	0.00033	0.0021

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 11/11/2024 3:05 PM View: Confidence Intervals

Plant Daniel Client: Southern Company Data: Bottom Ash CCR

	BAW-3	BAW-7
3/23/2016	<0.001	<0.001
5/17/2016		<0.001
5/18/2016	<0.001	
7/12/2016		<0.001
7/13/2016	<0.001	
9/13/2016		<0.001
9/14/2016	9.5E-05 (J)	
11/19/2016	<0.001	<0.001
1/17/2017	<0.001	<0.001
3/22/2017		<0.001
3/23/2017	<0.001	
5/24/2017	<0.001	<0.001
3/28/2018	<0.001	
3/29/2018		<0.001
11/8/2018	8.5E-05 (J)	
11/9/2018		<0.001
2/12/2019	<0.001	<0.001
4/17/2019	<0.001	
4/18/2019		<0.001
2/21/2020	0.000276 (J)	<0.001
4/14/2020	0.000158 (J)	<0.001
10/30/2020	<0.001	
11/2/2020		<0.001
3/26/2021	<0.001	<0.001
10/5/2021		0.000153 (J)
10/6/2021	<0.001	
3/16/2022	<0.001	<0.001
10/5/2022	<0.001	
10/6/2022		<0.001
4/20/2023	<0.001	
4/21/2023		<0.001
10/24/2023		<0.001
10/25/2023	<0.001	
3/21/2024	<0.001	<0.001
10/2/2024	<0.001	<0.001
Mean	0.0008528	0.0009632
Std. Dev.	0.0003297	0.0001766
Upper Lim.	0.001	0.001
Lower Lim.	0.000276	0.000153

Trend Tests - Confidence Interval Exceedances

Appendix IV - Trend Test Summary - Significant Results

Plant: Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:07 PM

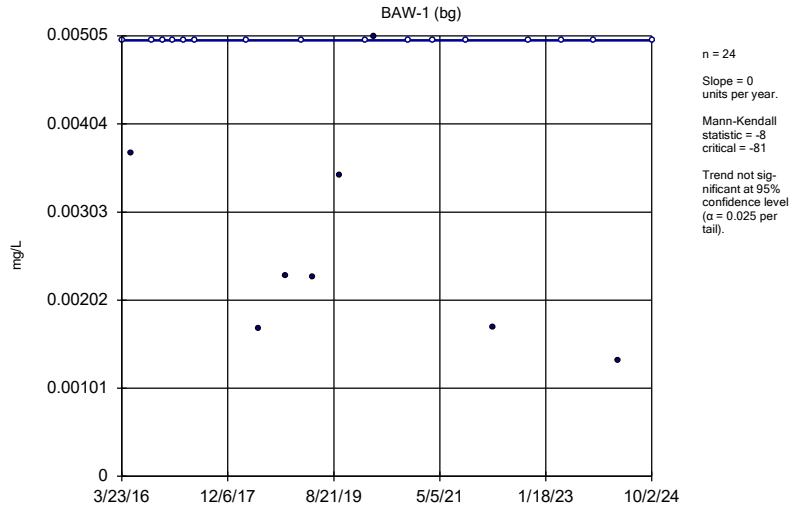
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-5	-0.01514	-142	-85	Yes	25	0	n/a	n/a	0.05	NP

Appendix IV - Trend Test Summary - All Results

Plant Daniel Client: Southern Company Data: Bottom Ash CCR Printed 11/11/2024, 3:07 PM

