2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

MISSISSIPPI POWER COMPANY
PLANT VICTOR DANIEL
NORTH ASH MANAGEMENT UNIT

January 31, 2024

Prepared for
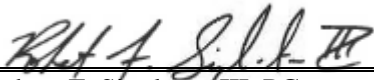
Mississippi Power Company
Gulfport, Mississippi

By

Southern Company Services
Earth Science and Environmental Engineering

CERTIFICATION STATEMENT

This *2023 Annual Groundwater Monitoring and Corrective Action Report*, Mississippi Power Company – Plant Daniel North Ash Management Unit has been prepared to comply with the United States Environmental Protection Agency coal combustion residual rule (40 Code of Federal Regulations (CFR) Part 257, Subpart D) under the supervision of a licensed Professional Geologist with Southern Company Services.

Robert F. Singleton III, PG

Mississippi PG No. 1015
Senior Geologist

Steven C. Bearce, PG

Mississippi PG No. 0334
Senior Geologist

SITE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), this *2023 Annual Groundwater Monitoring and Corrective Action Report* has been prepared to document 2023 semi-annual detection groundwater monitoring activities at the Plant Daniel North Ash Management Unit (NAMU) and to satisfy the requirements of § 257.90(e). Semi-annual detection monitoring and associated reporting for Plant Daniel NAMU is performed in accordance with the monitoring requirements § 257.90 through § 257.94.

Statistical evaluations identified statistically significant increases (SSIs) of Appendix III constituents above the GWPS during the April 2023 detection monitoring event. However, the constituents detected as SSIs during the first semi-annual detection monitoring event are previously addressed in an ASD report submitted in January 2022. As discussed in the ASD report, the apparent exceedances observed during the monitoring period are not likely the result of a release from the CCR unit. Therefore, in accordance with § 257.94, MPC will continue detection monitoring.

The following future actions will be taken or are recommended for the Site:

- Continue semi-annual assessment monitoring in 2024.
- Submit 2024 Annual Groundwater Monitoring and Corrective Action Report by January 31, 2025.

Pursuant to 40 CFR 257.90(e)(6), the table titled Monitoring Period Summary was prepared to describe the status of groundwater monitoring and corrective action during this report's monitoring period.

Monitoring Period Summary
Plant Daniel - North Ash Management Unit

Monitoring Period:	January 1 - December 31, 2023
Beginning Status:	Detection
Ending Status:	Detection

STATISTICAL ANALYSIS RESULTS*

Appendix III SSIs

Parameter	Wells
Boron	None
Calcium	MW-19
Chloride	None
Fluoride	None
pH	MW-19
Sulfate	None
TDS	None

Appendix IV SSLs

Site Remains in Detection Monitoring (§ 257.94)

* See the attached report for further details regarding statistical exceedances.

ASSESSMENT OF CORRECTIVE MEASURES & GROUNDWATER REMEDY

Assessment of Corrective Measures

Site Remains in Detection Monitoring (§ 257.94)

Groundwater Remedy

Site Remains in Detection Monitoring (§ 257.94)

TABLE OF CONTENTS

Tables

Figures

Appendices

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 *2023 Annual Groundwater Monitoring and Corrective Action Report* document groundwater monitoring activities at Mississippi Power Company (MPC) Plant Daniel North Ash Management Unit (NAMU).

Groundwater monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements § 257.90 through § 257.94 of the Federal CCR rule. This report has been prepared to document the 2023 semi-annual groundwater monitoring events at the NAMU and to satisfy the requirements of § 257.90(e).

2.0 SITE DESCRIPTION

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. The Site is 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.

NAMU is located in the northernmost portion of the property. **Figure 1, Site Location Map**, depicts the location of Plant Daniel relative to site features and the surrounding area.

2.1 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 surface geology of soils near Plant Daniel results from present-day weathering processes dictated by southern Mississippi's semi-tropical climate and the parent geologic materials. The soil profile formed from a wide variety of sediments of recent age, and from Pleistocene terrace deposits. The soil therefore contains sand, silt, clay, gravel, and organics.

Studies prepared by SCS, establish five geologic units underlying the immediate Plant Daniel property:

- Unit 1 is a sandy clay aquitard. The unit is discontinuous across the Plant Daniel site and extends from the surface to approximately 32 feet deep in some areas.
- Unit 2 is a sand aquifer, which extends to approximately 70 feet and is considered the uppermost aquifer for groundwater monitoring purposes.
- Unit 3 is a clay aquitard underlying Unit 2 with thicknesses ranging from 2.5 to 9.5 feet at Plant Daniel.
- Unit 4 is a sand and gravel aquifer with a thickness of 34 feet or greater.
- Unit 5 is a clay aquitard.

2.2 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, the Unit 2 sand is the uppermost aquifer screened by site monitoring wells.

3.0 GROUNDWATER MONITORING SYSTEM AND ACTIVITY

Pursuant to § 257.91, MPC installed a groundwater monitoring system to monitor groundwater within the uppermost aquifer (Unit 2). The Professional Engineer (PE)-certified groundwater monitoring system for the NAMU is designed to monitor groundwater passing the waste boundary of the CCR unit within the uppermost aquifer. As required by § 257.90(e), the following also describes monitoring-related activities performed during the preceding year.

3.1 Groundwater Monitoring System

The groundwater monitoring network comprises seven wells as presented on Figure 2, Monitoring Well Location Map. **Table 1, Monitoring Well Network Summary,** summarizes the monitoring well construction details and design purpose for the NAMU.

Monitoring wells MW-11, MW-14, and MW-18 serve as upgradient locations for the NAMU. Upgradient wells are screened within the same uppermost aquifer as downgradient locations and are representative of background groundwater quality at the site. Monitoring well locations MW-15, MW-16, MW-17, and MW-19 are utilized as downgradient locations for NAMU. Downgradient locations were determined by water level monitoring and potentiometric surface maps constructed for the site.

3.2 Monitoring Well Installation and Maintenance

There was no change to the groundwater monitoring system in 2023; the network remained the same as in the previous reporting year. Monitoring well-related activities were limited to visual inspection of well conditions prior to sampling, recording the site conditions, and performing exterior maintenance to perform sampling under safe and clean conditions.

3.3 Detection Monitoring

Based on results provided in previous Annual Groundwater and Corrective Action Monitoring Reports, the NAMU is performing detection monitoring. Samples were collected from wells in the PE-certified monitoring system shown on **Figure 2**. Analytical data from the semi-annual monitoring events are included as **Appendix A, Laboratory Analytical and Field Sampling Reports**, in accordance with the requirements of § 257.90(e)(3).

4.0 SAMPLE METHODOLOGY & ANALYSIS

The following describes the methods used to complete groundwater monitoring at NAMU.

4.1 Groundwater Flow Direction, Gradient, and Velocity

Before each sampling event, groundwater levels were measured and recorded to the nearest 0.01 foot within 24 hours. Groundwater levels recorded during the monitoring events are summarized in **Table 2, Groundwater Elevations Summary – 2023.** Groundwater levels and top of casing elevations were used to calculate groundwater elevation and develop the potentiometric surface elevation contour map provided as **Figures 3** and **4, Potentiometric Surface Contour Map(s)**. As shown in **Figures 3** and **4**, the general direction of groundwater flow is west-southwest. The groundwater flow pattern observed during the 2023 monitoring events is consistent with historic observations.

Groundwater flow velocities at the site were calculated based on hydraulic gradients, hydraulic conductivity from previous slug test results, and an estimated effective porosity of the screened horizon. Based on slug test data at the site, the average hydraulic conductivity is about 25 feet per day. The hydraulic gradient was calculated between well pairs shown on **Table 3, Groundwater Flow Velocity Calculations - 2023**. An 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 $\left(\frac{feet}{day}\right)$
K = Average permeability of the aquifer $\left(\frac{feet}{day}\right)$
i = Horizontal hydraulic gradient
n_e = Effective porosity

Using this equation, groundwater flow velocities are calculated for various areas of the site and are tabulated on **Table 3**.

Groundwater monitoring wells MW-14 and MW-16 were used as points for calculating Flow Path A and MW-11 and MW-19 were used to calculate Flow Path B. The horizontal hydraulic gradients ranged from 0.0030 feet per foot (ft/ft) to 0.0040 ft/ft. As presented on **Table 3,** groundwater flow velocity at the site ranges from approximately 0.37 feet per day (ft/day) (or approximately 135.33 feet per year) to 0.50 feet/day (or approximately 182.87 feet per year). These calculated groundwater flow velocities across the site are consistent with historical calculations and with expected velocities.

4.2 Groundwater Sampling

Groundwater samples were collected from monitoring wells using low-flow sampling procedures in accordance with § 257.93(a). All monitoring wells at the Site are equipped with a dedicated pump. Monitoring wells were purged and sampled using low-flow sampling procedures whereby samples are

collected when field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen (DO)) were stabilized. Groundwater stabilization criteria were:

- 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 5 nephelometric turbidity unit (NTU)
- Temperature and oxidation reduction potential (ORP) – record only, no stabilization criteria

During purging and sampling a SmarTroll instrument or similar was used to monitor and record field parameters. Once stabilization was achieved, samples were collected and submitted to the laboratory following standard chain-of-custody (COC) protocol.

4.3 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**.

4.4 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at a rate of one sample per every 10 detection samples. Equipment blanks and duplicate samples were also collected during each sampling event. QA/QC sample data was evaluated during data validation and is included in **Appendix A**. Values followed by a "J" flag indicate the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (RL). The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions.

Analytical precision is measured through the calculation of the relative percent difference (RPD) of two data sets generated from a similar source. Here, the comparison of samples to field duplicate samples is used as a measure of laboratory precision. For groundwater analytical data, quality control procedures include calculating the RPD (where field duplicates are collected) between the sample and duplicate sample duplicate concentrations. The calculation is:

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

Where:
RPD = Relative Percent Difference (%)
Conc1 = Higher concentration of the sample or field duplicate
Conc2 = Lower concentration of the sample or field duplicate

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 4, Relative Percent Difference Calculations**, provides the relative percent differences for sample and sample duplicates during 2023 sampling events.

During the first 2023 semi-annual sampling event, RPD exceeded 20% for Total Dissolved Solids (TDS) for the sample and field duplicate collected at MW-11. The TDS concentrations observed in MW-11 for the parent and duplicate samples were 67.0 mg/L and 47.0 mg/L, respectively, resulting in an RPD of 35.1%. If RPD exceeds 20% for samples with concentrations greater than five times the RL (10.0 mg/L), 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 the first semi-annual sampling event of 2023 is provided below.

Sample Location	Constituent	Sample Concentration (mg/L)	Field Duplicate Concentration (mg/L)	RPD (%)	Reporting Limit (mg/L)	Data Qualifier
MW-11	TDS	67.0 mg/L	47.0 mg/L	35.1%	10.0 mg/L	(+) J, (ND) UJ

No additional data qualification is required for the first or second semi-annual detection events of 2023.

5.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III 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. The statistical method used at the site was developed by Groundwater Stats Consulting, LLC (GSC), in accordance with 40 CFR § 257.93(f) using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, EPA 530/R-09-007 (USEPA, 2009). Results are included in **Appendix B, Statistical Data Evaluation.**

5.1 Statistical Method

At NAMU, intrawell prediction limits (PL) are used to compare the most recent sample to prediction limits constructed from screened historical data from within the same well for each of the Appendix III parameters and determine whether any concentrations exceed background levels. The selected statistical method includes a 1-of-2 verification resample plan. If the intrawell PL is exceeded, the two-step analysis procedure is enacted whereby interwell PL are constructed using pooled upgradient well data to evaluate the apparent intrawell PL exceedances among downgradient wells. 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.

5.2 Statistical Analysis Results

Analytical data from the 2023 semi-annual monitoring events in April and October were statistically analyzed in accordance with the PE-certified Statistical Analysis Plan (October 2017), Statistical Background Update by GSC (December 2019), and revised Statistical Analysis Plan (October 2022).

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

- MW-19: Calcium, pH, TDS

Per the outlined statistical methods, MW-19 was resampled for calcium, pH, and TDS in May 2023, within 90 days of the initial exceedances. The resample confirmed the calcium and pH exceedances, but TDS was below the PL, and thereby not a confirmed SSI. A review of the revised Sanitas results, presented in **Appendix B,** identified the following verified Appendix III SSIs for the first semi-annual monitoring event:

- MW-19: Calcium, pH

During the second semi-annual monitoring event, no SSIs were identified, including those previously reported at MW-19.

As discussed in the following section, an alternate source demonstration (ASD) was prepared and submitted in January 2022 pursuant to 40 CFR § 257.94(e)(2) demonstrating that the SSIs at MW-19 are not the result of a release from the CCR unit.

6.0 ALTERNATE SOURCE DEMONSTRATION

Section 257.94(e)(2) allows the owner or operator to demonstrate that a source other than the CCR Unit has caused an SSI or that the SSI was the result of an alternate source or resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. An ASD report for SSIs identified during the 2021 semi-annual detection monitoring events was submitted on January 31, 2022. As discussed in the ASD report, the apparent exceedances observed were not the result of a release from the CCR unit and are caused by natural variability in groundwater quality. Based on the ASD, the NAMU remains in detection monitoring.

7.0 MONITORING PROGRAM STATUS

Presently, Plant Daniel NAMU is in detection monitoring. SSIs of Appendix III parameters have been identified during the first semi-annual event of 2023. Pursuant to § 257.94(e)(1), MPC has prepared a demonstration that a source other than the CCR unit was the cause of the exceedances. MPC has addressed the reported SSIs in accordance with the requirements, and options, of § 257.94(e) (1-3) and (f) by providing an ASD, submitted January 31, 2022, as described in Section 6.0**.**

8.0 CONCLUSIONS & FUTURE ACTIONS

Based on results reported in the *2023 Annual Groundwater and Corrective Action Monitoring Report*, MPC remained in detection monitoring. Groundwater samples were subsequently collected from the certified well network and analyzed for Appendix III parameters.

The certified compliance monitoring well network is sampled on a semi-annual basis. The groundwater samples were analyzed for all Appendix III parameters. Statistical evaluations of the April and October 2023 detection monitoring data identified SSIs of Appendix III constituents above the GWPS. However, an ASD report submitted in January 2022 addresses these SSIs. As discussed in the ASD report, the apparent exceedances observed during the monitoring period are likely not the result of a release from the CCR unit.

Therefore, in accordance with § 257.94, MPC will continue detection monitoring. The following future actions will be taken or are recommended for the Site:

- Continue semi-annual detection monitoring in 2024.
- Submit 2023 Annual Groundwater Monitoring and Corrective Action Report by January 31, 2025.

9.0 REFERENCES

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, 2021 Semi-Annual Monitoring Events, Mississippi Power Company, Plant Victor Daniel, North Ash Management Unit, January 31, 2022.

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 257and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule.* [EPA-HQ-RCRA–2009–0640; FRL–9919–44–OSWER]. RIN–2050–AE81. April.

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 Summary

Well ID	Purpose	Installation Date	Latitude	Longitude	Total Well Depth (feet)	Top of Casing Elevation (feet MSL)	Ground Elevation (feet MSL)	Top of Screen Elevation (feet MSL)	Bottom of Screen Elevation (feet MSL)
MW-11	Upgradient	5/2/2006	30.55781	-88.56425	34.02	25.24	23.22	-3.78	-8.78
MW-14	Upgradient	7/24/2015	30.55575	-88.56435	40.78	23.65	20.87	-11.83	-16.83
MW-15	Downgradient	7/24/2015	30.55426	-88.56544	39.44	21.53	18.69	-12.41	-17.61
MW-16	Downgradient	7/24/2015	30.55451	-88.56775	28.36	16.12	13.16	-6.94	-11.94
MW-17	Downgradient	7/24/2015	30.55778	-88.56786	28.62	15.41	12.59	-7.91	-12.91
MW-18	Upgradient	7/24/2015	30.55917	-88.56479	44.43	28.86	26.33	-10.27	-15.27
MW-19	Downgradient	7/26/2016	30.55606	-88.56818	32.76	24.42	21.56	-3.04	-8.04

Notes:

1. Elevations shown are referenced Mean Sea Level (MSL) to NAVD 88 (G12) U.S. Survey Feet.

2. MSL refers to Mean Sea Level.

Table 2.
Groundwater Elevations Summary - 2023

Well ID	Top of Casing Elevation (feet MSL)	Groundwater Elevations (feet MSL)	
		April 17, 2023	October 23, 2023
MW-11	25.24	12.44	10.78
MW-14	23.65	11.45	9.88
MW-15	21.53	10.05	8.48
MW-16	16.12	7.46	5.02
MW-17	15.41	8.57	7.03
MW-18	28.86	12.45	10.77
MW-19	24.42	7.01	4.39

Notes:

1. MSL refers to Mean Sea Level

Table 3.
Groundwater Flow Velocity Calculations - 2023

	MW-14 h₁ (ft)	MW-16 h₂ (ft)	Distance Δl (ft)	Hydraulic Gradient Δh/Δl (ft/ft)	Hydraulic Conductivity K	Assumed Effective Porosity (ne)	Calculated Groundwater Flow Velocity (feet/day)	Calculated Groundwater Flow Velocity (feet/year)
				Flow Path A				
4/17/2023	11.45	7.46	1350	0.0030	25.09	0.2	0.37	135.33
10/23/2023	9.88	5.02	1350	0.0036	25.09	0.2	0.45	164.84

	MW-11 h₁ (ft)	MW-19 h₂ (ft)	Distance Δl (ft)	Hydraulic Gradient Δh/Δl (ft/ft)	Hydraulic Conductivity K	Assumed Effective Porosity (ne)	Calculated Groundwater Flow Velocity (feet/day)	Calculated Groundwater Flow Velocity (feet/year)
				Flow Path B				
4/17/2023	12.44	7.01	1600	0.0034	25.09	0.2	0.43	155.40
10/23/2023	10.78	4.39	1600	0.0040	25.09	0.2	0.50	182.87

Notes:

ft=feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year

Table 4.
Relative Percent Difference Calculations

1st Semi-Annual Monitoring Event

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-11	DUP-01	
Chloride	mg/L	12.2	12.3	0.8
Sulfate	mg/L	2.85	2.97	4.1
Calcium	mg/L	1.65	1.65	0.0
TDS	mg/L	67.0	47.0	35.1
Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-16	DUP-02	
Chloride	mg/L	10.00	10.20	2.0
Sulfate	mg/L	2.59	2.73	5.3
Calcium	mg/L	1.07	1.07	0.0
TDS	mg/L	37.0	38.0	2.7

2nd Semi-Annual Monitoring Event

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-11	DUP-04	
Chloride	mg/L	12.1	11.9	1.7
Sulfate	mg/L	2.72	2.67	1.9
Calcium	mg/L	1.42	1.49	4.8
TDS	mg/L	21.0	21.0	0.0
Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-19	DUP-01	
Chloride	mg/L	6.8	6.4	6.3
Sulfate	mg/L	2.62	2.48	5.5
Calcium	mg/L	1.70	1.73	1.7
TDS	mg/L	32.0	38.0	17.1

Figures

NORTH ASH MANAGEMENT UNIT

GYPSUM STORAGE AREA

JACKSON COUNTY

Vancleave

PLANT DANIEL

Gautier

Pascagoula

MISSISSIPPI ALABAMA
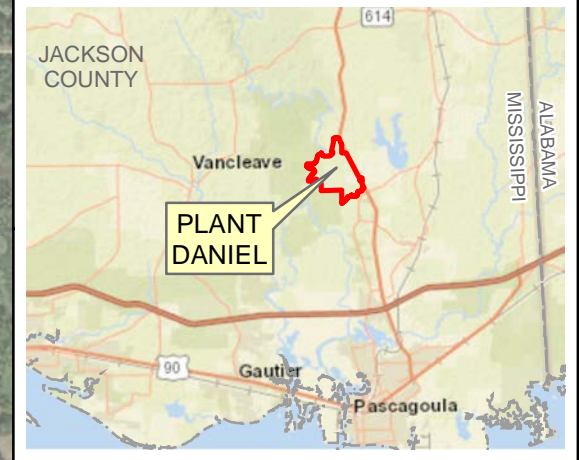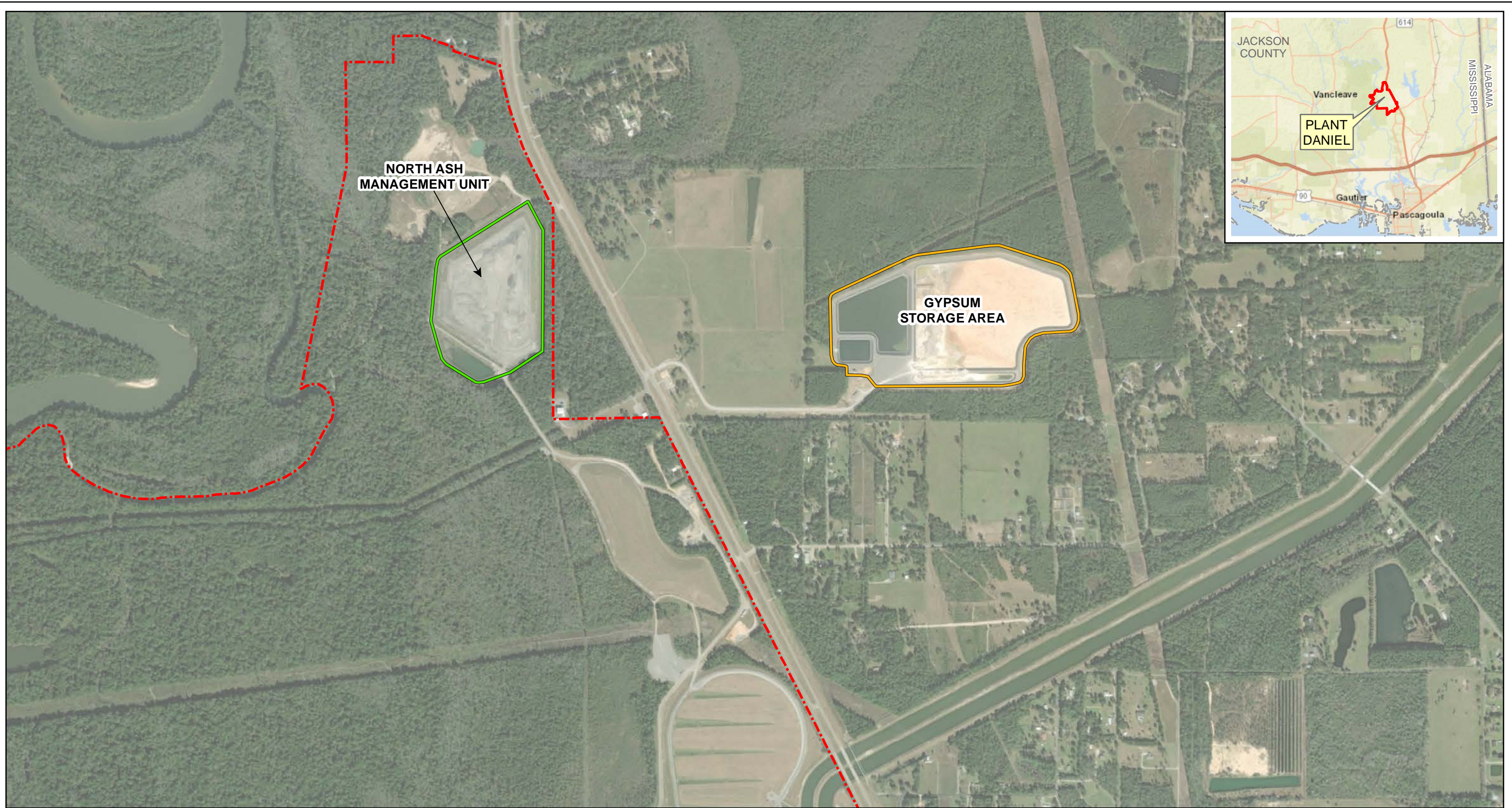
Legend

Gypsum Storage Area

North Ash Management Unit

Property Boundary (Approximate)

N

0   1,000   2,000   4,000 Feet

1 inch = 1,000 feet
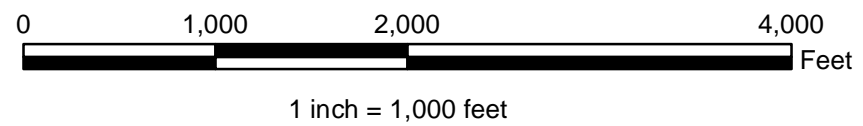
SCALE	DRAWING TITLE	
1:12000	SITE LOCATION MAP PLANT DANIEL NORTH ASH MANAGEMENT UNIT	
DATE		
12/21/2023		
DRAWN BY		
KAR	DRAWING NO	
CHECKED BY	FIGURE 1	Southern Company
RFS		
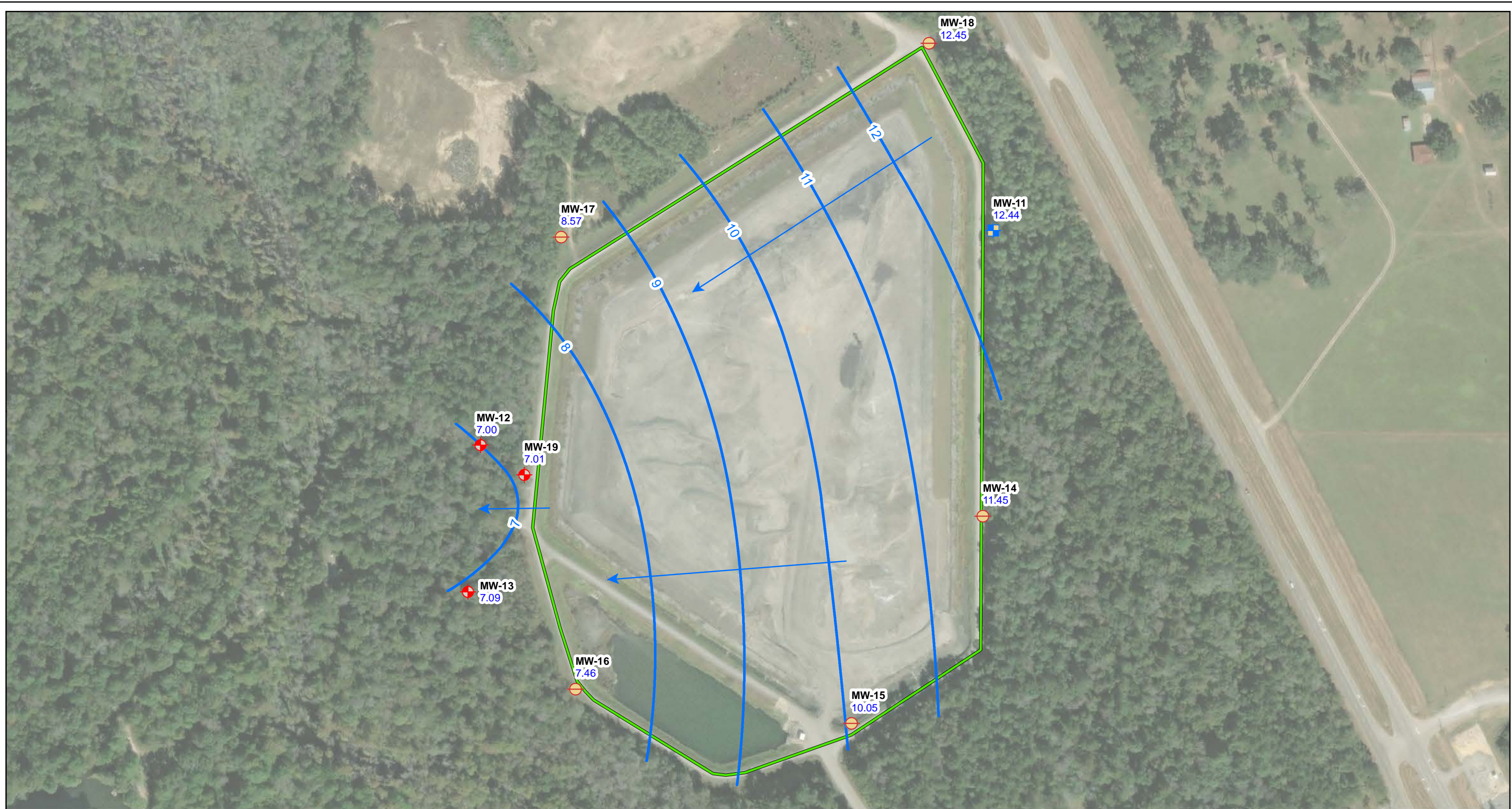
Legend

🔷 Upgradient Monitoring Well

🔴 Downgradient Monitoring Well

🟠 Piezometer (Water Level Only)

🟩 North Ash Management Unit

N

0   250   500 Feet

1 inch = 250 feet

SCALE	1:3000	DRAWING TITLE	MONITORING WELL LOCATION MAP
DATE	12/21/2023		PLANT DANIEL
DRAWN BY	KAR		NORTH ASH MANAGEMENT UNIT
CHECKED BY	RFS	DRAWING NO	FIGURE 2

Southern Company

MW-18
12.45

12

11

10

9

8

MW-17
8.57

MW-11
12.44

MW-12
7.00

MW-19
7.01

7

MW-14
11.45

MW-13
7.09

MW-16
7.46

MW-15
10.05

Legend

⊞ Upgradient Monitoring Well

⊕ Downgradient Monitoring Well

⊖ Piezometer (Water Level Only)

— Estimated Potentiometric Surface Contour (ft NAVD88)

↗ Approximate Groundwater Flow Direction

▭ North Ash Management Unit

MW-11
12.44 Well Name
Groundwater Elevation (ft NAVD88)

N

0   250   500
Feet

1 inch = 250 feet

Note: ft NAVD88 indicates feet relative to the North American Vertical Datum of 1988.

SCALE	DRAWING TITLE
1:3000	POTENTIOMETRIC SURFACE CONTOUR MAP
DATE	APRIL 17, 2023
12/21/2023	PLANT DANIEL
DRAWN BY	NORTH ASH MANAGEMENT UNIT
KWR	
CHECKED BY	DRAWING NO
RFS	**FIGURE 3**

▲ Southern Company

Legend

- Upgradient Monitoring Well
- Downgradient Monitoring Well
- Piezometer (Water Level Only)
- Estimated Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- North Ash Management Unit

MW-11
10.78
Well Name
Groundwater Elevation (ft NAVD88)

MW-18
10.77

MW-11
10.78

MW-17
7.03

MW-12
4.33

MW-19
4.39

MW-14
9.88

MW-13
4.29

MW-16
5.02

MW-15
8.48

N

0   250   500 Feet

1 inch = 250 feet

Note: ft NAVD88 indicates feet relative to the North American Vertical Datum of 1988.

SCALE	1:3000	DRAWING TITLE	POTENTIOMETRIC SURFACE CONTOUR MAP
DATE	12/21/2023		OCTOBER 23, 2023
			PLANT DANIEL
			NORTH ASH MANAGEMENT UNIT
DRAWN BY	KWR		
CHECKED BY	RFS	DRAWING NO	**FIGURE 4**

Southern Company

Appendix A

1st
Semi-Annual
Monitoring Event

eurofins

Environment Testing

I **ANALYTICAL REPORT**

PREPARED FOR

Attn: Robert (Trey) Singleton
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243
Generated 5/10/2023 3:40:02 PM Revision 1

JOB DESCRIPTION

Plant Daniel NAMU CCR

JOB NUMBER

180-155476-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

my EOL

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

Generated
5/10/2023 3:40:02 PM
Revision 1

Table of Contents

Eurofins Pittsburgh
5/10/2023 (Rev. 1)

Case Narrative

Job ID: 180-155476-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-155476-1

051023 Revied report to include field pH data at client request. This report replaces the report previously issued on 050423

Receipt
The samples were received on 4/21/2023 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 2 coolers at receipt time were 1.7°C and 2.6°C

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.

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
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

Eurofins Pittsburgh

5/10/2023 (Rev. 1)

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

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	05-03-23
California	State	2891	04-30-23
Connecticut	State	PH-0688	05-03-23
Florida	NELAP	E871008	05-03-23
Georgia	State	PA 02-00416	04-30-23
Illinois	NELAP	004375	05-03-23
Kansas	NELAP	E-10350	05-03-23
Kentucky (UST)	State	162013	04-30-23
Kentucky (WW)	State	KY98043	05-03-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	05-03-23
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	05-03-23
New Hampshire	NELAP	2030	05-03-23
New Jersey	NELAP	PA005	05-03-23
New York	NELAP	11182	05-03-23
North Carolina (WW/SW)	State	434	05-03-23
North Dakota	State	R-227	04-30-23
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	05-03-23
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23
Texas	NELAP	T104704528	05-03-23
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	05-03-23
Virginia	NELAP	10043	05-03-23
West Virginia DEP	State	142	05-03-23
Wisconsin	State	998027800	08-31-23

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	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-23
Florida	NELAP	E87052	06-30-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	07-01-23
Kentucky (UST)	State	NA	06-30-23
Louisiana	NELAP	30690	06-30-23
Louisiana (All)	NELAP	30690	06-30-23

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

Eurofins Pittsburgh

5/10/2023 (Rev. 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
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wyoming	State	8TMS-L	06-30-23

Eurofins Pittsburgh

5/10/2023 (Rev. 1)

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-155476-1	MW-11	Water	04/19/23 15:50	04/21/23 09:30
180-155476-2	MW-14	Water	04/19/23 12:54	04/21/23 09:30
180-155476-3	MW-15	Water	04/19/23 09:32	04/21/23 09:30
180-155476-4	MW-16	Water	04/20/23 11:57	04/21/23 09:30
180-155476-5	MW-17	Water	04/20/23 07:40	04/21/23 09:30
180-155476-6	MW-18	Water	04/19/23 17:25	04/21/23 09:30
180-155476-7	MW-19	Water	04/20/23 09:18	04/21/23 09:30
180-155476-8	DUP-01	Water	04/19/23 14:50	04/21/23 09:30
180-155476-9	DUP-02	Water	04/20/23 10:57	04/21/23 09:30
180-155476-10	EB-01	Water	04/20/23 08:51	04/21/23 09:30
180-155476-11	FB-01	Water	04/20/23 08:41	04/21/23 09:30

Method Summary

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	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

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

Eurofins Pittsburgh

5/10/2023 (Rev. 1)

Client: Southern Company

Project/Site: Plant Daniel NAMU CCR

Job ID: 180-155476-1

Client Sample ID: MW-11
Date Collected: 04/19/23 15:50
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-1
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	433276	04/25/23 14:39	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:09	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433500	04/26/23 19:13	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			434791	04/19/23 16:50	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-14
Date Collected: 04/19/23 12:54
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-2
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	433276	04/25/23 15:24	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:21	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433500	04/26/23 19:13	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			434791	04/19/23 13:54	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-15
Date Collected: 04/19/23 09:32
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-3
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	433276	04/25/23 15:38	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:29	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433500	04/26/23 19:13	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			434791	04/19/23 10:32	FDS	EET PIT
		Instrument ID: NOEQUIP								

Eurofins Pittsburgh

5/10/2023 (Rev. 1)

Client Sample ID: MW-16
Date Collected: 04/20/23 11:57
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-4
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	433276	04/25/23 15:53	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:41	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433644	04/27/23 18:38	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			434791	04/20/23 12:57	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-17
Date Collected: 04/20/23 07:40
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-5
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	433276	04/25/23 16:08	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:13	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433644	04/27/23 18:38	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			434791	04/20/23 08:40	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-18
Date Collected: 04/19/23 17:25
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-6
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	433276	04/25/23 16:23	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:25	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433500	04/26/23 19:13	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			434791	04/19/23 18:25	FDS	EET PIT
		Instrument ID: NOEQUIP								

Eurofins Pittsburgh

Lab Chronicle

Client Sample ID: MW-19
Date Collected: 04/20/23 09:18
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-7
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	433276	04/25/23 17:07	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:37	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433644	04/27/23 18:38	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			434791	04/20/23 10:18	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: DUP-01
Date Collected: 04/19/23 14:50
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-8
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	433276	04/25/23 17:22	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:17	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433500	04/26/23 19:13	LWM	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: DUP-02
Date Collected: 04/20/23 10:57
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-9
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	433276	04/25/23 17:37	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 18:33	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433644	04/27/23 18:38	LWM	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: EB-01
Date Collected: 04/20/23 08:51
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-10
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	433276	04/25/23 17:51	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 17:52	BWR	EET SAV
		Instrument ID: ICPMSC								

Eurofins Pittsburgh

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Client Sample ID: EB-01
Date Collected: 04/20/23 08:51
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-10
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	SM 2540C		1	100 mL	100 mL	433644	04/27/23 18:38	LWM	EET PIT

Client Sample ID: FB-01
Date Collected: 04/20/23 08:41
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-11
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		1	1 mL	1 mL	433276	04/25/23 18:06	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	776373	05/02/23 09:23	RR	EET SAV
Total Recoverable	Analysis	6020B		1			776852	05/03/23 17:56	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	433644	04/27/23 18:38	LWM	EET PIT
		Instrument ID: NOEQUIP								

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
       FDS = Sampler Field
       LWM = Leslie McIntire
       SNL = Sean Lordo
Lab: EET SAV
   Batch Type: Prep
       RR = Robert Rancourt
   Batch Type: Analysis
       BWR = Bryn Robertson

Eurofins Pittsburgh

5/10/2023 (Rev. 1)

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Client Sample ID: MW-11
Date Collected: 04/19/23 15:50
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-1
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.2		1.00	0.713	mg/L			04/25/23 14:39	1
Fluoride	0.0416	J	0.100	0.0260	mg/L			04/25/23 14:39	1
Sulfate	2.85		1.00	0.756	mg/L			04/25/23 14:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:09	1
Calcium	1.65		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	67.0		10.0	10.0	mg/L			04/26/23 19:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.61				SU			04/19/23 16:50	1

Client Sample ID: MW-14
Date Collected: 04/19/23 12:54
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-2
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.2		1.00	0.713	mg/L			04/25/23 15:24	1
Fluoride	0.0415	J	0.100	0.0260	mg/L			04/25/23 15:24	1
Sulfate	1.93		1.00	0.756	mg/L			04/25/23 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:21	1
Calcium	2.63		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	41.0		10.0	10.0	mg/L			04/26/23 19:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.80				SU			04/19/23 13:54	1

Client Sample ID: MW-15
Date Collected: 04/19/23 09:32
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-3
Matrix: Water

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			04/25/23 15:38	1
Fluoride	0.0275	J	0.100	0.0260	mg/L			04/25/23 15:38	1
Sulfate	2.42		1.00	0.756	mg/L			04/25/23 15:38	1

Eurofins Pittsburgh

5/10/2023 (Rev. 1)

Client Sample ID: MW-15
Date Collected: 04/19/23 09:32
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:29	1
Calcium	0.682		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:29	1

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			04/26/23 19:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.70				SU			04/19/23 10:32	1

Client Sample ID: MW-16
Date Collected: 04/20/23 11:57
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-4
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.0		1.00	0.713	mg/L			04/25/23 15:53	1
Fluoride	0.0322	J	0.100	0.0260	mg/L			04/25/23 15:53	1
Sulfate	2.59		1.00	0.756	mg/L			04/25/23 15:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:41	1
Calcium	1.07		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	37.0		10.0	10.0	mg/L			04/27/23 18:38	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.50				SU			04/20/23 12:57	1

Client Sample ID: MW-17
Date Collected: 04/20/23 07:40
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-5
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.73		1.00	0.713	mg/L			04/25/23 16:08	1
Fluoride	0.0271	J	0.100	0.0260	mg/L			04/25/23 16:08	1
Sulfate	3.44		1.00	0.756	mg/L			04/25/23 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:13	1
Calcium	0.855		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:13	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			04/27/23 18:38	1

Eurofins Pittsburgh

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Client Sample ID: MW-17　　　　　　　　　　　　**Lab Sample ID: 180-155476-5**
Date Collected: 04/20/23 07:40　　　　　　　　　　　　　　　　　　**Matrix: Water**
Date Received: 04/21/23 09:30

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.79**				SU			04/20/23 08:40	1

Client Sample ID: MW-18　　　　　　　　　　　　**Lab Sample ID: 180-155476-6**
Date Collected: 04/19/23 17:25　　　　　　　　　　　　　　　　　　**Matrix: Water**
Date Received: 04/21/23 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.08**		1.00	0.713	mg/L			04/25/23 16:23	1
Fluoride	**0.0297**	J	0.100	0.0260	mg/L			04/25/23 16:23	1
Sulfate	**7.48**		1.00	0.756	mg/L			04/25/23 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.0256**	J	0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:25	1
Calcium	**0.368**	J	0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:25	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			04/26/23 19:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.65**				SU			04/19/23 18:25	1

Client Sample ID: MW-19　　　　　　　　　　　　**Lab Sample ID: 180-155476-7**
Date Collected: 04/20/23 09:18　　　　　　　　　　　　　　　　　　**Matrix: Water**
Date Received: 04/21/23 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.84**		1.00	0.713	mg/L			04/25/23 17:07	1
Fluoride	**0.0566**	J	0.100	0.0260	mg/L			04/25/23 17:07	1
Sulfate	**3.73**		1.00	0.756	mg/L			04/25/23 17:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.0318**	J	0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:37	1
Calcium	**15.4**		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**66.0**		10.0	10.0	mg/L			04/27/23 18:38	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.06**				SU			04/20/23 10:18	1

Eurofins Pittsburgh

5/10/2023 (Rev. 1)

Client Sample Results

Client Sample ID: DUP-01 **Lab Sample ID: 180-155476-8**
Date Collected: 04/19/23 14:50 **Matrix: Water**
Date Received: 04/21/23 09:30

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			04/25/23 17:22	1
Fluoride	**0.0457**	J	0.100	0.0260	mg/L			04/25/23 17:22	1
Sulfate	**2.97**		1.00	0.756	mg/L			04/25/23 17:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:17	1
Calcium	**1.65**		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**47.0**		10.0	10.0	mg/L			04/26/23 19:13	1

Client Sample ID: DUP-02 **Lab Sample ID: 180-155476-9**
Date Collected: 04/20/23 10:57 **Matrix: Water**
Date Received: 04/21/23 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.2**		1.00	0.713	mg/L			04/25/23 17:37	1
Fluoride	**0.0376**	J	0.100	0.0260	mg/L			04/25/23 17:37	1
Sulfate	**2.73**		1.00	0.756	mg/L			04/25/23 17:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 18:33	1
Calcium	**1.07**		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 18:33	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			04/27/23 18:38	1

Client Sample ID: EB-01 **Lab Sample ID: 180-155476-10**
Date Collected: 04/20/23 08:51 **Matrix: Water**
Date Received: 04/21/23 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			04/25/23 17:51	1
Fluoride	<0.0260		0.100	0.0260	mg/L			04/25/23 17:51	1
Sulfate	<0.756		1.00	0.756	mg/L			04/25/23 17:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 17:52	1
Calcium	<0.140		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 17:52	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			04/27/23 18:38	1

Eurofins Pittsburgh

Client Sample ID: FB-01
Date Collected: 04/20/23 08:41
Date Received: 04/21/23 09:30

Lab Sample ID: 180-155476-11
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			04/25/23 18:06	1
Fluoride	<0.0260		0.100	0.0260	mg/L			04/25/23 18:06	1
Sulfate	<0.756		1.00	0.756	mg/L			04/25/23 18:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 17:56	1
Calcium	<0.140		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 17:56	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			04/27/23 18:38	1

Eurofins Pittsburgh

5/10/2023 (Rev. 1)

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-433276/6
Matrix: Water
Analysis Batch: 433276

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			04/25/23 10:16	1
Fluoride	<0.0260		0.100	0.0260	mg/L			04/25/23 10:16	1
Sulfate	<0.756		1.00	0.756	mg/L			04/25/23 10:16	1

Lab Sample ID: LCS 180-433276/7
Matrix: Water
Analysis Batch: 433276

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	48.38		mg/L		97	80 - 120
Fluoride	2.50	2.505		mg/L		100	80 - 120
Sulfate	50.0	49.54		mg/L		99	80 - 120

Lab Sample ID: 180-155476-1 MS
Matrix: Water
Analysis Batch: 433276

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	12.2		50.0	63.83		mg/L		103	80 - 120
Fluoride	0.0416	J	2.50	2.731		mg/L		108	80 - 120
Sulfate	2.85		50.0	56.00		mg/L		106	80 - 120

Lab Sample ID: 180-155476-1 MSD
Matrix: Water
Analysis Batch: 433276

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	12.2		50.0	59.70		mg/L		95	80 - 120	7	15
Fluoride	0.0416	J	2.50	2.544		mg/L		100	80 - 120	7	15
Sulfate	2.85		50.0	52.12		mg/L		99	80 - 120	7	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-776373/1-A
Matrix: Water
Analysis Batch: 776852

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 776373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.100	0.0220	mg/L		05/02/23 09:23	05/03/23 17:20	1
Calcium	<0.140		0.500	0.140	mg/L		05/02/23 09:23	05/03/23 17:20	1

Lab Sample ID: LCS 680-776373/2-A
Matrix: Water
Analysis Batch: 776852

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 776373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.200	0.1991		mg/L		100	80 - 120
Calcium	5.00	5.048		mg/L		101	80 - 120

QC Sample Results

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

Lab Sample ID: MB 180-433500/1
Matrix: Water
Analysis Batch: 433500

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			04/26/23 19:13	1

Lab Sample ID: LCS 180-433500/2
Matrix: Water
Analysis Batch: 433500

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			580	594.0		mg/L		102	85 - 115		

Lab Sample ID: MB 180-433644/1
Matrix: Water
Analysis Batch: 433644

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			04/27/23 18:38	1

Lab Sample ID: LCS 180-433644/2
Matrix: Water
Analysis Batch: 433644

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			580	586.0		mg/L		101	85 - 115		

Lab Sample ID: 180-155476-7 DU
Matrix: Water
Analysis Batch: 433644

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D		RPD	RPD Limit
Total Dissolved Solids	66.0			68.00		mg/L			3	10

Eurofins Pittsburgh

HPLC/IC

Analysis Batch: 433276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-155476-1	MW-11	Total/NA	Water	EPA 9056A	
180-155476-2	MW-14	Total/NA	Water	EPA 9056A	
180-155476-3	MW-15	Total/NA	Water	EPA 9056A	
180-155476-4	MW-16	Total/NA	Water	EPA 9056A	
180-155476-5	MW-17	Total/NA	Water	EPA 9056A	
180-155476-6	MW-18	Total/NA	Water	EPA 9056A	
180-155476-7	MW-19	Total/NA	Water	EPA 9056A	
180-155476-8	DUP-01	Total/NA	Water	EPA 9056A	
180-155476-9	DUP-02	Total/NA	Water	EPA 9056A	
180-155476-10	EB-01	Total/NA	Water	EPA 9056A	
180-155476-11	FB-01	Total/NA	Water	EPA 9056A	
MB 180-433276/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-433276/7	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-155476-1 MS	MW-11	Total/NA	Water	EPA 9056A	
180-155476-1 MSD	MW-11	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 776373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-155476-1	MW-11	Total Recoverable	Water	3005A	
180-155476-2	MW-14	Total Recoverable	Water	3005A	
180-155476-3	MW-15	Total Recoverable	Water	3005A	
180-155476-4	MW-16	Total Recoverable	Water	3005A	
180-155476-5	MW-17	Total Recoverable	Water	3005A	
180-155476-6	MW-18	Total Recoverable	Water	3005A	
180-155476-7	MW-19	Total Recoverable	Water	3005A	
180-155476-8	DUP-01	Total Recoverable	Water	3005A	
180-155476-9	DUP-02	Total Recoverable	Water	3005A	
180-155476-10	EB-01	Total Recoverable	Water	3005A	
180-155476-11	FB-01	Total Recoverable	Water	3005A	
MB 680-776373/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-776373/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 776852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-155476-1	MW-11	Total Recoverable	Water	6020B	776373
180-155476-2	MW-14	Total Recoverable	Water	6020B	776373
180-155476-3	MW-15	Total Recoverable	Water	6020B	776373
180-155476-4	MW-16	Total Recoverable	Water	6020B	776373
180-155476-5	MW-17	Total Recoverable	Water	6020B	776373
180-155476-6	MW-18	Total Recoverable	Water	6020B	776373
180-155476-7	MW-19	Total Recoverable	Water	6020B	776373
180-155476-8	DUP-01	Total Recoverable	Water	6020B	776373
180-155476-9	DUP-02	Total Recoverable	Water	6020B	776373
180-155476-10	EB-01	Total Recoverable	Water	6020B	776373
180-155476-11	FB-01	Total Recoverable	Water	6020B	776373
MB 680-776373/1-A	Method Blank	Total Recoverable	Water	6020B	776373
LCS 680-776373/2-A	Lab Control Sample	Total Recoverable	Water	6020B	776373

General Chemistry

Analysis Batch: 433500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-155476-1	MW-11	Total/NA	Water	SM 2540C	
180-155476-2	MW-14	Total/NA	Water	SM 2540C	
180-155476-3	MW-15	Total/NA	Water	SM 2540C	
180-155476-6	MW-18	Total/NA	Water	SM 2540C	
180-155476-8	DUP-01	Total/NA	Water	SM 2540C	
MB 180-433500/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-433500/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 433644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-155476-4	MW-16	Total/NA	Water	SM 2540C	
180-155476-5	MW-17	Total/NA	Water	SM 2540C	
180-155476-7	MW-19	Total/NA	Water	SM 2540C	
180-155476-9	DUP-02	Total/NA	Water	SM 2540C	
180-155476-10	EB-01	Total/NA	Water	SM 2540C	
180-155476-11	FB-01	Total/NA	Water	SM 2540C	
MB 180-433644/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-433644/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-155476-7 DU	MW-19	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 434791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-155476-1	MW-11	Total/NA	Water	Field Sampling	
180-155476-2	MW-14	Total/NA	Water	Field Sampling	
180-155476-3	MW-15	Total/NA	Water	Field Sampling	
180-155476-4	MW-16	Total/NA	Water	Field Sampling	
180-155476-5	MW-17	Total/NA	Water	Field Sampling	
180-155476-6	MW-18	Total/NA	Water	Field Sampling	
180-155476-7	MW-19	Total/NA	Water	Field Sampling	

Eurofins Pittsburgh

Eurofins TestAmerica, Pittsburgh

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

Chain of Custody Record

eurofins | Environment Testing America

180-155476 Chain of Custody

Client Information		
Client Contact: SCS Contacts	Sampler: Rick Hayendorfer	Lab PM: Brown, Shali
Company: SCS	Phone: 850-336-0192	E-Mail: shali.brown@eurofinset.co
Address: 3535 Colannade Pkwy BinS 530 EC	Due Date Requested:	
City: Birmingham	TAT Requested (days):	
State, Zip: Alabama		
Phone: 205.992.6283	PO #: SCS10382606	RDH 4-20-23
Email: SCS Contacts / Trey singleton RoSingleton@Southernco.com	WO #:	
Project Name: Plant Daniel NAMU CCR	Project #: 18020047	
Site:	SSOW#:	

Analysis Requested

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Boron and Calcium (App III)	Chloride Fluoride Sulfate	Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
				Preservation Code:							
MW-11	4-19-23	1550	G	water No			X	X	X	3	
MW-14	4-19-23	1254	G	water No			X	X	X	3	
MW-15	4-19-23	0932	G	water No			X	X	X	3	
MW-16	4-20-23	1157	G	water No			X	X	X	3	
MW-17	4-20-23	0740	G	water No			X	X	X	3	
MW-18	4-19-23	1725	G	water No			X	X	X	3	
MW-19	4-20-23	0918	G	water No			X	X	X	3	
DUP-01	4-19-23	1450	G	water No			X	X	X	3	
DUP-02	4-20-23	1057	G	water No			X	X	X	3	
EB-01	4-20-23	0851	G	water No			X	X	X	3	
FB-01	4-20-23	0841	G	water No			X	X	X	3	

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
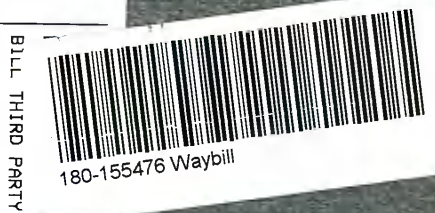
Deliverable Requested: I, II, III, IV, Other (specify) level II Reports and Associated EDDs

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 4-20-23 1423		Company: RDH EN.	Received by:	Date/Time: 4-21-23 0930	Company: EPitmE
Relinquished by:	Date/Time:		Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:		Company:	Received by:	Date/Time:	Company:

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

5/10/2023 (Rev. 1)

XN AGCA

MASTER
0201
TRK# **3972 9283 9021**

1 of 2

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

Uncorrected temp 2.6
Thermometer ID
CF 0.0 Initials _____

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

TO **EUROFINS TEST AMERICA**

301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238

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

DEPT:

BILL THIRD PARTY

180-155476 Waybill

2401
13

Part # 156297-435 RRDB2 EXP 03/24

FRI – 21 APR 10:30A

PRIORITY OVERNIGHT

15238
PA-US   PIT

FedEx
Express

E

J232023040501UV

Chain of Custody Record

eurofins | Environment Testing

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

COC No: 180-485778 1
Page: Page 1 of 2
Job #: 180-155476-1

Client Information (Sub Contract Lab)

Field	Value
Client Contact:	Shipping/Receiving
Company:	Eurofins Environment Testing Southeast,
Address:	5102 LaRoche Avenue
City:	Savannah
State, Zip:	GA, 31404
Phone:	912-354-7858(Tel) 912-352-0165(Fax)
Email:	
Project Name:	Plant Daniel NAMU CCR
Project #:	18020047
SSOW#:	

Sampler:
Phone:
State of Origin: Mississippi
Lab PM: Brown Shali
E-Mail: Shali Brown@et.eurofinsus.com

Due Date Requested: 5/4/2023
TAT Requested (days):
PO #:
WO #:

Primary Deliverable Rank: 2

Analysis Requested

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

Sample Identification – Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A App III Boron and Calcium	Total Number of containers	Special Instructions/Note
MW-11 (180-155476-1)	4/19/23	15 50 Central		Water			X	1	
MW-14 (180-155476-2)	4/19/23	12 54 Central		Water			X	1	
MW-15 (180-155476-3)	4/19/23	09 32 Central		Water			X	1	
MW-16 (180-155476-4)	4/20/23	11 57 Central		Water			X	1	
MW-17 (180-155476-5)	4/20/23	07 40 Central		Water			X	1	
MW-18 (180-155476-6)	4/19/23	17 25 Central		Water			X	1	
MW-19 (180-155476-7)	4/20/23	09 18 Central		Water			X	1	
DUP-01 (180-155476-8)	4/19/23	14 50 Central		Water			X	1	
DUP-02 (180-155476-9)	4/20/23	10 57 Central		Water			X	1	

Accreditations Required (See note):
Preservation Code:

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.

Possible Hazard Identification
Unconfirmed

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

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

Special Instructions/QC Requirements

Relinquished by	Date/Time: 4/28/23	Company: EQ ME
Relinquished by	Date/Time:	Company:
Relinquished by	Date/Time:	Company:

Received by	Date:	Time:	Company: EQ ME
Received by	Date/Time:	Company:
Received by	Date/Time:	Company:

Empty Kit Relinquished by:

Method of Shipment:

Cooler Temperature(s) °C and Other Remarks. 2 4 3.0

Custody Seals Intact: △ Yes △ No
Custody Seal No

Ver. 06/08/2021

5/10/2023 (Rev. 1)

Chain of Custody Record

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

:: eurofins | Environment Testing

COC No 180-485778 2
Page Page 2 of 2
Job #: 180-155476-1

Client Information (Sub Contract Lab)

Client Contact: Shipping/Receiving	**Sampler**	**Phone:**
Company Eurofins Environment Testing Southeast,		
Address: 5102 LaRoche Avenue	**Due Date Requested** 5/4/2023	
City: Savannah	**TAT Requested (days)**	
State Zip: GA, 31404		
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	**PO #:**	
Email:	**WO #:**	
Project Name: Plant Daniel NAMU CCR	**Project #:** 18020047	
Site:	**SSOW#:**	

Lab PM Brown, Shali
E-Mail: Shali Brown@et.eurofinsus com
Carrier Tracking No(s)
State of Origin: Mississippi

Accreditations Required (See note):

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A App III Boron and Calcium	Total Number of containers	Special Instructions/Note:
EB-01 (180-155476-10)	4/20/23	08 51 Central		Water				X	1	
FB-01 (180-155476-11)	4/20/23	08 41 Central		Water				X	1	

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.