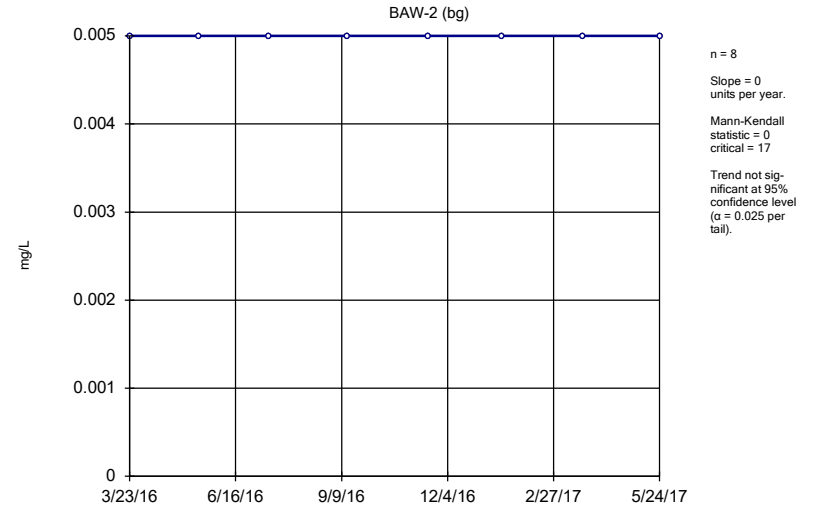
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BAW-1 (bg)	0	-8	-81	No	24	66.67	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-2 (bg)	0	0	17	No	8	100	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-2A (bg)	0	-2	-45	No	16	50	n/a	n/a	0.05	NP
Lithium (mg/L)	BAW-5	-0.01514	-142	-85	Yes	25	0	n/a	n/a	0.05	NP

Sen's Slope Estimator



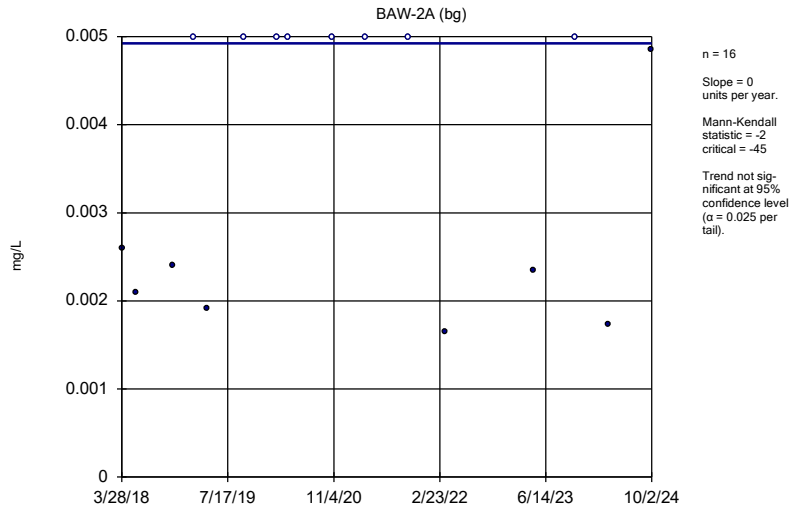
Constituent: Lithium Analysis Run 11/11/2024 3:06 PM View: Appendix IV Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator



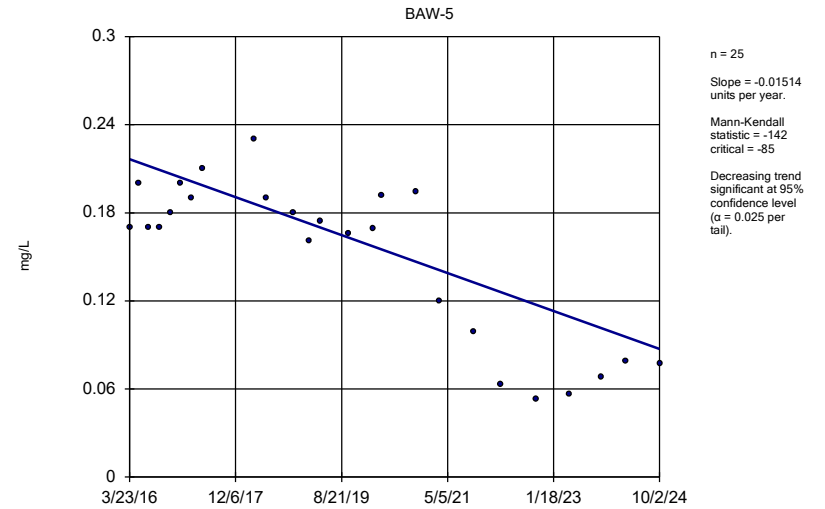
Constituent: Lithium Analysis Run 11/11/2024 3:06 PM View: Appendix IV Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator



Constituent: Lithium Analysis Run 11/11/2024 3:06 PM View: Appendix IV Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR

Sen's Slope Estimator



Constituent: Lithium Analysis Run 11/11/2024 3:06 PM View: Appendix IV Trend Tests
Plant Daniel Client: Southern Company Data: Bottom Ash CCR