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested I II, III IV Other (specify) Primary Deliverable Rank: 2
Special Instructions/QC Requirements

Empty Kit Relinquished by	Date:	Time:	Method of Shipment:
Relinquished by	Date/Time: 4/28/23	Company EENS	Received by
Relinquished by	Date/Time:	Company	Received by	Date/Type:
Relinquished by	Date/Time:	Company	Received by	Date/Time:

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Login Number: 155476   **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	

Login Sample Receipt Checklist

Login Number: 155476   **List Source: Eurofins Savannah**
List Number: 2   **List Creation: 04/29/23 11:57 AM**
Creator: Givens, Keshia

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

eurofins

Environment Testing

I ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/8/2023 2:22:34 PM Revision 1

JOB DESCRIPTION

Plant Daniel NAMU

JOB NUMBER

180-157165-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

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

Generated
6/8/2023 2:22:34 PM
Revision 1

Table of Contents

Eurofins Pittsburgh
6/8/2023 (Rev. 1)

Client: Southern Company
Project/Site: Plant Daniel NAMU

Job ID: 180-157165-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-157165-1

060823 Revised report to add field pH at client request. This report replaces the report previously issued on 060523.

Receipt

The samples were received on 5/26/2023 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°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: The laboratory control sample (LCS) for preparation batch 680-781343 and analytical batch 680-781604 recovered outside control limits for the following analyte: Boron. The analyte were biased high in the LCS and was not detected in the associated samples; therefore, the data 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.

Definitions/Glossary

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
*+	LCS and/or LCSD is outside acceptance limits, high biased.

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

Eurofins Pittsburgh

Accreditation/Certification Summary

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	06-27-23
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-23
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-23
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-23 *
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	05-31-23
Virginia	NELAP	10043	09-14-23
West Virginia DEP	State	142	03-31-24
Wisconsin	State	998027800	08-31-23

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	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-23
Florida	NELAP	E87052	06-30-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	06-30-23
Kentucky (UST)	State	NA	06-30-23
Louisiana	NELAP	30690	06-30-23
Louisiana (All)	NELAP	30690	06-30-23

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

Eurofins Pittsburgh

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
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wyoming	State	8TMS-L	06-30-23

Eurofins Pittsburgh

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-157165-1	MW-19	Water	05/24/23 13:12	05/26/23 09:35
180-157165-2	DUP-01	Water	05/24/23 12:12	05/26/23 09:35

Method Summary

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	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

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

Eurofins Pittsburgh

6/8/2023 (Rev. 1)

Lab Chronicle

Client Sample ID: MW-19

Date Collected: 05/24/23 13:12

Date Received: 05/26/23 09:35

Lab Sample ID: 180-157165-1

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			436477	05/30/23 19:37	SNL	EET PIT
		Instrument ID: CHIC2100A								
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	436380	05/27/23 18:26	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	781343	06/01/23 05:47	RR	EET SAV
Total Recoverable	Analysis	6020B		1			781604	06/01/23 19:12	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	436529	05/30/23 20:01	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			437404	05/24/23 14:12	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: DUP-01

Date Collected: 05/24/23 12:12

Date Received: 05/26/23 09:35

Lab Sample ID: 180-157165-2

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			436477	05/30/23 19:51	SNL	EET PIT
		Instrument ID: CHIC2100A								
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	436380	05/27/23 18:41	SNL	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	781343	06/01/23 05:47	RR	EET SAV
Total Recoverable	Analysis	6020B		1			781604	06/01/23 19:16	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	436529	05/30/23 20:01	LWM	EET PIT
		Instrument ID: NOEQUIP								

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

        FDS = Sampler Field

        LWM = Leslie McIntire

        SNL = Sean Lordo

Lab: EET SAV

    Batch Type: Prep

        RR = Robert Rancourt

    Batch Type: Analysis

        BWR = Bryn Robertson

Eurofins Pittsburgh

Client Sample Results

Client Sample ID: MW-19
Date Collected: 05/24/23 13:12
Date Received: 05/26/23 09:35

Lab Sample ID: 180-157165-1
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			05/27/23 18:26	1
Fluoride	0.0849	J	0.100	0.0260	mg/L			05/30/23 19:37	1
Sulfate	2.62		1.00	0.756	mg/L			05/27/23 18:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220	*+	0.0800	0.0220	mg/L		06/01/23 05:47	06/01/23 19:12	1
Calcium	1.70		0.500	0.140	mg/L		06/01/23 05:47	06/01/23 19:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	32.0		10.0	10.0	mg/L			05/30/23 20:01	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.15				SU			05/24/23 14:12	1

Client Sample ID: DUP-01
Date Collected: 05/24/23 12:12
Date Received: 05/26/23 09:35

Lab Sample ID: 180-157165-2
Matrix: Water

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			05/27/23 18:41	1
Fluoride	0.0443	J	0.100	0.0260	mg/L			05/30/23 19:51	1
Sulfate	2.48		1.00	0.756	mg/L			05/27/23 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220	*+	0.0800	0.0220	mg/L		06/01/23 05:47	06/01/23 19:16	1
Calcium	1.73		0.500	0.140	mg/L		06/01/23 05:47	06/01/23 19:16	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			05/30/23 20:01	1

QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel NAMU

Job ID: 180-157165-1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-436380/6
Matrix: Water
Analysis Batch: 436380

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			05/27/23 11:55	1
Fluoride	<0.0260		0.100	0.0260	mg/L			05/27/23 11:55	1
Sulfate	<0.756		1.00	0.756	mg/L			05/27/23 11:55	1

Lab Sample ID: LCS 180-436380/7
Matrix: Water
Analysis Batch: 436380

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	50.20		mg/L		100	80 - 120
Fluoride	2.50	2.609		mg/L		104	80 - 120
Sulfate	50.0	50.62		mg/L		101	80 - 120

Lab Sample ID: MB 180-436477/6
Matrix: Water
Analysis Batch: 436477

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			05/30/23 13:18	1
Fluoride	<0.0260		0.100	0.0260	mg/L			05/30/23 13:18	1
Sulfate	<0.756		1.00	0.756	mg/L			05/30/23 13:18	1

Lab Sample ID: LCS 180-436477/7
Matrix: Water
Analysis Batch: 436477

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	50.91		mg/L		102	80 - 120
Fluoride	2.50	2.718		mg/L		109	80 - 120
Sulfate	50.0	50.85		mg/L		102	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-781343/1-A
Matrix: Water
Analysis Batch: 781604

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 781343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		06/01/23 05:47	06/01/23 18:49	1
Calcium	<0.140		0.500	0.140	mg/L		06/01/23 05:47	06/01/23 18:49	1

Lab Sample ID: LCS 680-781343/2-A
Matrix: Water
Analysis Batch: 781604

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 781343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.200	0.2427	*+	mg/L		121	80 - 120
Calcium	5.00	5.379		mg/L		108	80 - 120

Eurofins Pittsburgh

6/8/2023 (Rev. 1)

Client: Southern Company
Project/Site: Plant Daniel NAMU

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

Lab Sample ID: MB 180-436529/1
Matrix: Water
Analysis Batch: 436529

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			05/30/23 20:01	1

Lab Sample ID: LCS 180-436529/2
Matrix: Water
Analysis Batch: 436529

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			580	582.0		mg/L		100	85 - 115		

Eurofins Pittsburgh

6/8/2023 (Rev. 1)

QC Association Summary

HPLC/IC

Analysis Batch: 436380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-157165-1	MW-19	Total/NA	Water	EPA 9056A	
180-157165-2	DUP-01	Total/NA	Water	EPA 9056A	
MB 180-436380/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-436380/7	Lab Control Sample	Total/NA	Water	EPA 9056A	

Analysis Batch: 436477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-157165-1	MW-19	Total/NA	Water	EPA 9056A	
180-157165-2	DUP-01	Total/NA	Water	EPA 9056A	
MB 180-436477/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-436477/7	Lab Control Sample	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 781343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-157165-1	MW-19	Total Recoverable	Water	3005A	
180-157165-2	DUP-01	Total Recoverable	Water	3005A	
MB 680-781343/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-781343/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 781604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-157165-1	MW-19	Total Recoverable	Water	6020B	781343
180-157165-2	DUP-01	Total Recoverable	Water	6020B	781343
MB 680-781343/1-A	Method Blank	Total Recoverable	Water	6020B	781343
LCS 680-781343/2-A	Lab Control Sample	Total Recoverable	Water	6020B	781343

General Chemistry

Analysis Batch: 436529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-157165-1	MW-19	Total/NA	Water	SM 2540C	
180-157165-2	DUP-01	Total/NA	Water	SM 2540C	
MB 180-436529/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-436529/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 437404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-157165-1	MW-19	Total/NA	Water	Field Sampling	

Eurofins Pittsburgh

Chain of Custody Record

eurofins
Environment Testing
America

Client Information

Client Contact:	
SCS Contacts	Robert Singleton
Company	SCS
Address	3535 Colonnade Pkwy Bin S 530 EC
City	Birmingham
State, Zip	Alabama
Phone	205 992.6283
Email	RoSingle@SouthernCo.Com
SCS Contacts	
Project Name	
Site	

Sampler	Rick Hegedorfus
Phone	850-336-0192

Due Date Requested:

TAT Requested (days):

PO #

WO #

Project #

SSOW#

Lab PM	Brown, Shali
E-Mail	shali.brown@eurofinset.com

COC No

Page

Job #

Carrier Tracking No(s)

Analysis Requested

Boron 6020B
Calcium 6020B
Chloride 9056A
Fluoride 9056A
Sulfate 9056A
TDS SM2540C

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

Other:

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or NO)	Total Number of Containers						
			Preservation Code:									
MW-19	5-24-23	1312	G	water			X	X	X	X	X	X
DUP-01	5-24-23	1212	G	water	NO		X	X	X	X	X	X

180-157165 Chain of Custody

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

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

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:

Method of Shipment:

Empty Kit Relinquished by: | Date: | Time:

	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	5-24-23 1351	ROHEW		5-24-23 0950	EFPittPh
Relinquished by		Company	Received by	Date/Time	Company
Relinquished by		Company	Received by	Date/Time	Company

Custody Seals Intact. ☐ Yes ☐ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks

Ver 01/16/2019

TO
TESTAMERICA PITTSBURG LAB
301 ALFA DR

PITTSBURGH PA 15238

(850) 336-0192   REF:
INV:
PO: DEPT:

Uncorrected temp _____ °C   **FedEx**
Thermometer ID 26-?? _____   **Express**

CF ◯   Initials   JD   **E**

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

2 of 2
MPS# 3987 4338 7569
0263
Mstr# 3987 4338 7558   0201

XN AGCA

THU – 25 MAY 10:30A
PRIORITY OVERNIGHT

15238
PA-US   **PIT**

180-157165 Waybill

Eurofins Pittsburgh

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

Chain of Custody Record

✤ eurofins | Environment Testing

Sampler	Carrier Tracking No(s)
	COC No: 180-487906 1
Lab PM: Brown Shali	State of Origin: Mississippi
Phone:	Page: Page 1 of 1
E-Mail: Shali.Brown@et.eurofinsus.com	Job #: 180-157165-1

Client Information (Sub Contract Lab)

Client Contact: Shipping/Receiving

Company: Eurofins Environment Testing Southeast,

Address: 5102 LaRoche Avenue,

City: Savannah

State, Zip: GA, 31404

Phone: 912-354-7858(Tel) 912-352-0165(Fax)

PO #:

Email:

WO #:

Project #: 18020047

Project Name: Plant Daniel NAMU

Site:

SSOW#:

Due Date Requested: 6/12/2023

TAT Requested (days):

Accreditations Required (See note)

Preservation Codes

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA

M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A App III Boron and Calcium		Total Number of containers	Special Instructions/Note:
MW-19 (180-157165-1)	5/24/23	13.12 Central		Water			X		2	
DUP-01 (180-157165-2)	5/24/23	12.12 Central		Water			X		2	

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.

Possible Hazard Identification

Unconfirmed

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

Empty Kit Relinquished by:

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:

Relinquished by:	Date/Time: 5130123 1700	Company: EQ/NB	Received by: 9H	Date/Time: 05-3-25	Method of Shipment:	Company
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 10:36		Company
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:		Company

Custody Seals Intact: △ Yes △ No   Custody Seal No   Cooler Temperature(s) °C and Other Remarks: 80.26

Ver. 06/08/2021

Login Sample Receipt Checklist

Client: Southern Company

Login Number: 157165

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	

Login Sample Receipt Checklist

Client: Southern Company

Login Number: 157165
List Number: 2
Creator: Harley, Tynisha

List Source: Eurofins Savannah
List Creation: 05/31/23 12:02 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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").	True	
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: 4/19/2023 3:05:04 PM
Project: Daniel NAMU CCR MW-11
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-11
   Well Diameter: 2 in
   Casing Type: PVC
   Screen Length: 5 ft
   Top of Screen: 28 ft
   Total Depth: 33 ft
   Initial Depth to Water: 12.65 ft
	Pump Type: PP
	   Tubing Type: PE
	   Pump Intake From TOC: 30.5 ft
	   Estimated Total Volume Pumped: 16000 ml
	   Flow Cell Volume: 90 ml
	   Final Flow Rate: 400 ml/min
	   Final Draw Down: 2.71 ft
		Instrument Used: Aqua TROLL 400
		   Serial Number: 852546

Test Notes:
Air valve on the well head is broken so I connected a Peristaltic pump to the water line and pumped water that way.

Weather Conditions:
Sunny 78

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	
4/19/2023 3:05 PM	00:00	4.74 pH	25.05 °C	68.38 µS/cm	6.79 mg/L		117.9 mV	12.65 ft	400.00 ml/min
4/19/2023 3:10 PM	05:00	4.78 pH	21.86 °C	62.18 µS/cm	2.98 mg/L	7.49 NTU	102.0 mV	13.93 ft	400.00 ml/min
4/19/2023 3:15 PM	10:00	4.68 pH	21.61 °C	62.81 µS/cm	1.45 mg/L	8.85 NTU	98.1 mV	14.88 ft	400.00 ml/min
4/19/2023 3:20 PM	15:00	4.64 pH	21.55 °C	62.66 µS/cm	0.73 mg/L	6.46 NTU	96.7 mV	15.15 ft	400.00 ml/min
4/19/2023 3:25 PM	20:00	4.62 pH	21.51 °C	62.73 µS/cm	0.49 mg/L	4.76 NTU	96.0 mV	15.28 ft	400.00 ml/min
4/19/2023 3:30 PM	25:00	4.63 pH	21.50 °C	62.56 µS/cm	0.38 mg/L	3.46 NTU	93.4 mV	15.34 ft	400.00 ml/min
4/19/2023 3:35 PM	30:00	4.62 pH	21.45 °C	62.38 µS/cm	0.34 mg/L	2.63 NTU	95.3 mV	15.35 ft	400.00 ml/min
4/19/2023 3:40 PM	35:00	4.61 pH	21.46 °C	62.23 µS/cm	0.24 mg/L	2.09 NTU	93.1 mV	15.36 ft	400.00 ml/min
4/19/2023 3:45 PM	40:00	4.61 pH	21.42 °C	62.19 µS/cm	0.21 mg/L	1.82 NTU	95.7 mV	15.36 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-11	Sample time 1550

Dup-01	Fake sample time 1450

Low-Flow Test Report:

Test Date / Time: 4/19/2023 9:50:31 AM
Project: Daniel NAMU CCR MW-14
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-14
  Well Diameter: 2 in
  Casing Type: PVC
  Screen Length: 5 ft
  Top of Screen: 35.7 ft
  Total Depth: 40.7 ft
  Initial Depth to Water: 12.03 ft
	Pump Type: BP
	  Tubing Type: PE
	  Pump Intake From TOC: 38.2 ft
	  Estimated Total Volume Pumped: 72000 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: 852546

Test Notes:

Weather Conditions:
 P/C 66

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	
4/19/2023 9:50 AM	00:00	4.85 pH	20.25 °C	59.08 µS/cm	4.18 mg/L		135.9 mV	12.03 ft	400.00 ml/min
4/19/2023 9:55 AM	05:00	4.93 pH	20.42 °C	60.87 µS/cm	3.41 mg/L	44.00 NTU	130.1 mV	12.11 ft	400.00 ml/min
4/19/2023 10:00 AM	10:00	4.94 pH	20.48 °C	60.04 µS/cm	3.45 mg/L	39.70 NTU	127.2 mV	12.11 ft	400.00 ml/min
4/19/2023 10:05 AM	15:00	4.92 pH	20.53 °C	59.28 µS/cm	3.51 mg/L	29.50 NTU	140.0 mV	12.11 ft	400.00 ml/min
4/19/2023 10:10 AM	20:00	4.90 pH	20.55 °C	58.92 µS/cm	3.53 mg/L	24.80 NTU	125.4 mV	12.11 ft	400.00 ml/min
4/19/2023 10:15 AM	25:00	4.89 pH	20.61 °C	58.53 µS/cm	3.55 mg/L	19.30 NTU	124.1 mV	12.11 ft	400.00 ml/min
4/19/2023 10:20 AM	30:00	4.88 pH	20.61 °C	58.36 µS/cm	3.56 mg/L	19.10 NTU	136.9 mV	12.11 ft	400.00 ml/min
4/19/2023 10:25 AM	35:00	4.86 pH	20.64 °C	57.96 µS/cm	3.58 mg/L	16.80 NTU	123.6 mV	12.11 ft	400.00 ml/min
4/19/2023 10:30 AM	40:00	4.86 pH	20.66 °C	57.65 µS/cm	3.59 mg/L	15.10 NTU	122.9 mV	12.11 ft	400.00 ml/min
4/19/2023 10:35 AM	45:00	4.85 pH	20.66 °C	57.49 µS/cm	3.61 mg/L	14.21 NTU	135.1 mV	12.11 ft	400.00 ml/min
4/19/2023 10:40 AM	50:00	4.84 pH	20.66 °C	57.31 µS/cm	3.61 mg/L	13.10 NTU	122.9 mV	12.11 ft	400.00 ml/min
4/19/2023 10:45 AM	55:00	4.84 pH	20.69 °C	57.12 µS/cm	3.62 mg/L	11.40 NTU	122.1 mV	12.11 ft	400.00 ml/min
4/19/2023 10:50 AM	01:00:00	4.83 pH	20.69 °C	56.98 µS/cm	3.63 mg/L	11.30 NTU	121.8 mV	12.11 ft	400.00 ml/min

Date	Time	pH	Temp	Conductivity	DO	Turbidity	ORP	Depth	Flow
4/19/2023 10:55 AM	01:05:00	4.83 pH	20.68 °C	57.12 µS/cm	3.63 mg/L	10.50 NTU	133.7 mV	12.11 ft	400.00 ml/min
4/19/2023 11:00 AM	01:10:00	4.83 pH	20.69 °C	57.02 µS/cm	3.63 mg/L	10.21 NTU	121.5 mV	12.11 ft	400.00 ml/min
4/19/2023 11:05 AM	01:15:00	4.83 pH	20.67 °C	56.85 µS/cm	3.65 mg/L	9.66 NTU	133.3 mV	12.11 ft	400.00 ml/min
4/19/2023 11:10 AM	01:20:00	4.82 pH	20.66 °C	56.85 µS/cm	3.65 mg/L	9.35 NTU	121.5 mV	12.11 ft	400.00 ml/min
4/19/2023 11:15 AM	01:25:00	4.82 pH	20.70 °C	56.68 µS/cm	3.65 mg/L	8.97 NTU	121.2 mV	12.11 ft	400.00 ml/min
4/19/2023 11:20 AM	01:30:00	4.82 pH	20.70 °C	56.62 µS/cm	3.66 mg/L	8.61 NTU	120.8 mV	12.11 ft	400.00 ml/min
4/19/2023 11:25 AM	01:35:00	4.81 pH	20.75 °C	56.53 µS/cm	3.66 mg/L	8.18 NTU	120.7 mV	12.11 ft	400.00 ml/min
4/19/2023 11:30 AM	01:40:00	4.81 pH	20.84 °C	56.46 µS/cm	3.66 mg/L	7.84 NTU	120.4 mV	12.11 ft	400.00 ml/min
4/19/2023 11:35 AM	01:45:00	4.81 pH	20.88 °C	56.30 µS/cm	3.66 mg/L	7.31 NTU	131.7 mV	12.11 ft	400.00 ml/min
4/19/2023 11:40 AM	01:50:00	4.81 pH	21.03 °C	56.32 µS/cm	3.67 mg/L	7.26 NTU	120.4 mV	12.11 ft	400.00 ml/min
4/19/2023 11:45 AM	01:55:00	4.81 pH	21.15 °C	56.44 µS/cm	3.66 mg/L	7.54 NTU	131.4 mV	12.11 ft	400.00 ml/min
4/19/2023 11:50 AM	02:00:00	4.80 pH	21.24 °C	56.19 µS/cm	3.67 mg/L	7.15 NTU	120.3 mV	12.11 ft	400.00 ml/min
4/19/2023 11:55 AM	02:05:00	4.80 pH	21.37 °C	56.21 µS/cm	3.66 mg/L	6.81 NTU	131.2 mV	12.11 ft	400.00 ml/min
4/19/2023 12:00 PM	02:10:00	4.80 pH	21.58 °C	56.16 µS/cm	3.66 mg/L	6.41 NTU	120.0 mV	12.11 ft	400.00 ml/min
4/19/2023 12:05 PM	02:15:00	4.80 pH	21.50 °C	56.25 µS/cm	3.66 mg/L	5.97 NTU	119.8 mV	12.11 ft	400.00 ml/min
4/19/2023 12:10 PM	02:20:00	4.80 pH	21.64 °C	56.11 µS/cm	3.65 mg/L	5.54 NTU	130.6 mV	12.11 ft	400.00 ml/min
4/19/2023 12:15 PM	02:25:00	4.80 pH	21.57 °C	56.23 µS/cm	3.66 mg/L	5.49 NTU	119.7 mV	12.11 ft	400.00 ml/min
4/19/2023 12:20 PM	02:30:00	4.80 pH	21.75 °C	56.17 µS/cm	3.65 mg/L	5.52 NTU	119.1 mV	12.11 ft	400.00 ml/min
4/19/2023 12:25 PM	02:35:00	4.80 pH	21.73 °C	56.16 µS/cm	3.67 mg/L	5.53 NTU	118.9 mV	12.11 ft	400.00 ml/min
4/19/2023 12:30 PM	02:40:00	4.80 pH	21.77 °C	56.14 µS/cm	3.66 mg/L	5.23 NTU	118.7 mV	12.11 ft	400.00 ml/min
4/19/2023 12:35 PM	02:45:00	4.80 pH	21.99 °C	56.07 µS/cm	3.65 mg/L	5.01 NTU	118.3 mV	12.11 ft	400.00 ml/min
4/19/2023 12:40 PM	02:50:00	4.80 pH	21.94 °C	56.25 µS/cm	3.67 mg/L	4.80 NTU	128.9 mV	12.11 ft	400.00 ml/min
4/19/2023 12:45 PM	02:55:00	4.80 pH	22.13 °C	56.09 µS/cm	3.65 mg/L	4.68 NTU	129.6 mV	12.11 ft	400.00 ml/min
4/19/2023 12:50 PM	03:00:00	4.80 pH	22.08 °C	56.14 µS/cm	3.67 mg/L	4.66 NTU	118.9 mV	12.11 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-14	Sample time 1254

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 4/19/2023 8:37:33 AM
Project: Daniel NAMU CCR MW-15
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-15
  Well Diameter: 2 in
  Casing Type: PVC
  Screen Length: 5 ft
  Top of Screen: 34.9 ft
  Total Depth: 39.5 ft
  Initial Depth to Water: 11.28 ft
	Pump Type: BP
	  Tubing Type: PE
	  Pump Intake From TOC: 37 ft
	  Estimated Total Volume Pumped: 20000 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

Test Notes:

Weather Conditions:
Sunny 63

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	
4/19/2023 8:37 AM	00:00	4.84 pH	20.26 °C	34.86 µS/cm	4.93 mg/L		108.8 mV	11.28 ft	400.00 ml/min
4/19/2023 8:42 AM	05:00	4.70 pH	20.62 °C	34.39 µS/cm	4.64 mg/L	9.15 NTU	121.1 mV	11.38 ft	400.00 ml/min
4/19/2023 8:47 AM	10:00	4.69 pH	20.75 °C	34.37 µS/cm	4.62 mg/L	7.93 NTU	116.2 mV	11.38 ft	400.00 ml/min
4/19/2023 8:52 AM	15:00	4.68 pH	20.79 °C	34.34 µS/cm	4.61 mg/L	7.45 NTU	128.6 mV	11.38 ft	400.00 ml/min
4/19/2023 8:57 AM	20:00	4.69 pH	20.75 °C	34.27 µS/cm	4.62 mg/L	6.28 NTU	119.7 mV	11.38 ft	400.00 ml/min
4/19/2023 9:02 AM	25:00	4.68 pH	20.79 °C	34.24 µS/cm	4.61 mg/L	5.84 NTU	121.4 mV	11.38 ft	400.00 ml/min
4/19/2023 9:07 AM	30:00	4.69 pH	20.80 °C	34.22 µS/cm	4.61 mg/L	4.70 NTU	134.2 mV	11.38 ft	400.00 ml/min
4/19/2023 9:12 AM	35:00	4.69 pH	20.80 °C	34.12 µS/cm	4.62 mg/L	4.32 NTU	123.2 mV	11.38 ft	400.00 ml/min
4/19/2023 9:17 AM	40:00	4.70 pH	20.82 °C	34.09 µS/cm	4.62 mg/L	3.97 NTU	136.4 mV	11.38 ft	400.00 ml/min
4/19/2023 9:22 AM	45:00	4.70 pH	20.83 °C	34.07 µS/cm	4.62 mg/L	3.69 NTU	137.4 mV	11.38 ft	400.00 ml/min
4/19/2023 9:27 AM	50:00	4.70 pH	20.84 °C	34.05 µS/cm	4.62 mg/L	3.50 NTU	124.7 mV	11.38 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-15	Sample time 0932

Low-Flow Test Report:

Test Date / Time: 4/20/2023 11:33:56 AM
Project: Daniel NAMU MW-16
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-16 Well Diameter: 2 in Casing Type: PVC Screen Length: 5 ft Top of Screen: 23.3 ft Total Depth: 28.3 ft Initial Depth to Water: 8.24 ft	**Pump Type: BP** Tubing Type: PE Pump Intake From TOC: 25.8 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: 852546

Test Notes:

Weather Conditions:
Sunny 76

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	
4/20/2023 11:33 AM	00:00	4.49 pH	23.42 °C	52.76 µS/cm	0.50 mg/L		138.0 mV	8.24 ft	400.00 ml/min
4/20/2023 11:38 AM	05:00	4.49 pH	23.30 °C	53.18 µS/cm	0.25 mg/L	4.61 NTU	141.1 mV	8.24 ft	400.00 ml/min
4/20/2023 11:43 AM	10:00	4.49 pH	22.89 °C	53.95 µS/cm	0.20 mg/L	2.22 NTU	148.3 mV	8.24 ft	400.00 ml/min
4/20/2023 11:48 AM	15:00	4.49 pH	22.84 °C	54.03 µS/cm	0.19 mg/L	1.02 NTU	144.7 mV	8.24 ft	400.00 ml/min
4/20/2023 11:53 AM	20:00	4.50 pH	22.90 °C	53.90 µS/cm	0.18 mg/L	0.81 NTU	145.4 mV	8.24 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-16	Sample time 1157
Dup-02	Fake sample time 1057

Low-Flow Test Report:

Test Date / Time: 4/20/2023 7:02:55 AM
Project: Daniel NAMU CCR MW-17
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-17
   Well Diameter: 2 in
   Casing Type: PVC
   Screen Length: 5 m
   Top of Screen: 23.5 m
   Total Depth: 28.5 m
   Initial Depth to Water: 6.47 ft
	Pump Type: BP
	   Tubing Type: PE
	   Pump Intake From TOC: 26 ft
	   Estimated Total Volume Pumped: 14000 ml
	   Flow Cell Volume: 90 ml
	   Final Flow Rate: 400 ml/min
	   Final Draw Down: 0.07 ft
		Instrument Used: Aqua TROLL 400
		   Serial Number: 852546

Test Notes:

Weather Conditions:
 Foggy 61

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	
4/20/2023 7:02 AM	00:00	4.74 pH	18.38 °C	40.89 µS/cm	0.82 mg/L		119.2 mV	6.47 ft	400.00 ml/min
4/20/2023 7:07 AM	05:00	4.76 pH	19.14 °C	40.46 µS/cm	0.69 mg/L	0.98 NTU	116.4 mV	6.54 ft	400.00 ml/min
4/20/2023 7:12 AM	10:00	4.78 pH	19.47 °C	40.44 µS/cm	0.37 mg/L	0.78 NTU	116.0 mV	6.54 ft	400.00 ml/min
4/20/2023 7:17 AM	15:00	4.79 pH	19.53 °C	40.33 µS/cm	0.33 mg/L	0.75 NTU	112.8 mV	6.54 ft	400.00 ml/min
4/20/2023 7:22 AM	20:00	4.78 pH	19.74 °C	40.39 µS/cm	0.32 mg/L	0.78 NTU	114.4 mV	6.54 ft	400.00 ml/min
4/20/2023 7:27 AM	25:00	4.79 pH	20.33 °C	40.35 µS/cm	0.26 mg/L	0.69 NTU	107.4 mV	6.54 ft	400.00 ml/min
4/20/2023 7:32 AM	30:00	4.79 pH	20.35 °C	40.24 µS/cm	0.23 mg/L	0.71 NTU	107.3 mV	6.54 ft	400.00 ml/min
4/20/2023 7:37 AM	35:00	4.79 pH	20.35 °C	40.34 µS/cm	0.22 mg/L	0.69 NTU	107.2 mV	6.54 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-17	Sample time 0740

Low-Flow Test Report:

Test Date / Time: 4/19/2023 4:56:14 PM
Project: Daniel NAMU CCR MW-18
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-18
  Well Diameter: 2 in
  Casing Type: PVC
  Screen Length: 5 ft
  Top of Screen: 39.4 ft
  Total Depth: 44.4 ft
  Initial Depth to Water: 16.27 ft
	Pump Type: BP
	  Tubing Type: PE
	  Pump Intake From TOC: 41.9 ft
	  Estimated Total Volume Pumped: 10000 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: 852546

Test Notes:

Weather Conditions:
Sunny 77

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	
4/19/2023 4:56 PM	00:00	4.44 pH	26.13 °C	42.71 µS/cm	7.16 mg/L		113.6 mV	16.27 ft	400.00 ml/min
4/19/2023 5:01 PM	05:00	4.60 pH	22.01 °C	43.04 µS/cm	0.92 mg/L	0.41 NTU	110.9 mV	16.35 ft	400.00 ml/min
4/19/2023 5:06 PM	10:00	4.64 pH	21.78 °C	43.26 µS/cm	0.33 mg/L	0.45 NTU	110.7 mV	16.35 ft	400.00 ml/min
4/19/2023 5:11 PM	15:00	4.65 pH	21.81 °C	43.35 µS/cm	0.26 mg/L	0.45 NTU	106.6 mV	16.35 ft	400.00 ml/min
4/19/2023 5:16 PM	20:00	4.65 pH	21.73 °C	43.25 µS/cm	0.25 mg/L	0.38 NTU	105.5 mV	16.35 ft	400.00 ml/min
4/19/2023 5:21 PM	25:00	4.65 pH	21.73 °C	43.22 µS/cm	0.24 mg/L	0.42 NTU	106.3 mV	16.35 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-18	Sample time 1725

Low-Flow Test Report:

Test Date / Time: 4/20/2023 8:04:06 AM
Project: Daniel NAMU CCR MW-19
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-19
  Well Diameter: 2 in
  Casing Type: PVC
  Screen Length: 10 ft
  Top of Screen: 22.4 ft
  Total Depth: 32.4 ft
  Initial Depth to Water: 16.99 ft
	Pump Type: BP
	  Tubing Type: PE
	  Pump Intake From TOC: 27.4 ft
	  Estimated Total Volume Pumped: 28000 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: 852546

Test Notes:

Weather Conditions:
 Fog 63

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	
4/20/2023 8:04 AM	00:00	6.23 pH	20.57 °C	223.34 µS/cm	6.10 mg/L		93.5 mV	16.99 ft	400.00 ml/min
4/20/2023 8:09 AM	05:00	6.61 pH	20.98 °C	226.40 µS/cm	3.28 mg/L	39.00 NTU	90.6 mV	17.11 ft	400.00 ml/min
4/20/2023 8:14 AM	10:00	6.49 pH	21.06 °C	168.83 µS/cm	1.98 mg/L	29.60 NTU	91.5 mV	17.11 ft	400.00 ml/min
4/20/2023 8:19 AM	15:00	6.30 pH	21.07 °C	132.78 µS/cm	1.31 mg/L	24.40 NTU	95.7 mV	17.11 ft	400.00 ml/min
4/20/2023 8:24 AM	20:00	6.18 pH	21.11 °C	115.53 µS/cm	1.04 mg/L	19.70 NTU	95.7 mV	17.11 ft	400.00 ml/min
4/20/2023 8:29 AM	25:00	6.07 pH	21.19 °C	103.72 µS/cm	0.83 mg/L	14.80 NTU	98.6 mV	17.11 ft	400.00 ml/min
4/20/2023 8:34 AM	30:00	6.03 pH	21.22 °C	98.72 µS/cm	0.73 mg/L	10.60 NTU	97.6 mV	17.11 ft	400.00 ml/min
4/20/2023 8:39 AM	35:00	6.02 pH	21.28 °C	98.22 µS/cm	0.71 mg/L	9.05 NTU	96.8 mV	17.11 ft	400.00 ml/min
4/20/2023 8:44 AM	40:00	6.00 pH	21.24 °C	96.22 µS/cm	0.67 mg/L	7.35 NTU	98.0 mV	17.11 ft	400.00 ml/min
4/20/2023 8:49 AM	45:00	6.02 pH	21.37 °C	97.96 µS/cm	0.72 mg/L	6.89 NTU	95.3 mV	17.11 ft	400.00 ml/min
4/20/2023 8:54 AM	50:00	6.03 pH	21.37 °C	100.87 µS/cm	0.76 mg/L	5.60 NTU	96.0 mV	17.11 ft	400.00 ml/min
4/20/2023 8:59 AM	55:00	6.04 pH	21.39 °C	101.34 µS/cm	0.79 mg/L	4.57 NTU	93.7 mV	17.11 ft	400.00 ml/min
4/20/2023 9:04 AM	01:00:00	6.06 pH	21.42 °C	106.29 µS/cm	0.88 mg/L	4.21 NTU	92.5 mV	17.11 ft	400.00 ml/min

| 4/20/2023 9:09 AM | 01:05:00 | 6.06 pH | 21.52 °C | 103.93 µS/cm | 0.89 mg/L | 4.49 NTU | 91.9 mV | 17.11 ft | 400.00 ml/min |
| 4/20/2023 9:14 AM | 01:10:00 | 6.06 pH | 21.55 °C | 104.81 µS/cm | 0.90 mg/L | 4.34 NTU | 92.5 mV | 17.11 ft | 400.00 ml/min |

Samples

Sample ID:	Description:
MW-19	Sample time 0918
EB-01	Sample time 0851
FB-01	Sample time 0841

Low-Flow Test Report:

Test Date / Time: 5/24/2023 11:17:49 AM
Project: Daniel NAMU CCR MW-19
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-19
  Well Diameter: 2 in
  Casing Type: PVC
  Screen Length: 10 ft
  Top of Screen: 22.4 ft
  Total Depth: 32.4 ft
  Initial Depth to Water: 18.34 ft
	Pump Type: BP
	  Tubing Type: PE
	  Pump Intake From TOC: 27.4 ft
	  Estimated Total Volume Pumped: 44000 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

Test Notes:

Weather Conditions:
Cloudy 80

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	
5/24/2023 11:17 AM	00:00	5.84 pH	22.09 °C	100.04 µS/cm	2.33 mg/L		69.4 mV	18.34 ft	400.00 ml/min
5/24/2023 11:22 AM	05:00	5.81 pH	21.82 °C	76.58 µS/cm	0.99 mg/L	10.70 NTU	59.4 mV	18.44 ft	400.00 ml/min
5/24/2023 11:27 AM	10:00	5.61 pH	21.82 °C	55.75 µS/cm	0.50 mg/L	11.10 NTU	62.0 mV	18.44 ft	400.00 ml/min
5/24/2023 11:32 AM	15:00	5.49 pH	21.77 °C	50.36 µS/cm	0.39 mg/L	9.77 NTU	65.0 mV	18.44 ft	400.00 ml/min
5/24/2023 11:37 AM	20:00	5.40 pH	21.75 °C	47.17 µS/cm	0.32 mg/L	7.41 NTU	67.2 mV	18.44 ft	400.00 ml/min
5/24/2023 11:42 AM	25:00	5.36 pH	21.78 °C	44.95 µS/cm	0.28 mg/L	6.05 NTU	67.5 mV	18.44 ft	400.00 ml/min
5/24/2023 11:47 AM	30:00	5.31 pH	21.77 °C	43.76 µS/cm	0.26 mg/L	4.78 NTU	67.8 mV	18.44 ft	400.00 ml/min
5/24/2023 11:52 AM	35:00	5.27 pH	21.77 °C	42.76 µS/cm	0.24 mg/L	3.91 NTU	68.2 mV	18.44 ft	400.00 ml/min
5/24/2023 11:57 AM	40:00	5.26 pH	21.83 °C	42.42 µS/cm	0.23 mg/L	3.73 NTU	67.4 mV	18.44 ft	400.00 ml/min
5/24/2023 12:02 PM	45:00	5.22 pH	21.93 °C	41.55 µS/cm	0.22 mg/L	3.11 NTU	68.3 mV	18.44 ft	400.00 ml/min
5/24/2023 12:07 PM	50:00	5.21 pH	21.84 °C	41.12 µS/cm	0.21 mg/L	2.79 NTU	68.6 mV	18.44 ft	400.00 ml/min
5/24/2023 12:12 PM	55:00	5.18 pH	21.87 °C	40.50 µS/cm	0.21 mg/L	2.92 NTU	68.8 mV	18.44 ft	400.00 ml/min
5/24/2023 12:17 PM	01:00:00	5.18 pH	22.02 °C	40.36 µS/cm	0.20 mg/L	2.63 NTU	69.1 mV	18.44 ft	400.00 ml/min

5/24/2023 12:22 PM	01:05:00	5.17 pH	22.18 °C	40.09 µS/cm	0.20 mg/L	2.33 NTU	69.5 mV	18.44 ft	400.00 ml/min
5/24/2023 12:27 PM	01:10:00	5.16 pH	22.09 °C	40.00 µS/cm	0.19 mg/L	2.37 NTU	69.5 mV	18.44 ft	400.00 ml/min
5/24/2023 12:32 PM	01:15:00	5.17 pH	22.27 °C	40.22 µS/cm	0.19 mg/L	2.08 NTU	69.6 mV	18.44 ft	400.00 ml/min
5/24/2023 12:37 PM	01:20:00	5.17 pH	22.17 °C	40.15 µS/cm	0.19 mg/L	1.90 NTU	69.9 mV	18.44 ft	400.00 ml/min
5/24/2023 12:42 PM	01:25:00	5.15 pH	22.22 °C	39.36 µS/cm	0.19 mg/L	1.79 NTU	70.7 mV	18.44 ft	400.00 ml/min
5/24/2023 12:47 PM	01:30:00	5.15 pH	22.20 °C	39.66 µS/cm	0.19 mg/L	1.72 NTU	71.6 mV	18.44 ft	400.00 ml/min
5/24/2023 12:52 PM	01:35:00	5.14 pH	22.19 °C	39.53 µS/cm	0.19 mg/L	1.68 NTU	71.8 mV	18.44 ft	400.00 ml/min
5/24/2023 12:57 PM	01:40:00	5.16 pH	22.27 °C	39.50 µS/cm	0.19 mg/L	1.67 NTU	72.0 mV	18.44 ft	400.00 ml/min
5/24/2023 1:02 PM	01:45:00	5.14 pH	22.22 °C	39.30 µS/cm	0.19 mg/L	1.67 NTU	72.8 mV	18.44 ft	400.00 ml/min
5/24/2023 1:07 PM	01:50:00	5.15 pH	22.11 °C	39.55 µS/cm	0.19 mg/L	1.66 NTU	73.7 mV	18.44 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-19	Sample time 1312
Dup-01	Fake sample time 1212

Created using VuSitu from In-Situ, Inc.

2nd
Semi-Annual
Monitoring Event

ANALYTICAL REPORT

PREPARED FOR

Attn: Robert (Trey) Singleton
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243
Generated 11/14/2023 4:23:09 PM

JOB DESCRIPTION

Plant Daniel NAMU CCR

JOB NUMBER

180-164675-1

See page two for job notes and contact information.

my EOL

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
11/14/2023 4:23:09 PM

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

Table of Contents

Eurofins Pittsburgh
11/14/2023

Case Narrative

Job ID: 180-164675-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-164675-1

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 11/1/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.7°C and 0.8°C

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
Method 2540C_Calcd: The sample did not reach a stable weight following 3 cycles of heating, cooling, and desiccation. The cycle 3 weight was used to calculate the Total Dissolved Solids (TDS) for the sample result.

MW-18 (180-164675-1)

Method 2540C_Calcd: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. MW-16 (180-164675-3)

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

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

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Job ID: 180-164675-1

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.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

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

Eurofins Pittsburgh

11/14/2023

Accreditation/Certification Summary

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	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
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	01-31-24
Wisconsin	State	998027800	08-31-24

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	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	11-09-23
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24

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

Eurofins Pittsburgh

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
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Eurofins Pittsburgh

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-164675-1	MW-18	Water	10/30/23 08:28	11/01/23 10:30
180-164675-2	MW-19	Water	10/30/23 11:24	11/01/23 10:30
180-164675-3	MW-16	Water	10/27/23 18:00	11/01/23 10:30
180-164675-4	MW-17	Water	10/27/23 17:17	11/01/23 10:30
180-164675-5	DUP-06	Water	10/30/23 10:24	11/01/23 10:30
180-164675-6	EB-03	Water	10/30/23 10:36	11/01/23 10:30
180-164675-7	FB-03	Water	10/30/23 10:57	11/01/23 10:30

Method Summary

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	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

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

Eurofins Pittsburgh

Lab Chronicle

Client Sample ID: MW-18 — Lab Sample ID: 180-164675-1
Date Collected: 10/30/23 08:28
Date Received: 11/01/23 10:30
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	450842	11/02/23 12:32	AM	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			807023	11/07/23 19:47	BWR	EET SAV
		Instrument ID: ICPMSC								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806837	11/06/23 20:50	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	451120	11/06/23 13:06	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			451752	10/30/23 09:28	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-19 — Lab Sample ID: 180-164675-2
Date Collected: 10/30/23 11:24
Date Received: 11/01/23 10:30
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	450842	11/02/23 13:17	AM	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			807023	11/07/23 19:23	BWR	EET SAV
		Instrument ID: ICPMSC								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806837	11/06/23 20:38	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	451120	11/06/23 13:06	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			451752	10/30/23 12:24	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-16 — Lab Sample ID: 180-164675-3
Date Collected: 10/27/23 18:00
Date Received: 11/01/23 10:30
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	450842	11/02/23 13:31	AM	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			807023	11/07/23 19:27	BWR	EET SAV
		Instrument ID: ICPMSC								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806837	11/06/23 20:41	BWR	EET SAV
		Instrument ID: ICPMSD								

Eurofins Pittsburgh

Lab Chronicle

Client Sample ID: MW-16
Date Collected: 10/27/23 18:00
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-3
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	SM 2540C		1	100 mL	100 mL	451525	11/09/23 17:46	LWM	EET PIT
Total/NA	Analysis	Field Sampling		1			451752	10/27/23 19:00	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-17
Date Collected: 10/27/23 17:17
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-4
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	450842	11/02/23 13:46	AM	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			807023	11/07/23 19:51	BWR	EET SAV
		Instrument ID: ICPMSC								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806837	11/06/23 20:53	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	450865	11/02/23 13:36	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			451752	10/27/23 18:17	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: DUP-06
Date Collected: 10/30/23 10:24
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-5
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	450842	11/02/23 14:01	AM	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	806564	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806838	11/06/23 18:53	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	451120	11/06/23 13:06	LWM	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: EB-03
Date Collected: 10/30/23 10:36
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-6
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	450842	11/02/23 14:16	AM	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			807023	11/07/23 19:35	BWR	EET SAV
		Instrument ID: ICPMSC								

Eurofins Pittsburgh

Lab Chronicle

Client Sample ID: EB-03

Date Collected: 10/30/23 10:36
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-6
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	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806837	11/06/23 20:47	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	451120	11/06/23 13:06	LWM	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: FB-03

Date Collected: 10/30/23 10:57
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-7
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	450842	11/02/23 19:58	AM	EET PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			807023	11/07/23 19:31	BWR	EET SAV
		Instrument ID: ICPMSC								
Total Recoverable	Prep	3005A			25 mL	125 mL	806563	11/06/23 05:49	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806837	11/06/23 20:44	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	451120	11/06/23 13:06	LWM	EET PIT
		Instrument ID: NOEQUIP								

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
        AM = Adzuira Musule
        FDS = Sampler Field
        LWM = Leslie McIntire
Lab: EET SAV
    Batch Type: Prep
        RR = Robert Rancourt
    Batch Type: Analysis
        BWR = Bryn Robertson

Client Sample Results

Client Sample ID: MW-18
Date Collected: 10/30/23 08:28
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-1
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.1		1.00	0.713	mg/L			11/02/23 12:32	1
Fluoride	<0.0260		0.100	0.0260	mg/L			11/02/23 12:32	1
Sulfate	7.39		1.00	0.756	mg/L			11/02/23 12:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0304	J	0.0800	0.0220	mg/L		11/06/23 05:49	11/07/23 19:47	1
Calcium	0.427	J	0.500	0.140	mg/L		11/06/23 05:49	11/06/23 20:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	15.0		10.0	10.0	mg/L			11/06/23 13:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.64				SU			10/30/23 09:28	1

Client Sample ID: MW-19
Date Collected: 10/30/23 11:24
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-2
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.88		1.00	0.713	mg/L			11/02/23 13:17	1
Fluoride	0.0511	J	0.100	0.0260	mg/L			11/02/23 13:17	1
Sulfate	2.73		1.00	0.756	mg/L			11/02/23 13:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		11/06/23 05:49	11/07/23 19:23	1
Calcium	1.19		0.500	0.140	mg/L		11/06/23 05:49	11/06/23 20:38	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			11/06/23 13:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.01				SU			10/30/23 12:24	1

Client Sample ID: MW-16
Date Collected: 10/27/23 18:00
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-3
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.4		1.00	0.713	mg/L			11/02/23 13:31	1
Fluoride	0.0612	J	0.100	0.0260	mg/L			11/02/23 13:31	1
Sulfate	3.08		1.00	0.756	mg/L			11/02/23 13:31	1

Eurofins Pittsburgh

11/14/2023

Client Sample ID: MW-16
Date Collected: 10/27/23 18:00
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		11/06/23 05:49	11/07/23 19:27	1
Calcium	1.05		0.500	0.140	mg/L		11/06/23 05:49	11/06/23 20:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	21.0	H	10.0	10.0	mg/L			11/09/23 17:46	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.47				SU			10/27/23 19:00	1

Client Sample ID: MW-17
Date Collected: 10/27/23 17:17
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-4
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.16		1.00	0.713	mg/L			11/02/23 13:46	1
Fluoride	0.0494	J	0.100	0.0260	mg/L			11/02/23 13:46	1
Sulfate	3.82		1.00	0.756	mg/L			11/02/23 13:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		11/06/23 05:49	11/07/23 19:51	1
Calcium	0.916		0.500	0.140	mg/L		11/06/23 05:49	11/06/23 20:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	14.0		10.0	10.0	mg/L			11/02/23 13:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.82				SU			10/27/23 18:17	1

Client Sample ID: DUP-06
Date Collected: 10/30/23 10:24
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-5
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.76		1.00	0.713	mg/L			11/02/23 14:01	1
Fluoride	0.0505	J	0.100	0.0260	mg/L			11/02/23 14:01	1
Sulfate	2.67		1.00	0.756	mg/L			11/02/23 14:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0546	J B	0.0800	0.0220	mg/L		11/06/23 05:49	11/06/23 18:53	1
Calcium	1.24		0.500	0.140	mg/L		11/06/23 05:49	11/06/23 18:53	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			11/06/23 13:06	1

Eurofins Pittsburgh

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Job ID: 180-164675-1

Client Sample ID: EB-03
Date Collected: 10/30/23 10:36
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-6
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			11/02/23 14:16	1
Fluoride	<0.0260		0.100	0.0260	mg/L			11/02/23 14:16	1
Sulfate	<0.756		1.00	0.756	mg/L			11/02/23 14:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		11/06/23 05:49	11/07/23 19:35	1
Calcium	<0.140		0.500	0.140	mg/L		11/06/23 05:49	11/06/23 20:47	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			11/06/23 13:06	1

Client Sample ID: FB-03
Date Collected: 10/30/23 10:57
Date Received: 11/01/23 10:30

Lab Sample ID: 180-164675-7
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			11/02/23 19:58	1
Fluoride	<0.0260		0.100	0.0260	mg/L			11/02/23 19:58	1
Sulfate	<0.756		1.00	0.756	mg/L			11/02/23 19:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		11/06/23 05:49	11/07/23 19:31	1
Calcium	<0.140		0.500	0.140	mg/L		11/06/23 05:49	11/06/23 20:44	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			11/06/23 13:06	1

Eurofins Pittsburgh

11/14/2023

QC Sample Results

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-450842/6
Matrix: Water
Analysis Batch: 450842

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			11/02/23 12:02	1
Fluoride	<0.0260		0.100	0.0260	mg/L			11/02/23 12:02	1
Sulfate	<0.756		1.00	0.756	mg/L			11/02/23 12:02	1

Lab Sample ID: LCS 180-450842/7
Matrix: Water
Analysis Batch: 450842

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	47.98		mg/L		96	80 - 120
Fluoride	2.50	2.578		mg/L		103	80 - 120
Sulfate	50.0	48.86		mg/L		98	80 - 120

Lab Sample ID: 180-164675-1 MS
Matrix: Water
Analysis Batch: 450842

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	11.1		50.0	54.58		mg/L		87	80 - 120
Fluoride	<0.0260		2.50	2.659		mg/L		106	80 - 120
Sulfate	7.39		50.0	57.84		mg/L		101	80 - 120

Lab Sample ID: 180-164675-1 MSD
Matrix: Water
Analysis Batch: 450842

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	11.1		50.0	52.07		mg/L		82	80 - 120	5	15
Fluoride	<0.0260		2.50	2.538		mg/L		102	80 - 120	5	15
Sulfate	7.39		50.0	55.13		mg/L		95	80 - 120	5	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-806563/1-A
Matrix: Water
Analysis Batch: 806837

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 806563

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.140		0.500	0.140	mg/L		11/06/23 05:49	11/06/23 19:55	1

Lab Sample ID: MB 680-806563/1-A
Matrix: Water
Analysis Batch: 807023

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 806563

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		11/06/23 05:49	11/07/23 18:58	1

Eurofins Pittsburgh

11/14/2023

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

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

Lab Sample ID: LCS 680-806563/2-A
Matrix: Water
Analysis Batch: 806837

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 806563

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Calcium			5.00	5.085		mg/L		102	80 - 120	

Lab Sample ID: LCS 680-806563/2-A
Matrix: Water
Analysis Batch: 807023

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 806563

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Boron			0.400	0.3974		mg/L		99	80 - 120	

Lab Sample ID: MB 680-806564/1-A
Matrix: Water
Analysis Batch: 806838

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 806564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.04491	J	0.0800	0.0220	mg/L		11/06/23 05:49	11/06/23 18:45	1
Calcium	<0.140		0.500	0.140	mg/L		11/06/23 05:49	11/06/23 18:45	1

Lab Sample ID: LCS 680-806564/2-A
Matrix: Water
Analysis Batch: 806838

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 806564

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Boron			0.400	0.3857		mg/L		96	80 - 120	
Calcium			5.00	5.060		mg/L		101	80 - 120	

Lab Sample ID: 180-164675-5 MS
Matrix: Water
Analysis Batch: 806838

Client Sample ID: DUP-06
Prep Type: Total Recoverable
Prep Batch: 806564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Boron	0.0546	J B	0.400	0.4071		mg/L		88	75 - 125	
Calcium	1.24		5.00	6.405		mg/L		103	75 - 125	

Lab Sample ID: 180-164675-5 MSD
Matrix: Water
Analysis Batch: 806838

Client Sample ID: DUP-06
Prep Type: Total Recoverable
Prep Batch: 806564

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.0546	J B	0.400	0.4139		mg/L		90	75 - 125	2	20
Calcium	1.24		5.00	6.382		mg/L		103	75 - 125	0	20

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

Lab Sample ID: MB 180-450865/1
Matrix: Water
Analysis Batch: 450865

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			11/02/23 13:36	1

Eurofins Pittsburgh

11/14/2023

QC Sample Results

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

Lab Sample ID: LCS 180-450865/2
Matrix: Water
Analysis Batch: 450865

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			336	302.0		mg/L		90	85 - 115		

Lab Sample ID: MB 180-451120/1
Matrix: Water
Analysis Batch: 451120

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			11/06/23 13:06	1

Lab Sample ID: LCS 180-451120/2
Matrix: Water
Analysis Batch: 451120

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			336	326.0		mg/L		97	85 - 115		

Lab Sample ID: MB 180-451525/1
Matrix: Water
Analysis Batch: 451525

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			11/09/23 17:46	1

Lab Sample ID: LCS 180-451525/2
Matrix: Water
Analysis Batch: 451525

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			336	308.0		mg/L		92	85 - 115		

QC Association Summary

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Job ID: 180-164675-1

HPLC/IC

Analysis Batch: 450842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-1	MW-18	Total/NA	Water	EPA 9056A	
180-164675-2	MW-19	Total/NA	Water	EPA 9056A	
180-164675-3	MW-16	Total/NA	Water	EPA 9056A	
180-164675-4	MW-17	Total/NA	Water	EPA 9056A	
180-164675-5	DUP-06	Total/NA	Water	EPA 9056A	
180-164675-6	EB-03	Total/NA	Water	EPA 9056A	
180-164675-7	FB-03	Total/NA	Water	EPA 9056A	
MB 180-450842/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-450842/7	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-164675-1 MS	MW-18	Total/NA	Water	EPA 9056A	
180-164675-1 MSD	MW-18	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 806563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-1	MW-18	Total Recoverable	Water	3005A	
180-164675-2	MW-19	Total Recoverable	Water	3005A	
180-164675-3	MW-16	Total Recoverable	Water	3005A	
180-164675-4	MW-17	Total Recoverable	Water	3005A	
180-164675-6	EB-03	Total Recoverable	Water	3005A	
180-164675-7	FB-03	Total Recoverable	Water	3005A	
MB 680-806563/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-806563/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 806564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-5	DUP-06	Total Recoverable	Water	3005A	
MB 680-806564/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-806564/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-164675-5 MS	DUP-06	Total Recoverable	Water	3005A	
180-164675-5 MSD	DUP-06	Total Recoverable	Water	3005A	

Analysis Batch: 806837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-1	MW-18	Total Recoverable	Water	6020B	806563
180-164675-2	MW-19	Total Recoverable	Water	6020B	806563
180-164675-3	MW-16	Total Recoverable	Water	6020B	806563
180-164675-4	MW-17	Total Recoverable	Water	6020B	806563
180-164675-6	EB-03	Total Recoverable	Water	6020B	806563
180-164675-7	FB-03	Total Recoverable	Water	6020B	806563
MB 680-806563/1-A	Method Blank	Total Recoverable	Water	6020B	806563
LCS 680-806563/2-A	Lab Control Sample	Total Recoverable	Water	6020B	806563

Analysis Batch: 806838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-5	DUP-06	Total Recoverable	Water	6020B	806564
MB 680-806564/1-A	Method Blank	Total Recoverable	Water	6020B	806564
LCS 680-806564/2-A	Lab Control Sample	Total Recoverable	Water	6020B	806564
180-164675-5 MS	DUP-06	Total Recoverable	Water	6020B	806564
180-164675-5 MSD	DUP-06	Total Recoverable	Water	6020B	806564

Eurofins Pittsburgh

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Metals

Analysis Batch: 807023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-1	MW-18	Total Recoverable	Water	6020B	806563
180-164675-2	MW-19	Total Recoverable	Water	6020B	806563
180-164675-3	MW-16	Total Recoverable	Water	6020B	806563
180-164675-4	MW-17	Total Recoverable	Water	6020B	806563
180-164675-6	EB-03	Total Recoverable	Water	6020B	806563
180-164675-7	FB-03	Total Recoverable	Water	6020B	806563
MB 680-806563/1-A	Method Blank	Total Recoverable	Water	6020B	806563
LCS 680-806563/2-A	Lab Control Sample	Total Recoverable	Water	6020B	806563

General Chemistry

Analysis Batch: 450865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-4	MW-17	Total/NA	Water	SM 2540C	
MB 180-450865/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-450865/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 451120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-1	MW-18	Total/NA	Water	SM 2540C	
180-164675-2	MW-19	Total/NA	Water	SM 2540C	
180-164675-5	DUP-06	Total/NA	Water	SM 2540C	
180-164675-6	EB-03	Total/NA	Water	SM 2540C	
180-164675-7	FB-03	Total/NA	Water	SM 2540C	
MB 180-451120/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-451120/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 451525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-3	MW-16	Total/NA	Water	SM 2540C	
MB 180-451525/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-451525/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 451752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164675-1	MW-18	Total/NA	Water	Field Sampling	
180-164675-2	MW-19	Total/NA	Water	Field Sampling	
180-164675-3	MW-16	Total/NA	Water	Field Sampling	
180-164675-4	MW-17	Total/NA	Water	Field Sampling	

Eurofins Pittsburgh

11/14/2023

Eurofins TestAmerica, Pittsburgh

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

Chain of Custody Record

eurofins — Environment Testing America

COC No	
Page	1 of 1
Job #	

Client Information

Client Contact:	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 NAMU CCR
Project #	18020047
SSOW#	
PO #	
WO #	

Sampler: Rick Haymaker / Todd Vures
Phone: 850-336-0192

Due Date Requested:
TAT Requested (days):

Lab PM: Brown, Shali
E-Mail: shali.brown@eurofinset.com

Barcode: 180-164675 Chain of Custody

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Eurofins Sample ID (Lab Use)	6020B Boron and Calcium	90656 Chloride Fluoride Sulfate	Total Dissolved Solids	Total Number of containers
MW-18	10-30-23	0828	G	water	N	X	X	X	W
MW-19	10-30-23	1124	G	water	N	X	X	X	W
MW-16	10-27-23	1800	G	water	N	X	X	X	W
MW-17	10-27-23	1717	G	water	N	X	X	X	W
DUP-06	10-30-23	1024	G	water	N	X	X	X	W
EB-03	10-30-23	1036	G	water	N	X	X	X	W
FB-03	10-30-23	1057	G	water	N	X	X	X	W

Preservation Codes:

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

Note:

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

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

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:

Empty Kit Relinquished by:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	10-30-23 1212	AH BW		11/01/23 1030	ETAME
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: △ Yes △ No
Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Method of Shipment:

Ver 01/16/2019

Chain of Custody Record

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

eurofins :: Environment Testing :: America

COC No	
Page	1 of 1
Job #	

Client Information

Client Contact: SCS Contacts	Carrier Tracking No(s)
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 NAMU CCR	
Site:	

Sampler: Rick / Todd Hazenmeyer/Vureis	
Phone: 850-336-0192	
Due Date Requested:	
TAT Requested (days):	
PO #:	
WO #:	
Project #: 18020047	
SSOW#:	

Lab PM: Brown, Shali
E-Mail: shali.brown@eurofinset.com

Analysis Requested

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code	Eurofins Sample ID (Lab Use Only)	6020B Boron and Calcium	90656 Chloride Fluoride Sulfate	Total Dissolved Solids	Total Number of Containers
MW-18	10-30-23	0828	G	water		no	X	X	X	M
MW-19	10-30-23	1124	G	water		no	X	X	X	M
MW-16	10-27-23	1800	G	water		no	X	X	X	M
MW-17	10-27-23	1717	G	water		no	X	X	X	M
DUP-06	10-30-23	1024	G	water		no	X	X	X	M
EB-03	10-30-23	1036	G	water		no	X	X	X	M
FB-03	10-30-23	1057	G	water		no	X	X	X	M

Note:

1-180-164675 Chain of Custody

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: _____ Time: _____

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:

Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	10-30-23 1212	AH BW.	Received by:	11/01/23 1030	Eurofins
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.:

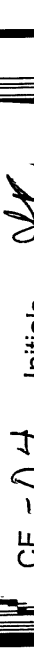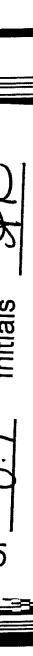Cooler Temperature(s) °C and Other Remarks:

Ver 01/16/2019

11/14/2023

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

SHIP DATE: 30OCT23
ACTWGT: 60.65 LB
CAD: 6994563/SSFE244
DIMS: 25x14x14 IN
BILL THIRD PARTY

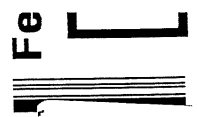TO TEST AMERICA PITTSBURGH
301 ALPHA DR
PITTSBURGH PA 15238
(850) 336-0192
REF:
DEPT:

Uncorrected temp 1.2 °C
Thermometer ID 17
CF -0.4 Initials
PT-WI-SR-001 effective 11/8/18

Fe

TRK# 7857 2441 6910
0201
MASTER
XS AGCA

TUE - 31 OCT
PRIORITY OVER
PA-US
1 of 2

180-164675 Waybill

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

SHIP DATE: 30OCT23
ACTWGT: 36.45 LB
CAD: 6994563/SSFE2441
DIMS: 17x12x15 IN
BILL THIRD PARTY

TO TEST AMERICA PITTSBURGH
301 ALPHA DR
PITTSBURGH PA 15238
(850) 336-0192
REF:
DEPT:

FedEx Express
E

Uncorrected temp 1.1 °C
Thermometer ID 17
CF -0.4 Initials
PT-WI-SR-001 effective 11/8/18

MPS# 7857 2441 6921
0263
Mstr# 7857 2441 6910
XS AGCA
2 of 2

TUE - 31 OCT 10:30A
PRIORITY OVERNIGHT
AHS
15238
PA-US PIT

11/14/2023

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

SHIP DATE: 30OCT23
ACTWGT: 60.65 LB
CAD: 6994563/SSFE244
DIMS: 25x14x14 IN

BILL THIRD PARTY

TO **TEST AMERICA PITTSBURGH**

301 ALPHA DR

PITTSBURGH PA 15238

REF:

(850) 336-0192

DEPT:

Uncorrected temp 1.2 °C
Thermometer ID 17

CF -0.4 Initials

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

Fe

TUE – 31 OCT
PRIORITY OVER

1 of 2

TRK# **7857 2441 6910**
0201

MASTER

XS AGCA

PA–US 1

180-164675 Waybill

Part # 15629734863 FRDB28 EXP 08/24

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

SHIP DATE: 30OCT23
ACTWGT: 36.45 LB
CAD: 6994563/SSFE2441
DIMS: 17x12x15 IN

BILL THIRD PARTY

TO **TEST AMERICA PITTSBURGH**

301 ALPHA DR

PITTSBURGH PA 15238

REF:

(850) 336-0192

DEPT:

FedEx
Express

E

Uncorrected temp 1.1 °C
Thermometer ID 17

CF -0.4 Initials

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

TUE – 31 OCT 10:30A
PRIORITY OVERNIGHT

AHS
15238 PIT

PA–US

2 of 2

MPS# **7857 2441 6921**
0263

Mstr# 7857 2441 6910

XS AGCA

Eurofins Pittsburgh

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

Chain of Custody Record

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-498840.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Mississippi	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note):		Job #: 180-164675-1

Address: 5102 LaRoche Avenue,
Due Date Requested: 11/14/2023

City: Savannah
TAT Requested (days):

State, Zip: GA, 31404

Phone: 912-354-7858(Tel) 912-352-0165(Fax)
PO #:

Email:
WO #:

Project Name: Plant Daniel NAMU CCR
Project #: 18020047

Site:
SSOW#:

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A App III Boron and Calcium	Total Number of containers	Special Instructions/Note:
				Preservation Code:					
MW-18 (180-164675-1)	10/30/23	08:28 Central		Water			X	1	
MW-19 (180-164675-2)	10/30/23	11:24 Central		Water			X	1	
MW-16 (180-164675-3)	10/27/23	18:00 Central		Water			X	1	
MW-17 (180-164675-4)	10/27/23	17:17 Central		Water			X	1	
DUP-06 (180-164675-5)	10/30/23	10:24 Central		Water			X	1	
EB-03 (180-164675-6)	10/30/23	10:36 Central		Water			X	1	
FB-03 (180-164675-7)	10/30/23	10:57 Central		Water			X	1	

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.

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

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: _(signature)_	Date/Time: 11/3/23 1600	Company: EPITANE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: C. Mmm	Date/Time: 11/4/23 0837 EUTINS	Company

Custody Seals Intact: △ Yes △ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 12.9/13.2

Ver: 06/08/2021 11/14/2023

Eurofins Pittsburgh

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

Chain of Custody Record

:: eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-498840.1

Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Mississippi	Page: Page 1 of 1

Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note):		Job #: 180-164675-1

Address: 5102 LaRoche Avenue,
Due Date Requested: 11/14/2023

City: Savannah — TAT Requested (days):

State, Zip: GA, 31404

Phone: 912-354-7858(Tel) 912-352-0165(Fax) — PO #:

Email: — WO #:

Project Name: Plant Daniel NAMU CCR — Project #: 18020047

Site: — SSOW#:

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A App III Boron and Calcium	Total Number of containers	Special Instructions/Note:
Preservation Code:									
MW-18 (180-164675-1)	10/30/23	08:28 Central		Water			X	1	
MW-19 (180-164675-2)	10/30/23	11:24 Central		Water			X	1	
MW-16 (180-164675-3)	10/27/23	18:00 Central		Water			X	1	
MW-17 (180-164675-4)	10/27/23	17:17 Central		Water			X	1	
DUP-06 (180-164675-5)	10/30/23	10:24 Central		Water			X	1	
EB-03 (180-164675-6)	10/30/23	10:36 Central		Water			X	1	
FB-03 (180-164675-7)	10/30/23	10:57 Central		Water			X	1	

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.

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

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

Relinquished by: [signature]	Date/Time: 11/3/23 1600	Company: EPMANE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: C. Mun	Date/Time: 11/4/23 0837	Company: EMTNS

Custody Seals Intact: △ Yes △ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 12.9/13.2

Ver: 06/08/2021 11/14/2023

Client: Southern Company

Job Number: 180-164675-1

Login Number: 164675
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	

Eurofins Pittsburgh

11/14/2023

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-164675-1

Login Number: 164675
List Number: 2
Creator: Munro, Caroline

List Source: Eurofins Savannah
List Creation: 11/04/23 01:19 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	

Eurofins Pittsburgh

11/14/2023

eurofins

Environment Testing

I **ANALYTICAL REPORT**

PREPARED FOR

Attn: Robert (Trey) Singleton
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243
Generated 11/14/2023 4:20:11 PM

JOB DESCRIPTION

Plant Daniel NAMU CCR

JOB NUMBER

180-164554-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

my **EOL**

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
11/14/2023 4:20:11 PM

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

Table of Contents

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

Job ID: 180-164554-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-164554-1

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 10/28/2023 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 5 coolers at receipt time were 2.0°C, 3.8°C, 3.9°C, 4.1°C and 4.9°C

HPLC/IC
Method 9056A_ORGFM_28D: The continuing calibration verification (CCV) associated with batch 180-450609 recovered above the upper control limit for fluoride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 180-450609/28).

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.

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

Definitions/Glossary

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

Eurofins Pittsburgh

Accreditation/Certification Summary

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	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
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	01-31-24
Wisconsin	State	998027800	08-31-24

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	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	11-09-23
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24

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

Eurofins Pittsburgh

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
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Eurofins Pittsburgh

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-164554-1	MW-11	Water	10/27/23 14:30	10/28/23 09:45
180-164554-2	MW-14	Water	10/27/23 11:25	10/28/23 09:45
180-164554-3	MW-15	Water	10/27/23 09:10	10/28/23 09:45
180-164554-4	DUP-04	Water	10/27/23 13:30	10/28/23 09:45

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	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

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

Eurofins Pittsburgh

11/14/2023

Lab Chronicle

Client Sample ID: MW-11
Date Collected: 10/27/23 14:30
Date Received: 10/28/23 09:45

Lab Sample ID: 180-164554-1
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	450609	11/01/23 00:13	M1D	EET PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			25 mL	125 mL	805669	11/01/23 06:43	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806015	11/01/23 17:15	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	450863	11/02/23 13:23	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			451752	10/27/23 15:30	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-14
Date Collected: 10/27/23 11:25
Date Received: 10/28/23 09:45

Lab Sample ID: 180-164554-2
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	450609	10/31/23 22:34	M1D	EET PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			25 mL	125 mL	805669	11/01/23 06:43	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806015	11/01/23 17:18	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	450863	11/02/23 13:23	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			451752	10/27/23 12:25	FDS	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-15
Date Collected: 10/27/23 09:10
Date Received: 10/28/23 09:45

Lab Sample ID: 180-164554-3
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	450609	10/31/23 22:48	M1D	EET PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			25 mL	125 mL	805669	11/01/23 06:43	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806015	11/01/23 17:21	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	450863	11/02/23 13:23	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			451752	10/27/23 10:10	FDS	EET PIT
		Instrument ID: NOEQUIP								

Eurofins Pittsburgh

Lab Chronicle

Project/Site: Plant Daniel NAMU CCR

Client Sample ID: DUP-04   **Lab Sample ID: 180-164554-4**
Date Collected: 10/27/23 13:30   **Matrix: Water**
Date Received: 10/28/23 09:45

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	450609	10/31/23 23:02	M1D	EET PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			25 mL	125 mL	805669	11/01/23 06:43	RR	EET SAV
Total Recoverable	Analysis	6020B		1			806015	11/01/23 17:24	BWR	EET SAV
		Instrument ID: ICPMSD								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	450863	11/02/23 13:23	LWM	EET PIT
		Instrument ID: NOEQUIP								

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
        FDS = Sampler Field
        LWM = Leslie McIntire
        M1D = Maureen Donlin
Lab: EET SAV
    Batch Type: Prep
        RR = Robert Rancourt
    Batch Type: Analysis
        BWR = Bryn Robertson

Eurofins Pittsburgh

Client Sample Results

Client: Southern Company
Project/Site: Plant Daniel NAMU CCR

Client Sample ID: MW-11
Date Collected: 10/27/23 14:30
Date Received: 10/28/23 09:45

Lab Sample ID: 180-164554-1
Matrix: Water

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			11/01/23 00:13	1
Fluoride	0.0580	J	0.100	0.0260	mg/L			11/01/23 00:13	1
Sulfate	2.72		1.00	0.756	mg/L			11/01/23 00:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0305	J B	0.0800	0.0220	mg/L		11/01/23 06:43	11/01/23 17:15	1
Calcium	1.42		0.500	0.140	mg/L		11/01/23 06:43	11/01/23 17:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	21.0		10.0	10.0	mg/L			11/02/23 13:23	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.70				SU			10/27/23 15:30	1

Client Sample ID: MW-14
Date Collected: 10/27/23 11:25
Date Received: 10/28/23 09:45

Lab Sample ID: 180-164554-2
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.77		1.00	0.713	mg/L			10/31/23 22:34	1
Fluoride	0.0511	J	0.100	0.0260	mg/L			10/31/23 22:34	1
Sulfate	1.53		1.00	0.756	mg/L			10/31/23 22:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		11/01/23 06:43	11/01/23 17:18	1
Calcium	2.28		0.500	0.140	mg/L		11/01/23 06:43	11/01/23 17:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	23.0		10.0	10.0	mg/L			11/02/23 13:23	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.80				SU			10/27/23 12:25	1

Client Sample ID: MW-15
Date Collected: 10/27/23 09:10
Date Received: 10/28/23 09:45

Lab Sample ID: 180-164554-3
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.90		1.00	0.713	mg/L			10/31/23 22:48	1
Fluoride	0.0459	J	0.100	0.0260	mg/L			10/31/23 22:48	1
Sulfate	1.70		1.00	0.756	mg/L			10/31/23 22:48	1

Eurofins Pittsburgh

11/14/2023

Client Sample Results

Client Sample ID: MW-15
Date Collected: 10/27/23 09:10
Date Received: 10/28/23 09:45

Lab Sample ID: 180-164554-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0234	J B	0.0800	0.0220	mg/L		11/01/23 06:43	11/01/23 17:21	1
Calcium	1.13		0.500	0.140	mg/L		11/01/23 06:43	11/01/23 17:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	24.0		10.0	10.0	mg/L			11/02/23 13:23	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.59				SU			10/27/23 10:10	1

Client Sample ID: DUP-04
Date Collected: 10/27/23 13:30
Date Received: 10/28/23 09:45

Lab Sample ID: 180-164554-4
Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.9		1.00	0.713	mg/L			10/31/23 23:02	1
Fluoride	0.0575	J	0.100	0.0260	mg/L			10/31/23 23:02	1
Sulfate	2.67		1.00	0.756	mg/L			10/31/23 23:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0226	J B	0.0800	0.0220	mg/L		11/01/23 06:43	11/01/23 17:24	1
Calcium	1.49		0.500	0.140	mg/L		11/01/23 06:43	11/01/23 17:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	21.0		10.0	10.0	mg/L			11/02/23 13:23	1

Eurofins Pittsburgh

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-450609/36
Matrix: Water
Analysis Batch: 450609

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			10/31/23 23:45	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/31/23 23:45	1
Sulfate	<0.756		1.00	0.756	mg/L			10/31/23 23:45	1

Lab Sample ID: MB 180-450609/6
Matrix: Water
Analysis Batch: 450609

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			10/31/23 11:47	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/31/23 11:47	1
Sulfate	<0.756		1.00	0.756	mg/L			10/31/23 11:47	1

Lab Sample ID: LCS 180-450609/37
Matrix: Water
Analysis Batch: 450609

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	51.90		mg/L		104	80 - 120
Fluoride	2.50	2.690		mg/L		108	80 - 120
Sulfate	50.0	52.31		mg/L		105	80 - 120

Lab Sample ID: LCS 180-450609/7
Matrix: Water
Analysis Batch: 450609

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	50.98		mg/L		102	80 - 120
Fluoride	2.50	2.700		mg/L		108	80 - 120
Sulfate	50.0	51.34		mg/L		103	80 - 120

Lab Sample ID: 180-164554-1 MS
Matrix: Water
Analysis Batch: 450609

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	12.1		50.0	64.59		mg/L		105	80 - 120
Fluoride	0.0580	J	2.50	2.862		mg/L		112	80 - 120
Sulfate	2.72		50.0	56.41		mg/L		107	80 - 120

Lab Sample ID: 180-164554-1 MSD
Matrix: Water
Analysis Batch: 450609

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	12.1		50.0	61.36		mg/L		99	80 - 120	5	15
Fluoride	0.0580	J	2.50	2.704		mg/L		106	80 - 120	6	15
Sulfate	2.72		50.0	53.59		mg/L		102	80 - 120	5	15

Eurofins Pittsburgh

QC Sample Results

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-805669/1-A
Matrix: Water
Analysis Batch: 806015

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 805669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.03802	J	0.0800	0.0220	mg/L		11/01/23 06:43	11/01/23 16:39	1
Calcium	<0.140		0.500	0.140	mg/L		11/01/23 06:43	11/01/23 16:39	1

Lab Sample ID: LCS 680-805669/2-A
Matrix: Water
Analysis Batch: 806015

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 805669

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	0.400	0.4158		mg/L		104	80 - 120		
Calcium	5.00	5.168		mg/L		103	80 - 120		

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

Lab Sample ID: MB 180-450863/1
Matrix: Water
Analysis Batch: 450863

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			11/02/23 13:23	1

Lab Sample ID: LCS 180-450863/2
Matrix: Water
Analysis Batch: 450863

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	336	298.0		mg/L		89	85 - 115		

HPLC/IC

Analysis Batch: 450609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164554-1	MW-11	Total/NA	Water	EPA 9056A	
180-164554-2	MW-14	Total/NA	Water	EPA 9056A	
180-164554-3	MW-15	Total/NA	Water	EPA 9056A	
180-164554-4	DUP-04	Total/NA	Water	EPA 9056A	
MB 180-450609/36	Method Blank	Total/NA	Water	EPA 9056A	
MB 180-450609/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-450609/37	Lab Control Sample	Total/NA	Water	EPA 9056A	
LCS 180-450609/7	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-164554-1 MS	MW-11	Total/NA	Water	EPA 9056A	
180-164554-1 MSD	MW-11	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 805669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164554-1	MW-11	Total Recoverable	Water	3005A	
180-164554-2	MW-14	Total Recoverable	Water	3005A	
180-164554-3	MW-15	Total Recoverable	Water	3005A	
180-164554-4	DUP-04	Total Recoverable	Water	3005A	
MB 680-805669/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-805669/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 806015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164554-1	MW-11	Total Recoverable	Water	6020B	805669
180-164554-2	MW-14	Total Recoverable	Water	6020B	805669
180-164554-3	MW-15	Total Recoverable	Water	6020B	805669
180-164554-4	DUP-04	Total Recoverable	Water	6020B	805669
MB 680-805669/1-A	Method Blank	Total Recoverable	Water	6020B	805669
LCS 680-805669/2-A	Lab Control Sample	Total Recoverable	Water	6020B	805669

General Chemistry

Analysis Batch: 450863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164554-1	MW-11	Total/NA	Water	SM 2540C	
180-164554-2	MW-14	Total/NA	Water	SM 2540C	
180-164554-3	MW-15	Total/NA	Water	SM 2540C	
180-164554-4	DUP-04	Total/NA	Water	SM 2540C	
MB 180-450863/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-450863/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 451752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-164554-1	MW-11	Total/NA	Water	Field Sampling	
180-164554-2	MW-14	Total/NA	Water	Field Sampling	
180-164554-3	MW-15	Total/NA	Water	Field Sampling	

Eurofins Pittsburgh

11/14/2023

Chain of Custody Record

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

eurofins | Environment Testing America

COC No

Job #

Client Information

Client Contact:
SCS Contacts

Sampler: TODD VOSES

Phone: 850-336-0192

Lab PM: Brown, Shali

E-Mail: shali.brown@eurofinset.com

Company: SCS

Due Date Requested:

TAT Requested (days):

Address: 3535 Colonnade Pkwy Bin S 530 EC

PO #

City: Birmingham

State, Zip: Alabama

WO #

Phone: 205.992.6283

Project #: 18020047

Email:

SCS Contacts

Project Name: Daniel NAMU CCR

SSOW#

Site:

Analysis Requested

Preservation Codes:

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

Other:

Special Instructions/Note:

180-164554 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	6020B Boron and Calcium	90656 Chloride Fluoride Sulfate	Total Dissolved Solids	Total Number of Containers
MW-11	10-27-23	1430	G	water	X	X	X	3
MW-14	10-27-23	1125	G	water	X	X	X	3
MW-15	10-27-23	0910	G	water	X	X	X	3
Dup-04	10-27-23	1330	G	water	X	X	X	3

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

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

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:

Empty Kit Relinquished by:

Method of Shipment:

	Date	Time
Relinquished by:	Date/Time 10-27-23	1444	Company ROH EW.	Received by:	Date/Time 10/28/23 0945	Company ERATLED
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

11/14/2023

ORIGIN ID:MOBA (850) 336-0192

TESTAMERICA PITTSBURGH LAB
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 27OCT23
ACTWGT: 75.65 LB
CAD: 6994562/SSFE2441
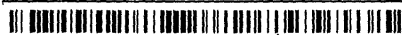DIMS: 24x13x14 IN

BILL THIRD PARTY

TO
TESTAMERICA PITTSBURG LAB
301 ALPHA DRIVE

PITTSBURGH PA 15238

(850) 336-0192   REF:
INV:
PO: DEPT:

Uncorrected temp   4.3   °C   FedEx
Thermometer ID   17   Express

CF −0.4   Initials RO   E

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

1 of 5   SATURDAY 12:00P
TRK# 7856 4357 2765   PRIORITY OVERNIGHT
0201
MASTER ##   AHS
                                       15238
XO AGCA   PA—US   PIT

180-164554 Waybill

... (as above)

ORIGIN ID:MOBA (850) 336-0192

SHIP DATE: 27OCT?
ACTWGT: 68.15 LB
CAD: 6994562/SS
DIMS: 24x13x14

TESTAMERICA PITTSBURGH LAB
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

BILL THIRD PAR

TO

TESTAMERICA PITTSBURG LAB
301 ALPHA DRIVE

PITTSBURGH PA 15238

(850) 336-0192   REF:
INV:
PO: DEPT:

Uncorrected temp   _2.4_ °C
Thermometer ID   _22_

CF _004_   Initials   _PM_

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

FedEx
Express

E

2 of 5

MPS#
0263   **7856 4357 2776**
Mstr# 7856 4357 2765   0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

PA-US

15238
PIT

Record

eurofins | Environment Testing America

ORIGIN ID:MOBA   (850) 336-0192

TESTAMERICA PITTSBURGH LAB
SEE CHEERS,5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 27OCT29
ACTWGT: 73.45 LB
CAD: 6994562/SSFE244
DIMS: 24x13x14 IN

BILL THIRD PARTY

TO

TESTAMERICA PITTSBURG LAB
301 ALPHA DRIVE

PITTSBURGH PA 15238

(850) 336-0192   REF:
INV:
PO:
                                    DEPT:

Uncorrected temp   5.3 °C   FedEx
Thermometer ID   17   Express

CF −0.4   Initials   RO   E

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

3 of 5
MPS#
0263 **7856 4357 2787**
Mstr# 7856 4357 2765   0201

XO AGCA

SATURDAY 12:00P
PRIORITY OVERNIGHT

15238
PA–US   PIT

	6020B Custom 14 (App III and IV)	7470 Mercury	90656 Chloride Fluoride Sulfate	Dissolved Solids
	X	X	X	
	X	X	X	
	X	X	X	
	X	X	X	
	X	X	X	
	X	X	X	
	X	X	X	
	X	X	X	
	X	X	X	
	X	X	X	
	X	X		

Sample Disp
☐ Return To Client

Special Instructions/QC Requirements:

Time:	Method of Shipment:	
ENV, Received by:	Date/Time: 10/28/23 0945	Company GP.HN25
Received by:	Date/Time:	Company
Received by:	Date/Time:	Company
Cooler Temperature(s) °C and Other Remarks:		

Ver. 01/16/2019

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

SHIP DATE: 27OCT23
ACTWGT: 61.35 LB
CAD: 6994562/SSFE2441
DIMS: 24x13x14 IN

BILL THIRD PARTY

TO
TESTAMERICA PITTSBURG LAB
301 ALPHA DRIVE

PITTSBURGH PA 15238
(850) 336-0192   REF:
INV:
PO:

Uncorrected temp   4.2   °C
Thermometer ID   17

CF -0.4   Initials. RO

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

FedEx Express

E

SATURDAY 12:00P
PRIORITY OVERNIGHT

4 of 5
MPS# 7856 4357 2798
0263
Mstr# 7856 4357 2765   0201

XO AGCA

15238
PA-US   PIT

TESTAMERICA PITTSBURGH LAB
SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

CAD: 6994562/SSFE2441
DIMS: 24x13x14 IN

BILL THIRD PARTY

TO

TESTAMERICA PITTSBURG LAB
301 ALPHA DRIVE

PITTSBURGH PA 15238

(860) 336-0192   REF:
INV:
PO: DEPT:

Uncorrected temp   4.5 °C
Thermometer ID   17

CF —0.4   Initials PD

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

FedEx
Express

E

5 of 5
MPS#
0263 7856 4357 2802
Mstr# 7856 4357 2765   0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA   15238
                    PA-US   PIT

Chain of Custody Record

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

⸭ eurofins | Environment Testing

Field	Value
Sampler:	
Lab PM:	Brown, Shali
Carrier Tracking No(s):	
COC No:	180-498561 1

Client Information (Sub Contract Lab)

Field	Value
Client Contact:	Shipping/Receiving
Phone:	
E-Mail:	Shali.Brown@et.eurofinsus.com
State of Origin:	Mississippi
Page:	Page 1 of 1
Company:	Eurofins Environment Testing Southeast,
Accreditations Required (See note):	
Job #:	180-164554-1
Address:	5102 LaRoche Avenue,
Due Date Requested:	11/13/2023
City:	Savannah
TAT Requested (days):	
State, Zip:	GA, 31404
Phone:	912-354-7858(Tel) 912-352-0165(Fax)
PO #:	
Email:	
WO #:	
Project Name:	Plant Daniel NAMU CCR
Project #:	18020047
Site:	
SSOW#:	

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

Analysis Requested

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A App III Boron and Calcium	Total Number of containers	Special Instructions/Note:
Preservation Code:									
MW-11 (180-164554-1)	10/27/23	14.30 Central		Water			X	1	
MW-14 (180-164554-2)	10/27/23	11:25 Central		Water			X	1	
MW-15 (180-164554-3)	10/27/23	09:10 Central		Water			X	1	
DUP-04 (180-164554-4)	10/27/23	13:30 Central		Water			X	1	

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.

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

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	_(signature)_	Date/Time: 10/30/23 1600	Company: EΓΓΛΝΕ	Received by: TH	Date/Time: 10-31-23	Company	
Relinquished by:		Date/Time:	Company	Received by:	Date/Time: 10 18	Company	
Relinquished by:		Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: △ Yes △ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 8.1- 2.0

Ver: 06/08/2021   11/14/2023

Eurofins Pittsburgh

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

Chain of Custody Record

∴ eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown Shali	Carrier Tracking No(s):	COC No: 180-498561.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Mississippi	Page: Page 2 of 2
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note):		Job #: 180-164552-1

Address: 5102 LaRoche Avenue,	Due Date Requested: 11/13/2023	Analysis Requested	Preservation Codes:

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

Other:

Field	Value
City:	Savannah
State, Zip:	GA, 31404
Phone:	912-354-7858(Tel) 912-352-0165(Fax)
Email:	
Project Name:	Plant Daniel GSA CCR
Site:	

	TAT Requested (days):		
PO #:		
WO #:		
Project #: 18020047		
SSOW#:		

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Custom 14 (Appll + App IV)	Total Number of containers	Special Instructions/Note:
Preservation Code:									
MW-10 (180-164552-10)	10/26/23	12:21 Central		Water			X	1	
DUP-03 (180-164552-11)	10/26/23	09:55 Central		Water			X	1	
DUP-05 (180-164552-12)	10/27/23	09:31 Central		Water			X	1	
EB-02 (180-164552-13)	10/27/23	08:48 Central		Water			X	1	
FB-02 (180-164552-14)	10/27/23	08:38 Central		Water			X	1	

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.

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Relinquished by: [signature]	Date/Time: 10/30/23 1600	Company: EPITTNE	Received by: TH	Date/Time: 10-31-23	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 10:18	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: △ Yes △ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 2.1 - 2.2

Ver: 06/08/2021   11/14/2023

Login Sample Receipt Checklist

Client: Southern Company   Job Number: 180-164554-1

Login Number: 164554   **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	

Login Sample Receipt Checklist

Client: Southern Company   Job Number: 180-164554-1

Login Number: 164554   **List Source: Eurofins Savannah**
List Number: 2   **List Creation: 10/31/23 12:26 PM**
Creator: Harley, Tynisha

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	

Eurofins Pittsburgh

11/14/2023

Low-Flow Test Report:

Test Date / Time: 10/27/2023 12:07:28 PM
Project: Daniel NAMU CCR MW-11
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-11	Pump Type: BP	Instrument Used: Aqua TROLL 400
Well Diameter: 2 in **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 30.5 ft** **Total Depth: 33 ft** **Initial Depth to Water: 14.53 ft**	**Tubing Type: PE** **Pump Intake From TOC: 30.5 ft** **Estimated Total Volume Pumped: 54000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 2.52 ft**	**Serial Number: 852546**

Test Notes:
DUP-04 is CCR

DUP-02 is State

Weather Conditions:
Partly cloudy, 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	
10/27/2023 12:07 PM	00:00	4.79 pH	23.52 °C	57.70 µS/cm	2.12 mg/L		167.7 mV	14.53 ft	400.00 ml/min
10/27/2023 12:12 PM	05:00	4.78 pH	22.71 °C	59.16 µS/cm	1.61 mg/L	45.60 NTU	164.5 mV	16.57 ft	400.00 ml/min
10/27/2023 12:17 PM	10:00	4.71 pH	22.69 °C	58.28 µS/cm	0.85 mg/L	44.00 NTU	162.1 mV	16.71 ft	400.00 ml/min
10/27/2023 12:22 PM	15:00	4.69 pH	22.46 °C	57.83 µS/cm	0.56 mg/L	34.70 NTU	162.9 mV	16.71 ft	400.00 ml/min
10/27/2023 12:27 PM	20:00	4.68 pH	22.49 °C	57.87 µS/cm	0.43 mg/L	30.70 NTU	161.5 mV	16.72 ft	400.00 ml/min
10/27/2023 12:32 PM	25:00	4.68 pH	22.53 °C	57.87 µS/cm	0.34 mg/L	24.00 NTU	160.0 mV	16.78 ft	400.00 ml/min
10/27/2023 12:37 PM	30:00	4.69 pH	22.62 °C	58.01 µS/cm	0.32 mg/L	20.20 NTU	157.9 mV	16.79 ft	400.00 ml/min
10/27/2023 12:42 PM	35:00	4.68 pH	22.64 °C	58.20 µS/cm	0.30 mg/L	17.60 NTU	156.9 mV	16.82 ft	400.00 ml/min
10/27/2023 12:47 PM	40:00	4.68 pH	22.15 °C	58.08 µS/cm	0.29 mg/L	16.90 NTU	155.8 mV	16.84 ft	400.00 ml/min
10/27/2023 12:52 PM	45:00	4.69 pH	22.08 °C	58.17 µS/cm	0.27 mg/L	13.50 NTU	154.1 mV	16.86 ft	400.00 ml/min
10/27/2023 12:57 PM	50:00	4.68 pH	22.35 °C	58.22 µS/cm	0.25 mg/L	11.50 NTU	152.5 mV	16.88 ft	400.00 ml/min
10/27/2023 1:02 PM	55:00	4.68 pH	22.61 °C	58.12 µS/cm	0.24 mg/L	11.30 NTU	151.2 mV	16.89 ft	400.00 ml/min
10/27/2023 1:07 PM	01:00:00	4.68 pH	22.93 °C	58.33 µS/cm	0.25 mg/L	8.32 NTU	149.7 mV	16.89 ft	400.00 ml/min

10/27/2023 1:12 PM	01:05:00	4.68 pH	22.53 °C	58.20 µS/cm	0.23 mg/L	8.45 NTU	149.2 mV	16.91 ft	400.00 ml/min
10/27/2023 1:17 PM	01:10:00	4.69 pH	22.29 °C	57.96 µS/cm	0.23 mg/L	7.23 NTU	148.3 mV	16.94 ft	400.00 ml/min
10/27/2023 1:22 PM	01:15:00	4.68 pH	22.62 °C	58.40 µS/cm	0.23 mg/L	6.31 NTU	146.4 mV	16.94 ft	400.00 ml/min
10/27/2023 1:27 PM	01:20:00	4.68 pH	22.37 °C	58.00 µS/cm	0.23 mg/L	6.54 NTU	146.2 mV	16.95 ft	400.00 ml/min
10/27/2023 1:32 PM	01:25:00	4.69 pH	22.11 °C	58.05 µS/cm	0.23 mg/L	5.45 NTU	145.2 mV	16.96 ft	400.00 ml/min
10/27/2023 1:37 PM	01:30:00	4.69 pH	22.04 °C	57.96 µS/cm	0.22 mg/L	5.37 NTU	144.3 mV	16.97 ft	400.00 ml/min
10/27/2023 1:42 PM	01:35:00	4.69 pH	22.11 °C	58.00 µS/cm	0.22 mg/L	5.10 NTU	143.2 mV	16.98 ft	400.00 ml/min
10/27/2023 1:47 PM	01:40:00	4.68 pH	22.13 °C	58.13 µS/cm	0.22 mg/L	4.88 NTU	143.1 mV	16.99 ft	400.00 ml/min
10/27/2023 1:52 PM	01:45:00	4.69 pH	22.22 °C	57.92 µS/cm	0.22 mg/L	4.87 NTU	142.0 mV	17.00 ft	400.00 ml/min
10/27/2023 1:57 PM	01:50:00	4.70 pH	22.31 °C	58.07 µS/cm	0.22 mg/L	4.05 NTU	141.0 mV	17.01 ft	400.00 ml/min
10/27/2023 2:02 PM	01:55:00	4.69 pH	22.02 °C	57.93 µS/cm	0.21 mg/L	3.84 NTU	140.5 mV	17.02 ft	400.00 ml/min
10/27/2023 2:07 PM	02:00:00	4.69 pH	22.27 °C	57.93 µS/cm	0.21 mg/L	3.73 NTU	139.7 mV	17.03 ft	400.00 ml/min
10/27/2023 2:12 PM	02:05:00	4.69 pH	22.46 °C	58.10 µS/cm	0.22 mg/L	3.54 NTU	139.1 mV	17.04 ft	400.00 ml/min
10/27/2023 2:17 PM	02:10:00	4.69 pH	22.51 °C	58.04 µS/cm	0.22 mg/L	3.87 NTU	138.2 mV	17.05 ft	400.00 ml/min
10/27/2023 2:22 PM	02:15:00	4.70 pH	22.58 °C	58.06 µS/cm	0.21 mg/L	3.64 NTU	137.4 mV	17.05 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-11	Sample time 1430
DUP-04	Fake sample time 1330
DUP-02	Fake sample time 1330

Low-Flow Test Report:

Test Date / Time: 10/27/2023 9:34:15 AM
Project: Daniel NAMU CCR MW-14
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-14 Well Diameter: 2 in Casing Type: PVC Screen Length: 5 ft Top of Screen: 35.7 ft Total Depth: 40.7 ft Initial Depth to Water: 13.81 ft	**Pump Type: BP** Tubing Type: PE Pump Intake From TOC: 38.2 ft Estimated Total Volume Pumped: 42000 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: 852546

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	
10/27/2023 9:34 AM	00:00	4.77 pH	21.37 °C	51.88 µS/cm	4.60 mg/L		142.8 mV	13.81 ft	400.00 ml/min
10/27/2023 9:39 AM	05:00	4.89 pH	21.15 °C	53.82 µS/cm	4.21 mg/L	51.10 NTU	141.6 mV	13.82 ft	400.00 ml/min
10/27/2023 9:44 AM	10:00	4.92 pH	21.15 °C	54.12 µS/cm	4.20 mg/L	51.90 NTU	142.6 mV	13.82 ft	400.00 ml/min
10/27/2023 9:49 AM	15:00	4.92 pH	21.18 °C	53.90 µS/cm	4.20 mg/L	39.30 NTU	142.9 mV	13.82 ft	400.00 ml/min
10/27/2023 9:54 AM	20:00	4.90 pH	21.15 °C	53.75 µS/cm	4.23 mg/L	28.90 NTU	143.4 mV	13.82 ft	400.00 ml/min
10/27/2023 9:59 AM	25:00	4.90 pH	21.20 °C	53.40 µS/cm	4.25 mg/L	22.40 NTU	144.2 mV	13.82 ft	400.00 ml/min
10/27/2023 10:04 AM	30:00	4.87 pH	21.22 °C	53.05 µS/cm	4.26 mg/L	17.60 NTU	145.0 mV	13.82 ft	400.00 ml/min
10/27/2023 10:09 AM	35:00	4.86 pH	21.23 °C	52.81 µS/cm	4.26 mg/L	15.50 NTU	145.1 mV	13.82 ft	400.00 ml/min
10/27/2023 10:14 AM	40:00	4.85 pH	21.28 °C	52.83 µS/cm	4.27 mg/L	13.40 NTU	145.7 mV	13.82 ft	400.00 ml/min
10/27/2023 10:19 AM	45:00	4.85 pH	21.28 °C	52.55 µS/cm	4.27 mg/L	11.20 NTU	146.2 mV	13.82 ft	400.00 ml/min
10/27/2023 10:24 AM	50:00	4.84 pH	21.33 °C	52.43 µS/cm	4.28 mg/L	10.30 NTU	146.8 mV	13.82 ft	400.00 ml/min
10/27/2023 10:29 AM	55:00	4.83 pH	21.37 °C	52.35 µS/cm	4.28 mg/L	7.40 NTU	147.7 mV	13.82 ft	400.00 ml/min
10/27/2023 10:34 AM	01:00:00	4.82 pH	21.39 °C	52.30 µS/cm	4.28 mg/L	7.44 NTU	148.3 mV	13.82 ft	400.00 ml/min

10/27/2023 10:39 AM	01:05:00	4.83 pH	21.43 °C	52.25 µS/cm	4.28 mg/L	6.68 NTU	148.6 mV	13.82 ft	400.00 ml/min
10/27/2023 10:44 AM	01:10:00	4.83 pH	21.42 °C	52.12 µS/cm	4.29 mg/L	5.73 NTU	148.9 mV	13.82 ft	400.00 ml/min
10/27/2023 10:49 AM	01:15:00	4.82 pH	21.50 °C	52.10 µS/cm	4.29 mg/L	5.54 NTU	149.7 mV	13.82 ft	400.00 ml/min
10/27/2023 10:54 AM	01:20:00	4.82 pH	21.53 °C	52.04 µS/cm	4.28 mg/L	5.57 NTU	150.0 mV	13.82 ft	400.00 ml/min
10/27/2023 10:59 AM	01:25:00	4.82 pH	21.55 °C	52.11 µS/cm	4.29 mg/L	5.25 NTU	150.3 mV	13.82 ft	400.00 ml/min
10/27/2023 11:04 AM	01:30:00	4.82 pH	21.55 °C	52.00 µS/cm	4.29 mg/L	4.91 NTU	150.6 mV	13.82 ft	400.00 ml/min
10/27/2023 11:09 AM	01:35:00	4.82 pH	21.47 °C	51.96 µS/cm	4.29 mg/L	4.47 NTU	151.3 mV	13.82 ft	400.00 ml/min
10/27/2023 11:14 AM	01:40:00	4.81 pH	21.47 °C	51.90 µS/cm	4.29 mg/L	4.53 NTU	151.9 mV	13.82 ft	400.00 ml/min
10/27/2023 11:19 AM	01:45:00	4.80 pH	21.57 °C	52.01 µS/cm	4.29 mg/L	4.33 NTU	152.5 mV	13.82 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-14	Sample time 1125

Low-Flow Test Report:

Test Date / Time: 10/27/2023 8:15:09 AM
Project: Daniel NAMU CCR MW-15
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-15
    Well Diameter: 2 in
    Casing Type: PVC
    Screen Length: 5 ft
    Top of Screen: ~~34.5 ft~~ 37 Ft.
    Total Depth: 39.5 ft
    Initial Depth to Water: 13.06 ft
	Pump Type: BP
	    Tubing Type: PE
	    Pump Intake From TOC: 34.5 ft
	    Estimated Total Volume Pumped: 20000 ml
	    Flow Cell Volume: 90 ml
	    Final Flow Rate: 400 ml/min
	    Final Draw Down: 0.04 ft
		Instrument Used: Aqua TROLL 400
		    Serial Number: 852546

Test Notes:

Weather Conditions:
Sunny, 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	+/- 20	+/- 0.3	
10/27/2023 8:15 AM	00:00	5.62 pH	21.01 °C	37.26 µS/cm	5.50 mg/L		99.8 mV	13.06 ft	400.00 ml/min
10/27/2023 8:20 AM	05:00	4.62 pH	21.46 °C	48.98 µS/cm	3.42 mg/L	7.95 NTU	99.6 mV	13.10 ft	400.00 ml/min
10/27/2023 8:25 AM	10:00	4.59 pH	21.47 °C	49.49 µS/cm	3.28 mg/L	7.55 NTU	103.4 mV	13.10 ft	400.00 ml/min
10/27/2023 8:30 AM	15:00	4.60 pH	21.44 °C	49.52 µS/cm	3.29 mg/L	5.78 NTU	105.9 mV	13.10 ft	400.00 ml/min
10/27/2023 8:35 AM	20:00	4.58 pH	21.46 °C	49.55 µS/cm	3.29 mg/L	4.39 NTU	109.5 mV	13.10 ft	400.00 ml/min
10/27/2023 8:40 AM	25:00	4.58 pH	21.46 °C	49.53 µS/cm	3.30 mg/L	4.32 NTU	112.2 mV	13.10 ft	400.00 ml/min
10/27/2023 8:45 AM	30:00	4.59 pH	21.46 °C	49.55 µS/cm	3.29 mg/L	3.06 NTU	113.8 mV	2.15 ft	400.00 ml/min
10/27/2023 8:50 AM	35:00	4.58 pH	21.50 °C	49.56 µS/cm	3.29 mg/L	2.15 NTU	116.3 mV	13.10 ft	400.00 ml/min
10/27/2023 8:55 AM	40:00	4.60 pH	21.51 °C	49.59 µS/cm	3.28 mg/L	1.87 NTU	117.1 mV	13.10 ft	400.00 ml/min
10/27/2023 9:00 AM	45:00	4.60 pH	21.50 °C	49.59 µS/cm	3.28 mg/L	1.53 NTU	119.2 mV	13.10 ft	400.00 ml/min
10/27/2023 9:05 AM	50:00	4.59 pH	21.55 °C	49.59 µS/cm	3.29 mg/L	1.36 NTU	121.7 mV	13.10 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-15	Sample time 0910

Daniel- Correction on MW-15!!!!!!!!!

1 message

Laura Hagendorfer <laura.rdhenv@gmail.com>   Fri, Oct 27, 2023 at 11:38 AM
To: Laura Hagendorfer <laura.rdhenv@gmail.com>

On the log for Daniel NAMU CCR MW-15, the pump intake from TOC should be 37, not 34.5. I entered it wrong.
From Todd 10/26/23

Low-Flow Test Report:

Test Date / Time: 10/27/2023 5:41:03 PM
Project: Daniel NAMU CCR MW-16
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-16
   Well Diameter: 2 cm
   Casing Type: PVC
   Screen Length: 5 m
   Top of Screen: 23.3 m
   Total Depth: 28.3 m
   Initial Depth to Water: 11.1 ft
	Pump Type: BP
	   Tubing Type: PE
	   Pump Intake From TOC: 25.8 ft
	   Estimated Total Volume Pumped: 6000 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: 852546

Test Notes:

Weather Conditions:
 Mostly cloudy, 77 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	
10/27/2023 5:41 PM	00:00	4.56 pH	23.99 °C	55.64 µS/cm	3.65 mg/L		146.9 mV	11.10 ft	400.00 ml/min
10/27/2023 5:46 PM	05:00	4.47 pH	23.15 °C	56.84 µS/cm	0.24 mg/L	5.45 NTU	141.1 mV	11.11 ft	400.00 ml/min
10/27/2023 5:51 PM	10:00	4.46 pH	23.07 °C	56.85 µS/cm	0.21 mg/L	2.97 NTU	140.9 mV	11.11 ft	400.00 ml/min
10/27/2023 5:56 PM	15:00	4.47 pH	23.00 °C	56.81 µS/cm	0.21 mg/L	1.23 NTU	141.2 mV	11.11 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-16	Sample time 1800

Low-Flow Test Report:

Test Date / Time: 10/27/2023 4:37:12 PM
Project: Daniel NAMU CCR MW-17
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-17	Pump Type: BP	Instrument Used: Aqua TROLL 400
Well Diameter: 2 in **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 23.5 ft** **Total Depth: 28.5 ft** **Initial Depth to Water: 8.41 ft**	**Tubing Type: PE** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 14000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0 ft**	**Serial Number: 852546**

Test Notes:

Weather Conditions:
Mostly cloudy, 81 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	
10/27/2023 4:37 PM	00:00	4.68 pH	24.57 °C	41.45 µS/cm	1.62 mg/L		158.4 mV	8.41 ft	400.00 ml/min
10/27/2023 4:42 PM	05:00	4.79 pH	23.57 °C	42.80 µS/cm	0.31 mg/L	1.56 NTU	146.9 mV	8.41 ft	400.00 ml/min
10/27/2023 4:47 PM	10:00	4.81 pH	23.37 °C	42.84 µS/cm	0.25 mg/L	1.02 NTU	142.8 mV	8.41 ft	400.00 ml/min
10/27/2023 4:52 PM	15:00	4.81 pH	23.35 °C	42.82 µS/cm	0.23 mg/L	0.80 NTU	139.0 mV	8.41 ft	400.00 ml/min
10/27/2023 4:57 PM	20:00	4.81 pH	23.30 °C	42.88 µS/cm	0.23 mg/L	0.87 NTU	136.2 mV	8.41 ft	400.00 ml/min
10/27/2023 5:02 PM	25:00	4.82 pH	23.07 °C	42.71 µS/cm	0.22 mg/L	0.45 NTU	133.3 mV	8.41 ft	400.00 ml/min
10/27/2023 5:07 PM	30:00	4.81 pH	23.16 °C	42.72 µS/cm	0.21 mg/L	0.52 NTU	131.5 mV	8.41 ft	400.00 ml/min
10/27/2023 5:12 PM	35:00	4.82 pH	22.98 °C	42.67 µS/cm	0.21 mg/L	0.75 NTU	128.9 mV	8.41 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-17	Sample time 1717

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 10/30/2023 8:00:58 AM
Project: Daniel NAMU CCR MW-18
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-18 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 39.4 ft** **Total Depth: 44.4 ft** **Initial Depth to Water: 18.23 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 41.9 ft** **Estimated Total Volume Pumped: 10000 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**

Test Notes:

Weather Conditions:
Foggy 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	
10/30/2023 8:00 AM	00:00	3.90 pH	21.12 °C	49.68 µS/cm	6.72 mg/L		138.3 mV	18.23 ft	400.00 ml/min
10/30/2023 8:05 AM	05:00	4.51 pH	20.93 °C	43.48 µS/cm	0.43 mg/L	0.30 NTU	90.9 mV	18.26 ft	400.00 ml/min
10/30/2023 8:10 AM	10:00	4.55 pH	20.89 °C	43.23 µS/cm	0.22 mg/L	0.27 NTU	90.5 mV	18.26 ft	400.00 ml/min
10/30/2023 8:15 AM	15:00	4.59 pH	20.93 °C	43.18 µS/cm	0.19 mg/L	0.31 NTU	73.4 mV	18.26 ft	400.00 ml/min
10/30/2023 8:20 AM	20:00	4.61 pH	20.89 °C	43.24 µS/cm	0.17 mg/L	0.35 NTU	68.7 mV	18.26 ft	400.00 ml/min
10/30/2023 8:25 AM	25:00	4.64 pH	20.89 °C	43.18 µS/cm	0.16 mg/L	0.28 NTU	64.9 mV	18.26 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-18	Sample time 0828

Low-Flow Test Report:

Test Date / Time: 10/30/2023 10:40:14 AM
Project: Daniel NAMU CCR MW-19
Operator Name: Rick Hagendorfer

Location Name: Daniel NAMU CCR MW-19
   Well Diameter: 2 in
   Casing Type: PVC
   Screen Length: 10 ft
   Top of Screen: 22.4 ft
   Total Depth: 32.4 ft
   Initial Depth to Water: 20.04 ft
	Pump Type: BP
	   Tubing Type: PE
	   Pump Intake From TOC: 27.4 ft
	   Estimated Total Volume Pumped: 16000 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

Test Notes:

Weather Conditions:
Cloudy 73

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	
10/30/2023 10:40 AM	00:00	5.04 pH	22.72 °C	39.77 µS/cm	7.97 mg/L		101.6 mV	20.04 ft	400.00 ml/min
10/30/2023 10:45 AM	05:00	5.34 pH	22.41 °C	60.33 µS/cm	0.47 mg/L	1.16 NTU	79.9 mV	20.13 ft	400.00 ml/min
10/30/2023 10:50 AM	10:00	5.21 pH	22.37 °C	48.25 µS/cm	0.21 mg/L	1.00 NTU	66.9 mV	20.13 ft	400.00 ml/min
10/30/2023 10:55 AM	15:00	5.12 pH	22.42 °C	42.17 µS/cm	0.17 mg/L	1.02 NTU	51.2 mV	20.13 ft	400.00 ml/min
10/30/2023 11:00 AM	20:00	5.06 pH	22.44 °C	39.51 µS/cm	0.16 mg/L	0.97 NTU	48.0 mV	20.13 ft	400.00 ml/min
10/30/2023 11:05 AM	25:00	5.06 pH	22.44 °C	39.24 µS/cm	0.15 mg/L	0.99 NTU	41.0 mV	20.13 ft	400.00 ml/min
10/30/2023 11:10 AM	30:00	5.03 pH	22.48 °C	38.21 µS/cm	0.14 mg/L	1.03 NTU	38.1 mV	20.13 ft	400.00 ml/min
10/30/2023 11:15 AM	35:00	4.98 pH	22.50 °C	37.52 µS/cm	0.14 mg/L	0.97 NTU	36.9 mV	20.13 ft	400.00 ml/min
10/30/2023 11:20 AM	40:00	5.01 pH	22.54 °C	37.69 µS/cm	0.14 mg/L	0.98 NTU	33.3 mV	20.13 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-19	Sample time 1124

Dup-06	Fake sample time 1024 CCR
Dup-03	Fake sample time 1024 state
EB-03	Sample time 1036
FB-03	Sample time 1057

Appendix B

1st
Semi-Annual
Monitoring Event

GROUNDWATER STATS
CONSULTING

June 9, 2023

Southern Company Services
Attn: Mr. Trey Singleton
3535 Colonnade Parkway
Birmingham, AL 35243
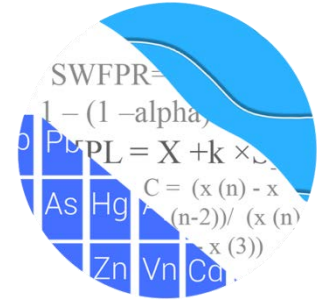
Re: Plant Daniel North Ash Management Unit (NAMU)
        Statistical Analysis – April 2023

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 2023 Groundwater Monitoring Annual report for Mississippi Power Company's Plant Daniel NAMU. 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 United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at Daniel NAMU for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- o **Upgradient wells:** MW-11, MW-14, and MW-18
- o **Downgradient wells:** MW-15, MW-16, MW-17, and MW-19

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The CCR program monitors the constituents listed below. The terms "parameters" and "constituents" are used interchangeably throughout this report.

- o **Appendix III** (Detection Monitoring) **-** boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of 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. For calculating intrawell prediction limits, the substitution is performed for individual wells and may differ across wells. This generally gives the most conservative limit in each case.

Time series plots for Appendix III parameters are provided for all wells and are used to evaluate concentrations over time as well as for the purpose of updating statistical limits (Figure A). Additionally, box plots are included for all constituents at upgradient and downgradient wells (Figure B). Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graph; however, no values were flagged as outliers (Figure C). 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 were 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:

- Intrawell 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 limits is based on an annual 10% (5% per semi-annual event) as recommended

2

by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The 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. 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.

Note that values shown on data pages reflect raw data and any non-detects that have been substituted with one-half of the reporting limit will be shown as the original reporting limit.

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 intrawell case, data for all wells and constituents are re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. While this was not required for this report, 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.

Two-Step Statistical Analysis

Intrawell statistical methods, combined with a 1-of-2 resample plan, may be used as a conservative first step for identifying potential facility impacts in downgradient wells. Intrawell methods use background data for individual wells and may be overly sensitive to natural variation. In particular for nonparametric limits with small background sample

sizes, the probability of a false positive is much higher than the desired annual sitewide rate of 10%. Therefore, a large number of exceedances may occur as a result of natural variation rather than facility impacts. A second step can be used to further evaluate those exceedances and reduce the overall number of SSIs that result from natural variation. In instances where intrawell statistical methods identify an apparent SSI, a second step of interwell statistical evaluation may be used to determine whether the measurement exceeds the sitewide background limit based on pooled upgradient well data. This is similar in concept to the procedure used in compliance monitoring programs where an interwell statistical limit is used to determine "background" (USEPA Unified Guidance (2009), Chapter 7, Section 7.5). For the detection monitoring program, if the result does not exceed sitewide (interwell) background, an SSI is not declared.

When the result exceeds the sitewide (interwell) background, the 1-of-2 resample plan allows for collection of an independent resample to confirm or disconfirm the initial finding. A statistically significant increase is not declared unless the resample also exceeds the intrawell prediction limit (United States Environmental Protection Agency (USEPA) Unified Guidance, March 2009, Chapter 19). When the resample confirms the initial exceedance, 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). When any resample falls within the statistical limit, the initial exceedance is considered to be a false positive result, and no further action is necessary. In cases where intrawell and interwell exceedances are noted and no resamples are collected, the initial exceedance will be considered a confirmed statistically significant increase (SSI).

Trend tests, in addition to interwell prediction limits, are recommended for well/constituent pairs found to have an initial intrawell SSI. Trend analysis will provide for detection of long-term changes and potential facility impacts at a given well in cases where the concentrations at that well remain below the sitewide upgradient limits. Thus, the two-step approach has additional capability to detect long-term changes at downgradient wells compared to interwell methods alone. While a trend may be identified by visual inspection, a quantification of the trend and its significance is needed to identify whether concentrations are statistically significantly increasing, decreasing, or remaining stable over time. The absence of a statistically significant increasing trend indicates that an initial intrawell exceedance is short-term and may be the result of natural variation rather than facility impact to groundwater. If a facility impact has occurred, it will likely result in additional exceedances in future sampling events. When a statistically significant increasing trend is noted, additional data may be needed to demonstrate that there is reasonable evidence that the initial intrawell statistical exceedance is a result of natural variation rather than a result of impact to groundwater quality downgradient of the facility.

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 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 data sets for Appendix III parameters. 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 few 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.

<u>Appendix III – Determination of Spatial Variation</u>

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified variation among upgradient well data at Plant Daniel NAMU for the majority of the Appendix III parameters. This facility is a lined unit with pre-waste data; therefore, due to variation noted among upgradient wells, intrawell prediction limits were recommended for this facility to accommodate the groundwater quality. A summary table of the ANOVA results was included with the screening.

Summary of Background Update – Appendix III Parameters – November 2019

Prior to updating background data, samples were re-evaluated for Appendix III constituents at all wells using Tukey's outlier test and visual screening on all historical data through the April 2019 sample event. Only one value was noted by Tukey's as a potential outlier; however, when Tukey's outlier test detects an outlier for the most recent sample, it often will not be flagged in the event that the data precede a trend that is more representative of current concentrations. Therefore, no values for Appendix III constituents were flagged as outliers at the time of the screening. An updated summary of Tukey's test results was included with the screening.

The Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through June 2017 to the new compliance samples at each well through April 2019 to evaluate whether the groups are statistically different at the 99% confidence level for each of the Appendix III parameters. When no differences exist, background data sets may be updated to include newer data for construction of prediction limits. This results in statistical limits that are representative of present-day conditions. No statistically significant differences were found between the two groups except for the following: calcium and sulfate in well MW-15. Note that the Mann-Whitney test could not be produced due to insufficient variation in the data for boron in wells MW-14, MW-15, MW-16, MW-17, and MW-19.

6

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background are not updated to include the newer data but will be reconsidered in the future. For all well/constituent pairs except for sulfate in well MW-15, due to the limited data available and the variability in data shows some of the more recent data has similar concentrations to those reported in background, these data sets were updated. In the case of calcium at well MW-15, while there is a statistically significant difference between the two medians, the magnitude of the difference is minimal, and newer data more accurately represent concentrations present in nearby wells. Therefore, the background for this well/constituent pair was updated with new data. A summary of these results was included in the 2019 Background Update report.

Summary of Background Update – Appendix III Parameters – March 2022

Outlier Analysis

Prior to updating background data, samples were re-evaluated for Appendix III constituents at all wells using Tukey's outlier test and visual screening on all historical data through the March 2022 sample event. A few values were noted by Tukey's as potential outliers; however, these values were not drastically different than concentrations within the respective wells and were not flagged as outliers. Additionally, when Tukey's outlier test detects an outlier for the most recent sample, it often will not be flagged in the event that the reported concentration precedes a trend that is more representative of current concentrations. No values for Appendix III constituents were flagged as outliers at this time. The Tukey's test results were included with the update.

Mann-Whitney Test of Medians

The Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through April 2019 to the new compliance samples at each well through October 2021 to evaluate whether the groups are statistically different at the 99% confidence level for each of the Appendix III parameters. When no differences exist, background data sets may be updated to include newer data for construction of prediction limits. This results in statistical limits that are representative of present-day conditions. Statistically significant differences were found between the two groups except for the following:

Groundwater Stats Consulting   •   www.groundwaterstats.com   •   913.829.1470

Increase:
- Calcium: MW-19

Decrease:
- Calcium: MW-14 (upgradient)
- Chloride: MW-14 and MW-18 (both upgradient)
- Fluoride: MW-19
- Sulfate: MW-11 (upgradient) and MW-15

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background are not updated to include the newer data but will be reconsidered in the future. For all well/constituent pairs with decreasing medians, these records were updated with more recent compliance measurements since reported concentrations are similar to those reported historically. In the case of fluoride in downgradient well MW-19, the significant difference resulted from reported trace values compared to reported non-detects in the record.

For the statistically significant increasing median identified in well MW-19, while a portion of the more recent concentrations remain below historical upgradient concentrations, the most recent compliance samples indicate an increase that would result in an elevated intrawell prediction limit. Therefore, this record was not updated at this time. This step results in construction of a statistical limit that is conservative (i.e., lower) from a regulatory perspective. A summary of the date range used for this well/constituent pair follows this report.

Statistical Analysis of Appendix III Parameters – April 2023

Intrawell Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample strategy, were established for each of the Appendix III parameters at each well using historical data through October 2021 for comparison of the April 2023 samples (Figure D). Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at the same well. The April 2023 samples from each well were compared to the prediction limits to determine whether initial exceedances are present. Note that during this event, the reporting limit for boron increased from 0.0601 mg/L to 0.1 mg/L at wells MW-11, MW-14, and MW-15. No significant changes occurred as a result of the reporting limit increase since no recent detections have been detected above the reporting limit in any of these wells.

Groundwater Stats Consulting   •   www.groundwaterstats.com   •   913.829.1470

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:

- Calcium: MW-19
- pH: MW-19
- Sulfate: MW-18 (upgradient)
- TDS: MW-19

Two-Step Analysis

Following the two-step analysis procedure, interwell prediction limits were then constructed using pooled upgradient well data to evaluate the apparent intrawell prediction limit exceedances among downgradient wells (Figure E). Exceedances were identified for the following well/constituent pairs:

- Calcium: MW-19
- pH: MW-19
- TDS: MW-19

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 to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure F). 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 natural variability in groundwater that is unrelated to practices at the site. Statistically significant trends were identified for the following well/constituent pairs which is an indication of naturally changing groundwater quality:

Increasing:

- Calcium: MW-19

Decreasing:

- Calcium: MW-14 and MW-18 (both upgradient)
- pH: MW-14 (upgradient)
- Sulfate: MW-11 (upgradient)

Resample Reports – May 2023

Resample data were collected in May 2023 for Appendix III parameters in downgradient well MW-19. Intrawell prediction limits were constructed using background data through October 2021 to compare the May 2023 resamples for all Appendix III parameters at well MW-19 (Figure G). Note that the reporting limit for boron at well MW-19 is 0.08 mg/L during the May 2023 event and the May 2023 observation is non-detect. Exceedances were identified for the following well/constituent pairs:

- Calcium: MW-19
- Chloride: MW-19

Following the two-step analysis procedure, interwell prediction limits was constructed for calcium and chloride at GWC-23 using upgradient well data through April 2023 (Figure H). No exceedances were noted; therefore, no further action was required.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Daniel North Ash Management Unit. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins   Kristina L. Rayner
Project Manager   Senior Statistician

100% Non-Detects

Boron (mg/L)
MW-16, MW-17

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Page 1

Date Ranges

Date: 5/9/2023 5:14 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Calcium (mg/L)
>MW-19 background:9/12/2016-4/22/2019

Appendix III Intrawell Prediction Limits - Significant Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 5/9/2023, 5:26 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	0.8608	n/a	4/20/2023	15.4	Yes	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
pH (SU)	MW-19	5.525	4.715	4/20/2023	6.06	Yes	18	5.12	0.1992	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	4.898	n/a	4/19/2023	7.48	Yes	17	3.696	0.585	5.882	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	43.34	n/a	4/20/2023	66	Yes	17	22.09	10.35	5.882	None	No	0.00188	Param Intra 1 of 2

Appendix III Intrawell Prediction Limits - All Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 5/9/2023, 5:26 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.103	n/a	4/19/2023	0.1ND	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.1	n/a	4/19/2023	0.1ND	No	17	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.1	n/a	4/19/2023	0.1ND	No	17	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.0601	n/a	4/19/2023	0.0256J	No	17	n/a	n/a	70.59	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-19	0.0601	n/a	4/20/2023	0.0318J	No	17	n/a	n/a	100	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.125	n/a	4/19/2023	1.65	No	17	24.35	9.256	5.882	None	x^5	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	5.702	n/a	4/19/2023	2.63	No	17	3.406	1.117	5.882	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.597	n/a	4/19/2023	0.682	No	17	1.187	0.2	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.146	n/a	4/20/2023	1.07	No	18	0.8117	0.1645	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.27	n/a	4/20/2023	0.855	No	17	0.01917	0.1071	0	None	ln(x)	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-18	0.9976	n/a	4/19/2023	0.368J	No	17	0.6866	0.1514	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	**MW-19**	**0.8608**	**n/a**	**4/20/2023**	**15.4**	**Yes**	**12**	**0.7847**	**0.06412**	**0**	**None**	**sqrt(x)**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	MW-11	16.08	n/a	4/19/2023	12.2	No	32	12.44	1.948	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.3	n/a	4/19/2023	10.2	No	17	8.927	1.643	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.02	n/a	4/19/2023	5.21	No	17	7.922	1.023	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	10.07	n/a	4/20/2023	10	No	19	7.533	1.263	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.234	n/a	4/20/2023	5.73	No	17	6.738	0.7281	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.16	n/a	4/19/2023	5.08	No	17	8	1.54	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.802	n/a	4/20/2023	4.84	No	17	706.2	208.1	5.882	None	x^4	0.00188	Param Intra 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	4/19/2023	0.0416J	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.0411	n/a	4/19/2023	0.0415J	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.0484	n/a	4/19/2023	0.0275J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.0496	n/a	4/20/2023	0.0322J	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.0511	n/a	4/20/2023	0.0271J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.0764	n/a	4/19/2023	0.0297J	No	17	n/a	n/a	64.71	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.0382	n/a	4/20/2023	0.0566J	No	17	n/a	n/a	82.35	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.927	4.479	4/19/2023	4.61	No	18	4.703	0.1101	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.519	4.651	4/19/2023	4.8	No	17	5.085	0.2112	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	5.006	4.405	4/19/2023	4.7	No	17	4.705	0.1462	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.808	4.41	4/20/2023	4.5	No	17	4.609	0.09695	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.314	4.695	4/20/2023	4.79	No	17	1.71	0.0172	0	None	x^(1/3)	0.0009398	Param Intra 1 of 2
pH (SU)	MW-18	4.833	4.445	4/19/2023	4.65	No	16	4.639	0.09337	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	**MW-19**	**5.525**	**4.715**	**4/20/2023**	**6.06**	**Yes**	**18**	**5.12**	**0.1992**	**0**	**None**	**No**	**0.0009398**	**Param Intra 1 of 2**
Sulfate (mg/L)	MW-11	10.47	n/a	4/19/2023	2.85	No	32	1.364	0.5266	15.63	Kaplan-Meier	ln(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-14	2.474	n/a	4/19/2023	1.93	No	17	2.586	1.72	29.41	Kaplan-Meier	x^2	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-15	3.38	n/a	4/19/2023	2.42	No	17	n/a	n/a	52.94	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	4/20/2023	2.59	No	17	n/a	n/a	47.06	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-17	3.508	n/a	4/20/2023	3.44	No	17	2.304	0.5866	11.76	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	**MW-18**	**4.898**	**n/a**	**4/19/2023**	**7.48**	**Yes**	**17**	**3.696**	**0.585**	**5.882**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Sulfate (mg/L)	MW-19	5	n/a	4/20/2023	3.73	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	76.12	n/a	4/19/2023	67	No	17	44	15.64	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	67.34	n/a	4/19/2023	41	No	17	36.35	15.09	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	54.62	n/a	4/19/2023	31	No	18	27.33	13.43	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	59.48	n/a	4/20/2023	37	No	17	24.46	17.05	17.65	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	43.75	n/a	4/20/2023	30	No	17	25.75	8.766	5.882	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	46.41	n/a	4/19/2023	29	No	17	26.88	9.506	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	**MW-19**	**43.34**	**n/a**	**4/20/2023**	**66**	**Yes**	**17**	**22.09**	**10.35**	**5.882**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**

Appendix III Interwell Prediction Limits - Two-Step - All/Significant Results

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	4.531	n/a	4/20/2023	15.4	Yes	60	1.32	0.4539	3.333	None	sqrt(x)	0.00188	Param Inter 1 of 2
pH (SU)	MW-19	5.65	4.45	4/20/2023	6.06	Yes	60	n/a	n/a	0	n/a	n/a	0.001049	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-19	64.48	n/a	4/20/2023	66	Yes	60	37.22	15.3	0	None	No	0.00188	Param Inter 1 of 2

Trend Tests - Prediction Limit Exceedances - Significant Results

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	MW-14 (bg)	-0.363	-133	-81	Yes	20	5	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-18 (bg)	-0.07165	-129	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-19	0.2253	90	81	Yes	20	0	n/a	n/a	0.01	NP
pH (SU)	MW-14 (bg)	-0.04668	-92	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-11 (bg)	-0.2485	-251	-184	Yes	35	14.29	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 5/12/2023, 10:31 AM

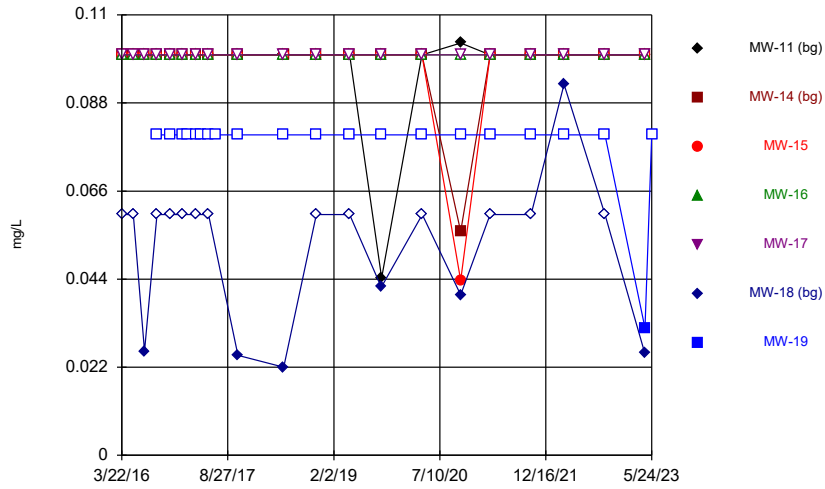| Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	MW-11 (bg)	0	-11	-81	No	20	5	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-14 (bg)**	**-0.363**	**-133**	**-81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.07165**	**-129**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.2253**	**90**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	MW-11 (bg)	-0.01735	-60	-87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	**MW-14 (bg)**	**-0.04668**	**-92**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	MW-18 (bg)	0.01861	67	74	No	19	0	n/a	n/a	0.01	NP
pH (SU)	MW-19	0.04749	44	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-11 (bg)**	**-0.2485**	**-251**	**-184**	**Yes**	**35**	**14.29**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-14 (bg)	0.04357	39	81	No	20	30	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-18 (bg)	0.2127	52	81	No	20	5	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-11 (bg)	1.963	49	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-14 (bg)	0.5865	13	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-18 (bg)	0.3801	24	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-19	3.324	79	81	No	20	5	n/a	n/a	0.01	NP

Intrawell Prediction Limits - May 2023 Resample (Significant Results)

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 6/8/2023, 3:38 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	0.8608	n/a	5/24/2023	1.7	Yes	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.802	n/a	5/24/2023	6.84	Yes	17	706.2	208.1	5.882	None	x^4	0.00188	Param Intra 1 of 2

Intrawell Prediction Limits - May 2023 Resample (All Results)

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-19	0.08	n/a	5/24/2023	0.08ND	No	17	n/a	n/a	100	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Calcium (mg/L)	**MW-19**	**0.8608**	**n/a**	**5/24/2023**	**1.7**	**Yes**	**12**	**0.7847**	**0.06412**	**0**	**None**	**sqrt(x)**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	**MW-19**	**5.802**	**n/a**	**5/24/2023**	**6.84**	**Yes**	**17**	**706.2**	**208.1**	**5.882**	**None**	**x^4**	**0.00188**	**Param Intra 1 of 2**
Fluoride (mg/L)	MW-19	0.0382	n/a	5/24/2023	0.0849J	No	17	n/a	n/a	82.35	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
pH (SU)	MW-19	5.525	4.715	5/24/2023	5.15	No	18	5.12	0.1992	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	5/24/2023	2.62	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-19	43.34	n/a	5/24/2023	32	No	17	22.09	10.35	5.882	None	No	0.00188	Param Intra 1 of 2

Interwell Prediction Limits - Two-Step - May 2023 Resample (No Significant)

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	4.531	n/a	5/24/2023	1.7	No	60	1.32	0.4539	3.333	None	sqrt(x)	0.00188	Param Inter 1 of 2
Chloride (mg/L)	MW-19	15.13	n/a	5/24/2023	6.84	No	75	10.26	2.757	0	None	No	0.00188	Param Inter 1 of 2

FIGURE A.

Time Series

Constituent: Boron   Analysis Run 6/8/2023 3:25 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Calcium   Analysis Run 6/8/2023 3:25 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Chloride   Analysis Run 6/8/2023 3:25 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Fluoride   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: pH   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Sulfate   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Total Dissolved Solids   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Boron (mg/L)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			<0.1 (B1)	<0.1 (B1)	<0.1 (B1)	<0.0601 (B1)	
3/23/2016	<0.1 (B1)	<0.1 (B1)					
5/18/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.0601	
7/11/2016				<0.1			
7/12/2016	<0.1	<0.1	<0.1		<0.1	0.026 (J)	
9/12/2016	<0.1	<0.1	<0.1		<0.1	<0.0601	<0.08
9/13/2016				<0.1			
11/17/2016				<0.1			
11/18/2016	<0.1				<0.1	<0.0601	<0.08
11/19/2016		<0.1	<0.1				
1/18/2017		<0.1		<0.1	<0.1	<0.0601	<0.08
1/19/2017	<0.1		<0.1				
2/10/2017							<0.08
3/21/2017			<0.1	<0.1	<0.1	<0.0601	<0.08
3/22/2017	<0.1	<0.1					
4/14/2017							<0.08
5/23/2017			<0.1	<0.1			<0.08
5/24/2017	<0.1	<0.1			<0.1	<0.0601	
6/26/2017							<0.08
10/17/2017	<0.1	<0.1	<0.1	<0.1	<0.1	0.025 (J)	<0.08
5/31/2018	<0.1			<0.1	<0.1	0.022 (J)	<0.08
6/1/2018		<0.1	<0.1				
11/7/2018	<0.1	<0.1	<0.1				
11/8/2018				<0.1	<0.1	<0.0601	<0.08
4/22/2019	<0.1			<0.1	<0.1	<0.0601	<0.08
4/23/2019		<0.1	<0.1				
9/26/2019		<0.1	<0.1	<0.1	<0.1	0.042 (J)	<0.08
9/27/2019	0.0443 (J)						
4/13/2020	<0.1	<0.1	<0.1		<0.1		<0.08
4/14/2020				<0.1		<0.0601	
10/21/2020				<0.1			<0.08
10/22/2020	0.103	0.0559 (J)	0.0437 (J)		<0.1	0.0401 (J)	
3/16/2021	<0.1	<0.1	<0.1	<0.1	<0.1	<0.0601	<0.08
10/5/2021	<0.1	<0.1	<0.1	<0.1	<0.1	<0.0601	<0.08
3/15/2022	<0.1	<0.1	<0.1	<0.1			<0.08
3/16/2022					<0.1	0.0927	
10/4/2022	<0.1	<0.1	<0.1				
10/5/2022				<0.1	<0.1	<0.0601	<0.08
4/19/2023	<0.1	<0.1	<0.1			0.0256 (J)	
4/20/2023				<0.1	<0.1		0.0318 (J)
5/24/2023							<0.08

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			1.3 (B1)	0.61 (B1)	1.4 (B1)	0.93 (B1)	
3/23/2016	<1.9 (*)	<5.9 (*)					
5/18/2016	1.8	5.5	1.2	0.89	1	0.85	
7/11/2016				0.82			
7/12/2016	1.9	5.3	1.1		1.1	0.69	
9/12/2016	2	4.9	1.4		0.98	0.86	0.92
9/13/2016				0.82			
11/17/2016				0.75			
11/18/2016	2				1	0.41	0.68
11/19/2016		4.8	1.3				
1/18/2017		3.8		0.58	1	0.81	0.64
1/19/2017	1.8		1.3				
2/10/2017							0.58
3/21/2017			1.3	0.6	0.91	0.76	0.56
3/22/2017	1.8	3.3					
4/14/2017							0.51
5/23/2017			1.4	0.65			0.54
5/24/2017	2	3.6			0.96	0.8	
6/26/2017							0.66
10/17/2017	2	3.7	1.1	1.1	0.96	0.69	0.58
12/15/2017				0.89 (RS)			
5/31/2018	1.8			1.1	1.1	0.75	0.56
6/1/2018		2.8	0.97				
11/7/2018	2	2.9	1.1				
11/8/2018				0.76	0.96	0.78	0.57
4/22/2019	1.71			1.09	0.946	0.531	0.634
4/23/2019		2.76	1.01				
9/26/2019		2.4	1.08	0.758	1.11	0.631	1.24
9/27/2019	1.99						
4/13/2020	2.03	2.74	1.22		1.03		0.687
4/14/2020				0.92		0.627	
10/21/2020				0.798			0.806
10/22/2020	2.02	2.17	1.35		0.969	0.553	
3/16/2021	1.74	2.4	1.41	0.681	1.12	0.57	2.23
10/5/2021	1.87	1.89	0.632	0.793	0.883	0.43 (J)	3.67
3/15/2022	1.87	2.59	0.703	1.18			5.84
3/16/2022					1.04	0.406 (J)	
10/4/2022	1.3	2.56	1.11				
10/5/2022				1.19	0.755	0.285 (J)	2.16
4/19/2023	1.65	2.63	0.682			0.368 (J)	
4/20/2023				1.07	0.855		15.4
5/24/2023							1.7

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
11/16/2006	8.5						
2/5/2007	8.8						
4/12/2007	9.5						
10/17/2007	12.1						
4/17/2008	13.1						
10/24/2008	13.7						
4/21/2009	11.9						
10/26/2009	11						
4/12/2010	12.5						
10/30/2010	10.8						
5/25/2011	10						
5/25/2012	10.9						
5/28/2013	11.4						
5/31/2014	9.2						
5/29/2015	11.5						
3/22/2016			8.4 (B1)	6.9 (B1)	7.3 (B1)	11 (B1)	
3/23/2016	13	8.8 (B1)					
5/18/2016	13	7.2	6	5.4	6	8.4	
7/11/2016				8.1			
7/12/2016	13	7.5	7.1		5.7	7.9	
9/12/2016	13	8.4	7.3		5.7	7.6	5
9/13/2016				6.2			
11/17/2016				7.3			
11/18/2016	14				8.2	8.5	<6.3 (*)
11/19/2016		12	8.9				
1/18/2017		11		6.3	7.4	9.2	5.3
1/19/2017	13		8.3				
2/10/2017							5.4
3/21/2017			8.8	7.3	7.9	10	5.3
3/22/2017	15	11					
4/14/2017							4.9 (B)
5/23/2017			9.3	7.4			5.5
5/24/2017	14	10			7.4	10	
6/26/2017							5.4
10/17/2017	15	10	7.1	9.9	6.5	8.6	5.4
12/19/2017				7.8 (RS)			
5/31/2018	12			8.7	6.5	6.9	5
6/1/2018		9.9	6.4				
11/7/2018	14	10	8				
11/8/2018				7.6	6.9	8.7	5.2
4/22/2019	13.3			10.2	6.64	6.17	4.91
4/23/2019		9.3	6.75				
6/25/2019				9.4			
9/26/2019		8.35	7.66	6.54	6.7	6.09	5.03
9/27/2019	13.4						
4/13/2020	14.2	7.9	7.74		6.46		4.9
4/14/2020				7.03		6.15	
10/21/2020				7.36			5.25
10/22/2020	17.4	6.5	8.69		6.37	6.89	
3/16/2021	13.3	7.32	8.94	7.14	6.97	8.18	5.72
10/5/2021	12.5	6.59	9.3	6.55	5.91	5.72	5.1
3/15/2022	13.6	8.36	5.55	10.8			6.91

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/16/2022					7	6.05	
10/4/2022	12	11.2	8.22				
10/5/2022				11.7	5.51	4.97	5.94
4/19/2023	12.2	10.2	5.21			5.08	
4/20/2023				10	5.73		4.84
5/24/2023							6.84

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			<0.026 (B1)	<0.026 (B1)	<0.026 (B1)	<0.026 (B1)	
3/23/2016	<0.1	<0.026 (B1)					
5/18/2016	<0.1	<0.026	<0.026	<0.026	<0.026	<0.026	
7/11/2016				<0.026			
7/12/2016	0.04 (J)	<0.026	<0.026		<0.026	0.04 (J)	
9/12/2016	0.04 (J)	<0.026	<0.026		<0.026	<0.026	<0.026
9/13/2016				<0.026			
11/17/2016				<0.026			
11/18/2016	<0.1				<0.026	<0.026	<0.026
11/19/2016		<0.026	<0.026				
1/18/2017		<0.026		<0.026	<0.026	<0.026	<0.026
1/19/2017	<0.1		<0.026				
2/10/2017							<0.026
3/21/2017			<0.026	<0.026	<0.026	<0.026	<0.026
3/22/2017	<0.1	<0.026					
4/14/2017							<0.026
5/23/2017			<0.026	<0.026			<0.026
5/24/2017	<0.1	<0.026			<0.026	<0.026	
6/26/2017							<0.026
10/17/2017	0.04 (J)	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
5/31/2018	0.04 (J)			<0.026	<0.026	0.04 (J)	<0.026
6/1/2018		<0.026	<0.026				
11/7/2018	0.05 (J)	<0.026	<0.026				
11/8/2018				<0.026	<0.026	<0.026	<0.026
4/22/2019	0.0353 (J)			0.029 (J)	<0.026	0.0311 (J)	<0.026
4/23/2019		0.0335 (J)	0.0275 (J)				
9/26/2019		0.0272 (J)	<0.026	0.0302 (J)	0.0263 (J)	0.0366 (J)	0.0287 (J)
9/27/2019	0.0438 (J)						
4/13/2020	0.0672 (J)	0.0411 (J)	0.0484 (J)		0.0511 (J)		0.0382 (J)
4/14/2020				0.0496 (J)		0.0764 (J)	
10/21/2020				<0.026			<0.026
10/22/2020	<0.1	<0.026	<0.026		<0.026	<0.026	
3/16/2021	0.0269 (J)	<0.026	<0.026	<0.026	<0.026	0.0344 (J)	0.0376 (J)
10/5/2021	0.0561 (J)	0.03 (J)	<0.026	0.0264 (J)	<0.026	<0.026	<0.026
3/15/2022	<0.1	0.0364 (J)	0.0302 (J)	0.0438 (J)			0.0423 (J)
3/16/2022					0.0399 (J)	<0.026	
10/4/2022	0.0281 (J)	<0.026	<0.026				
10/5/2022				<0.026	<0.026	<0.026	<0.026
4/19/2023	0.0416 (J)	0.0415 (J)	0.0275 (J)			0.0297 (J)	
4/20/2023				0.0322 (J)	0.0271 (J)		0.0566 (J)
5/24/2023							0.0849 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series
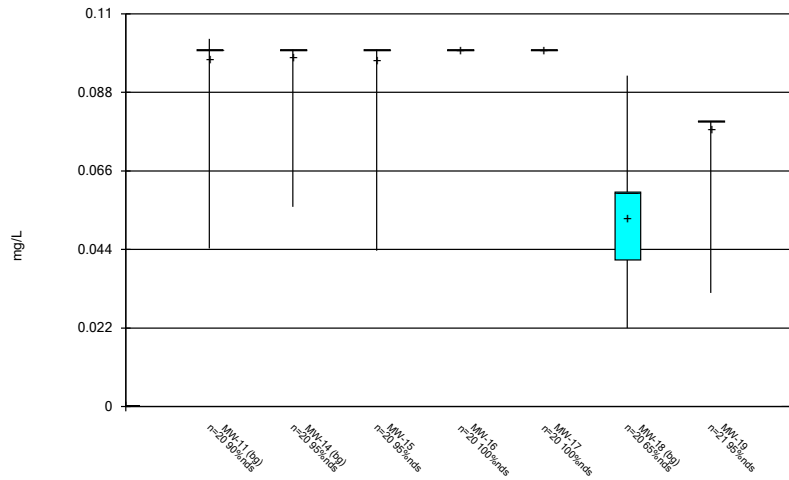
Constituent: pH (SU)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			4.77	4.68	4.89	4.63	
3/23/2016	4.8	5.4					
5/18/2016	4.74	5.38	4.62	4.67	5.09	4.58	
7/11/2016				4.75			
7/12/2016	4.9	5.65	5.03		5.27	4.7	
9/12/2016	4.72	5.14	4.6		4.94	4.6	5.55
9/13/2016				4.56			
11/17/2016				4.6			
11/18/2016	4.65				4.82	4.52	5.14
11/19/2016		5.05	4.46				
1/18/2017		5.11		4.68	5.02	4.63	5.27
1/19/2017	4.77		4.65				
2/10/2017							5.14
3/21/2017			4.47	4.39	4.82	4.45	4.96
3/22/2017	4.46	4.86					
4/14/2017							5.07
5/23/2017			4.69	4.61			5.01
5/24/2017	4.74	5.02			4.87	4.55	
6/26/2017							4.93
10/17/2017	4.72	5.01	4.62	4.51	5	4.61	4.93
11/30/2017	4.61						4.81
5/31/2018	4.93			4.75	5.42	4.84	5.11
6/1/2018		5	4.87				
11/7/2018	4.58	4.81	4.61				
11/8/2018				4.71	5.02	4.63	5.09
4/22/2019	4.67			4.49	4.94	4.64	4.97
4/23/2019		4.93	4.77				
9/26/2019		4.99	4.84	4.62	5.01	4.71	5.19
9/27/2019	4.61						
4/13/2020	4.7	4.96	4.71		4.99		5.06
4/14/2020				4.61		4.75	
10/21/2020				4.5			5.05
10/22/2020	4.66	5.09	4.78		5.01	4.7	
3/16/2021	4.72	5.06	4.65	4.62	5		5.35
10/5/2021	4.67	4.98	4.85	4.6	4.88	4.68	5.53
3/15/2022	4.73	5.07	4.87	4.58			5.82
3/16/2022					4.91	4.79	
10/4/2022	4.62	4.9	4.71				
10/5/2022				4.52	5	4.7	5.3
4/19/2023	4.61	4.8	4.7			4.65	
4/20/2023				4.5	4.79		6.06
5/24/2023							5.15

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
11/16/2006	5						
2/5/2007	<5						
4/12/2007	<5						
10/17/2007	5.7						
4/17/2008	7						
10/24/2008	6.6						
4/21/2009	5.2						
10/26/2009	8.3						
4/12/2010	6.8						
10/30/2010	10.8						
5/25/2011	11.5						
5/25/2012	8.2						
5/28/2013	6.9						
5/31/2014	3.5						
5/29/2015	3.3						
3/22/2016			<0.756	<5	<5	3 (J)	
3/23/2016	1.8 (J)	<0.756					
5/18/2016	4.1	1.9	<0.756	<5	1.4	3.9 (J)	
7/11/2016				<5			
7/12/2016	3.8 (J)	2 (J)	<0.756		1.8 (J)	3.9 (J)	
9/12/2016	3.9 (J)	2 (J)	<0.756		2.2 (J)	4.5 (J)	<5
9/13/2016				1.7 (J)			
11/17/2016				<5			
11/18/2016	5.4				1.5 (J)	4.2 (J)	<5
11/19/2016		1.7 (J)	<0.756				
1/18/2017		<0.756		<5	1.5 (J)	3.8 (J)	<5
1/19/2017	<5		<0.756				
2/10/2017							<5
3/21/2017			<0.756	<5	<5	<5 (*)	<5
3/22/2017	<5	<0.756					
4/14/2017							1.5 (J)
5/23/2017			<0.756	<5			<5
5/24/2017	2 (J)	<0.756			1.7 (J)	3 (J)	
6/26/2017							1.5 (J)
10/17/2017	<5	<0.756	<0.756	<5	1.8 (J)	3.4 (J)	<5
5/31/2018	3 (J)			2.2 (J)	2.5 (J)	4.1 (J)	1.9 (J)
6/1/2018		1.8 (J)	1.5 (J)				
11/7/2018	3.1 (J)	1.8 (J)	1.5 (J)				
11/8/2018				1.7 (J)	2.2 (J)	3.3 (J)	1.5 (J)
4/22/2019	2.22			2.52	2.96	4.66	2.09
4/23/2019		1.99	1.43				
9/26/2019		1.95	1.2	2.28	2.96	4.23	2.1
9/27/2019	2.36						
4/13/2020	2.47	1.43	0.992 (J)		2.75		1.69
4/14/2020				2.27		3.96	
10/21/2020				2.15			1.31
10/22/2020	2.01	1.76	1.04		2.98	3.37	
3/16/2021	2.15	2.23	1.07	2	3.06	3.18	2.72
10/5/2021	2.57	2.46	3.38	2.22	2.85	3.83	1.91
3/15/2022	2.88	2.1	1.33	2.29			4.86
3/16/2022					3.38	7.04	
10/4/2022	2.04	<0.756	<0.756				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
10/5/2022				1.4	2.05	6.04	1.02
4/19/2023	2.85	1.93	2.42			7.48	
4/20/2023				2.59	3.44		3.73
5/24/2023							2.62

Time Series

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			34 (B1)	42 (B1)	32 (B1)	28 (B1)	
3/23/2016	40	48 (B1)					
5/18/2016	52	26	24	<5	26	20	
7/11/2016				<5			
7/12/2016	42	24	24		22	24	
9/12/2016	42	32	4 (J)		32	48	12
9/13/2016				48			
11/17/2016				20			
11/18/2016	82				16	10	14
11/19/2016		76	44				
1/18/2017		48		18	32	30	20
1/19/2017	32		26				
2/10/2017							28
3/21/2017			20	8	16	6	20
3/22/2017	6	30					
4/14/2017							14
5/23/2017			6	<5			<5
5/24/2017	48	46			22	30	
6/26/2017							34
10/17/2017	34	8	58	58	26	32	42
12/15/2017			20 (RS)				
5/31/2018	32			24	<3.4	30	22
6/1/2018		44	26				
11/7/2018	52	26	8				
11/8/2018				4 (J)	36	22	8
4/22/2019	50			46	24	36	31
4/23/2019		48	34				
9/26/2019		39	32	27	25	30	29
9/27/2019	50						
4/13/2020	63	28	39		27		20
4/14/2020				36		29	
10/21/2020				33			19
10/22/2020	41	25	34		29	22	
3/16/2021	39	41	34	27	37	31	25
10/5/2021	43	29	25	29	34	29	35
3/15/2022	53	56	51	34			36
3/16/2022					55	25	
10/4/2022	53	52	42				
10/5/2022				42	35	34	31
4/19/2023	67	41	31			29	
4/20/2023				37	30		66
5/24/2023							32

ND substitution: RL or RL/2 if <15% NDs.

FIGURE B.

Box & Whiskers Plot

Constituent: Boron   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot

Constituent: Calcium   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot

Constituent: Chloride   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot

Constituent: Fluoride   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot

Constituent: pH   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot

Constituent: Sulfate   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot

Constituent: Total Dissolved Solids   Analysis Run 6/8/2023 3:26 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

FIGURE C.

Outlier Summary

No values were flagged as outliers.

FIGURE D.

Appendix III Intrawell Prediction Limits - Significant Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 5/9/2023, 5:26 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	0.8608	n/a	4/20/2023	15.4	Yes	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
pH (SU)	MW-19	5.525	4.715	4/20/2023	6.06	Yes	18	5.12	0.1992	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	4.898	n/a	4/19/2023	7.48	Yes	17	3.696	0.585	5.882	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	43.34	n/a	4/20/2023	66	Yes	17	22.09	10.35	5.882	None	No	0.00188	Param Intra 1 of 2

Appendix III Intrawell Prediction Limits - All Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 5/9/2023, 5:26 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.103	n/a	4/19/2023	0.1ND	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.1	n/a	4/19/2023	0.1ND	No	17	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.1	n/a	4/19/2023	0.1ND	No	17	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.0601	n/a	4/19/2023	0.0256J	No	17	n/a	n/a	70.59	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-19	0.0601	n/a	4/20/2023	0.0318J	No	17	n/a	n/a	100	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.125	n/a	4/19/2023	1.65	No	17	24.35	9.256	5.882	None	x^5	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	5.702	n/a	4/19/2023	2.63	No	17	3.406	1.117	5.882	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.597	n/a	4/19/2023	0.682	No	17	1.187	0.2	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.146	n/a	4/20/2023	1.07	No	18	0.8117	0.1645	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.27	n/a	4/20/2023	0.855	No	17	0.01917	0.1071	0	None	ln(x)	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-18	0.9976	n/a	4/19/2023	0.368J	No	17	0.6866	0.1514	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	**MW-19**	**0.8608**	**n/a**	**4/20/2023**	**15.4**	**Yes**	**12**	**0.7847**	**0.06412**	**0**	**None**	**sqrt(x)**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	MW-11	16.08	n/a	4/19/2023	12.2	No	32	12.44	1.948	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.3	n/a	4/19/2023	10.2	No	17	8.927	1.643	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.02	n/a	4/19/2023	5.21	No	17	7.922	1.023	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	10.07	n/a	4/20/2023	10	No	19	7.533	1.263	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.234	n/a	4/20/2023	5.73	No	17	6.738	0.7281	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.16	n/a	4/19/2023	5.08	No	17	8	1.54	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.802	n/a	4/20/2023	4.84	No	17	706.2	208.1	5.882	None	x^4	0.00188	Param Intra 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	4/19/2023	0.0416J	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.0411	n/a	4/19/2023	0.0415J	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.0484	n/a	4/19/2023	0.0275J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.0496	n/a	4/20/2023	0.0322J	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.0511	n/a	4/20/2023	0.0271J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.0764	n/a	4/19/2023	0.0297J	No	17	n/a	n/a	64.71	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.0382	n/a	4/20/2023	0.0566J	No	17	n/a	n/a	82.35	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.927	4.479	4/19/2023	4.61	No	18	4.703	0.1101	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.519	4.651	4/19/2023	4.8	No	17	5.085	0.2112	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	5.006	4.405	4/19/2023	4.7	No	17	4.705	0.1462	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.808	4.41	4/20/2023	4.5	No	17	4.609	0.09695	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.314	4.695	4/20/2023	4.79	No	17	1.71	0.0172	0	None	x^(1/3)	0.0009398	Param Intra 1 of 2
pH (SU)	MW-18	4.833	4.445	4/19/2023	4.65	No	16	4.639	0.09337	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	**MW-19**	**5.525**	**4.715**	**4/20/2023**	**6.06**	**Yes**	**18**	**5.12**	**0.1992**	**0**	**None**	**No**	**0.0009398**	**Param Intra 1 of 2**
Sulfate (mg/L)	MW-11	10.47	n/a	4/19/2023	2.85	No	32	1.364	0.5266	15.63	Kaplan-Meier	ln(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-14	2.474	n/a	4/19/2023	1.93	No	17	2.586	1.72	29.41	Kaplan-Meier	x^2	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-15	3.38	n/a	4/19/2023	2.42	No	17	n/a	n/a	52.94	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	4/20/2023	2.59	No	17	n/a	n/a	47.06	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-17	3.508	n/a	4/20/2023	3.44	No	17	2.304	0.5866	11.76	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	**MW-18**	**4.898**	**n/a**	**4/19/2023**	**7.48**	**Yes**	**17**	**3.696**	**0.585**	**5.882**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Sulfate (mg/L)	MW-19	5	n/a	4/20/2023	3.73	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	76.12	n/a	4/19/2023	67	No	17	44	15.64	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	67.34	n/a	4/19/2023	41	No	17	36.35	15.09	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	54.62	n/a	4/19/2023	31	No	18	27.33	13.43	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	59.48	n/a	4/20/2023	37	No	17	24.46	17.05	17.65	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	43.75	n/a	4/20/2023	30	No	17	25.75	8.766	5.882	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	46.41	n/a	4/19/2023	29	No	17	26.88	9.506	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	**MW-19**	**43.34**	**n/a**	**4/20/2023**	**66**	**Yes**	**17**	**22.09**	**10.35**	**5.882**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**

Within Limit

Prediction Limit

Intrawell Non-parametric

0.11
0.088
0.066
0.044
0.022
0

mg/L

3/23/16   8/21/17   1/20/19   6/19/20   11/18/21   4/19/23
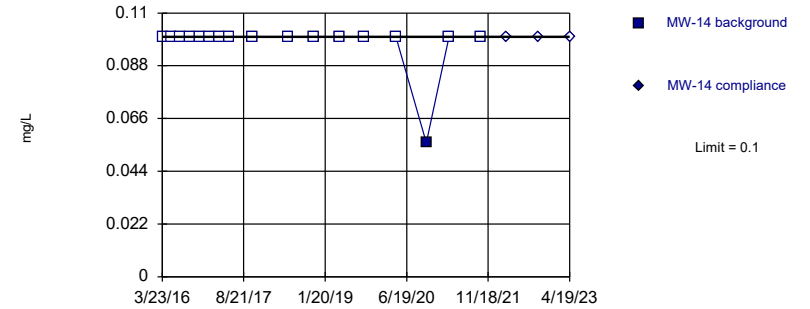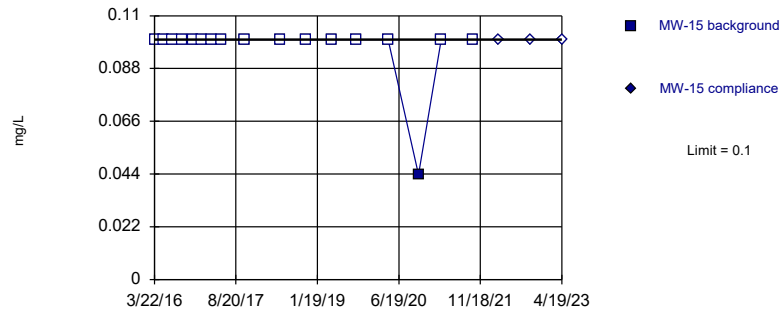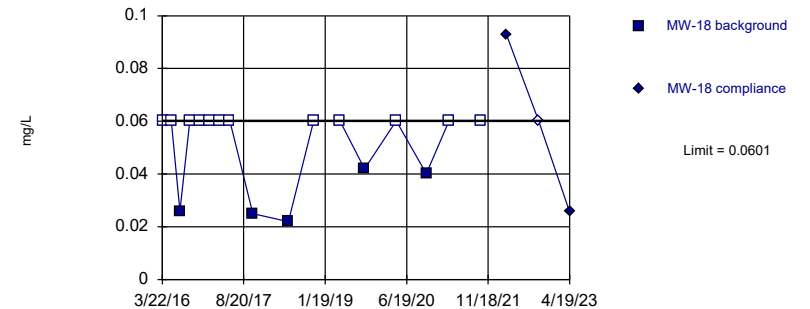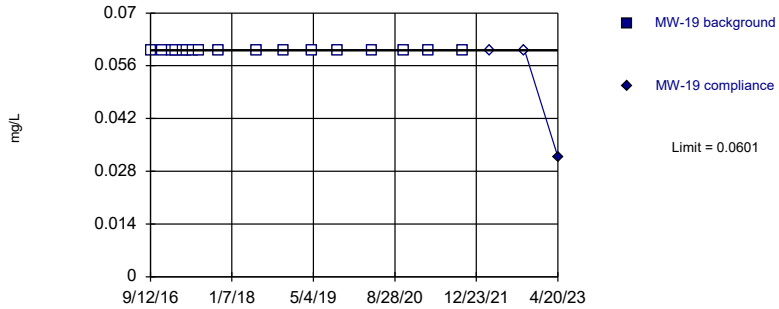
■ MW-11 background

◆ MW-11 compliance

Limit = 0.103

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
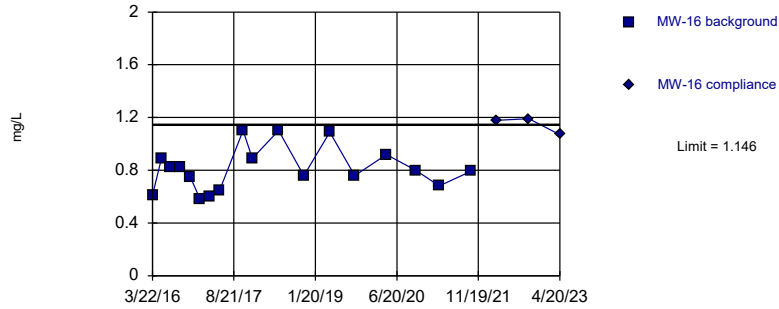
Intrawell Non-parametric

0.11
0.088
0.066
0.044
0.022
0

mg/L

3/23/16   8/21/17   1/20/19   6/19/20   11/18/21   4/19/23

■ MW-14 background

◆ MW-14 compliance

Limit = 0.1

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
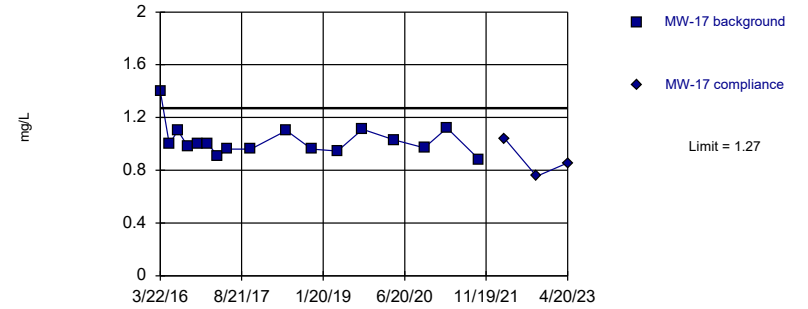
Intrawell Non-parametric

0.11
0.088
0.066
0.044
0.022
0

mg/L

3/22/16   8/20/17   1/19/19   6/19/20   11/18/21   4/19/23

■ MW-15 background

◆ MW-15 compliance

Limit = 0.1

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
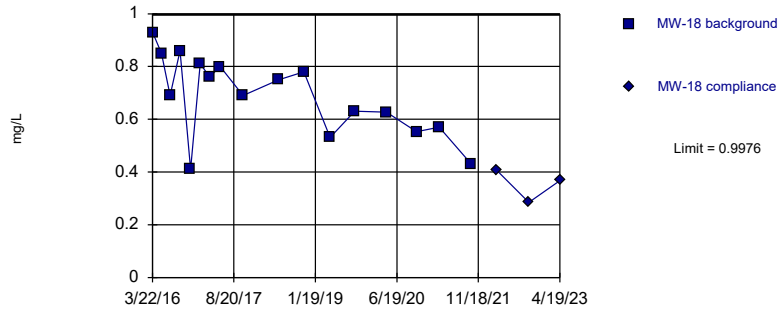
Intrawell Non-parametric

0.1
0.08
0.06
0.04
0.02
0

mg/L

3/22/16   8/20/17   1/19/19   6/19/20   11/18/21   4/19/23

■ MW-18 background

◆ MW-18 compliance

Limit = 0.0601

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 70.59% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
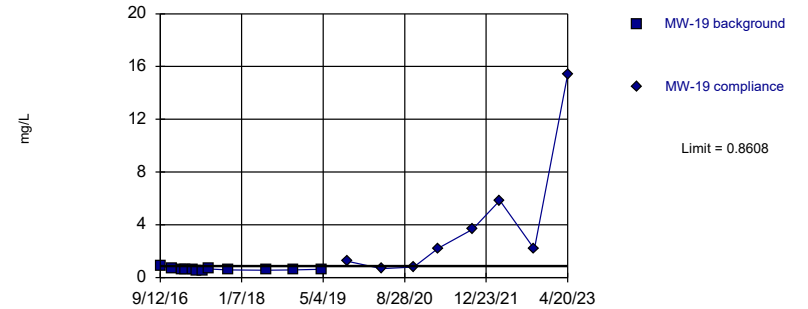
Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ MW-19 background
- ◆ MW-19 compliance

Limit = 0.0601

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 17) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

- ■ MW-11 background
- ◆ MW-11 compliance

Limit = 2.125

Background Data Summary (based on x^5 transformation): Mean=24.35, Std. Dev.=9.256, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8606, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit
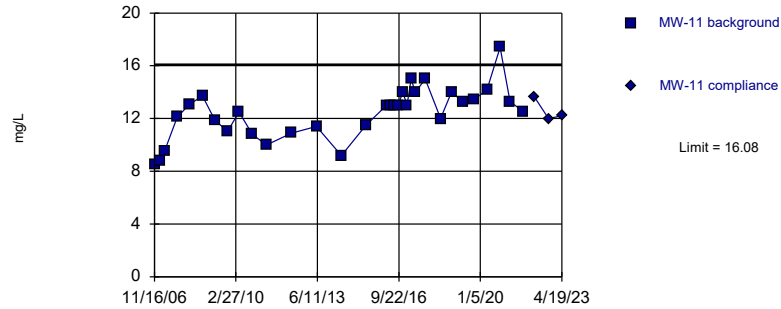
Prediction Limit

Intrawell Parametric

- ■ MW-14 background
- ◆ MW-14 compliance

Limit = 5.702

Background Data Summary: Mean=3.406, Std. Dev.=1.117, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9118, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

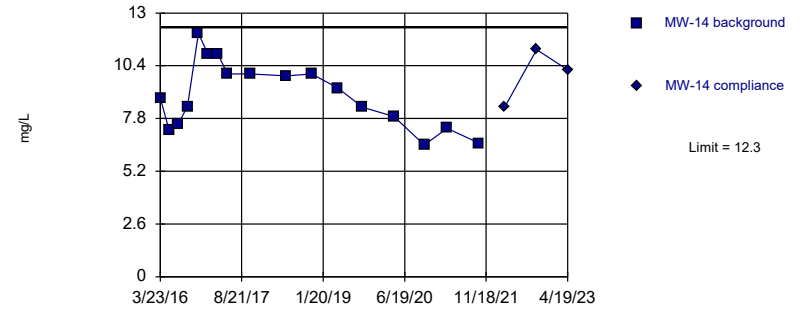## Prediction Limit

Intrawell Parametric

- ■ MW-15 background
- ◆ MW-15 compliance

Limit = 1.597

Background Data Summary: Mean=1.187, Std. Dev.=0.2, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8807, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

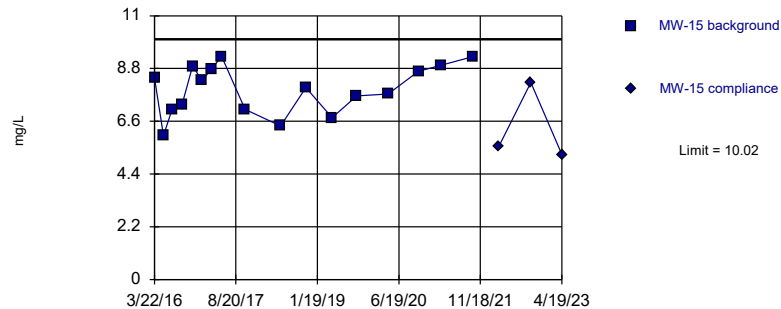## Prediction Limit
Intrawell Parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 1.146

Background Data Summary: Mean=0.8117, Std. Dev.=0.1645, n=18.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9244, critical = 0.858.   Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-17 background

◆ MW-17 compliance

Limit = 1.27

Background Data Summary (based on natural log transformation): Mean=0.01917, Std. Dev.=0.1071, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8548, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 5/9/2023 5:16 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

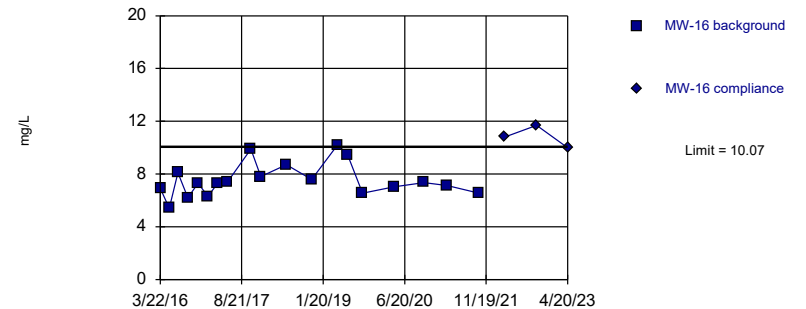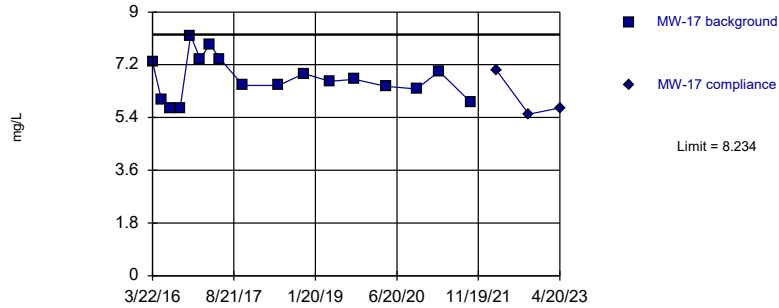Within Limit

Prediction Limit
Intrawell Parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 0.9976

Background Data Summary: Mean=0.6866, Std. Dev.=0.1514, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.964, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 0.8608

Background Data Summary (based on square root transformation): Mean=0.7847, Std. Dev.=0.06412, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8069, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-11 background

◆ MW-11 compliance

Limit = 16.08

Background Data Summary: Mean=12.44, Std. Dev.=1.948, n=32.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9664, critical = 0.904.   Kappa = 1.87 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 12.3

Background Data Summary: Mean=8.927, Std. Dev.=1.643, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9575, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 10.02

Background Data Summary: Mean=7.922, Std. Dev.=1.023, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 10.07

Background Data Summary: Mean=7.533, Std. Dev.=1.263, n=19.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9348, critical = 0.863.   Kappa = 2.01 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-17 background

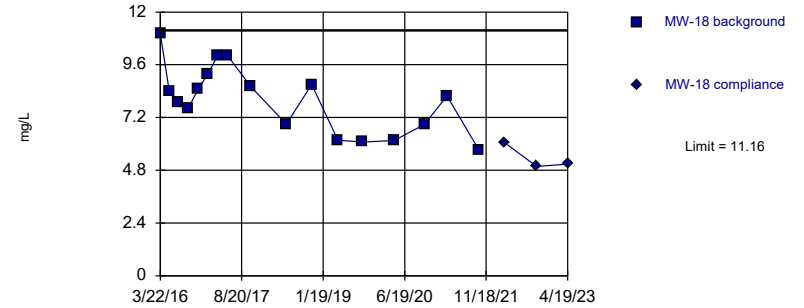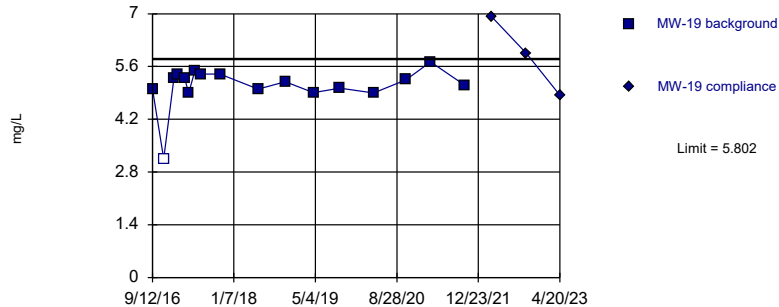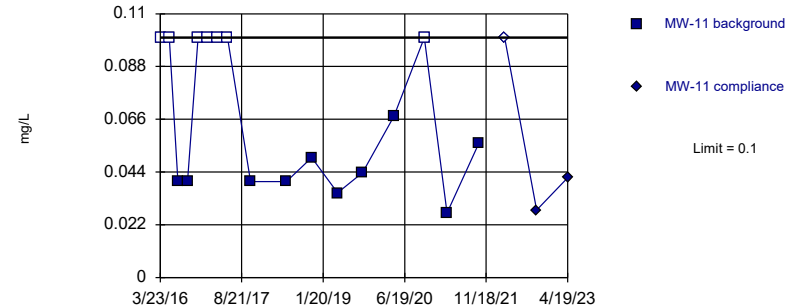◆ MW-17 compliance

Limit = 8.234

Background Data Summary: Mean=6.738, Std. Dev.=0.7281, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9598, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 11.16

Background Data Summary: Mean=8, Std. Dev.=1.54, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.958, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 5.802

Background Data Summary (based on x^4 transformation): Mean=706.2, Std. Dev.=208.1, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

■ MW-11 background
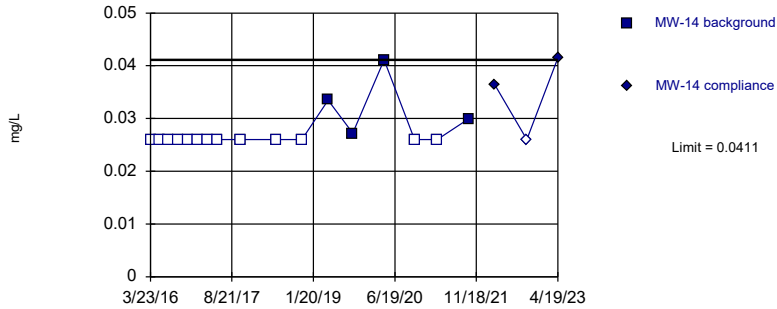
◆ MW-11 compliance

Limit = 0.1

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 17 background values. 41.18% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-14 background
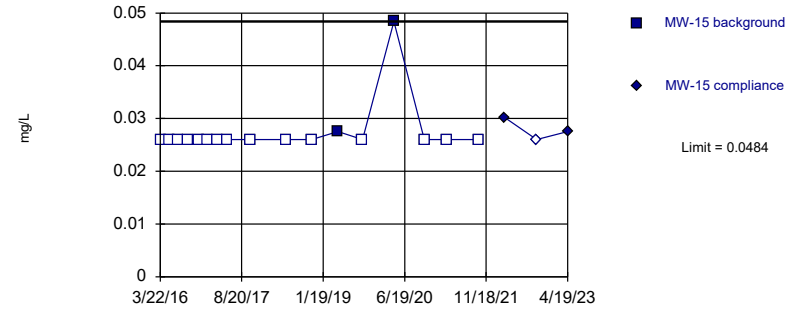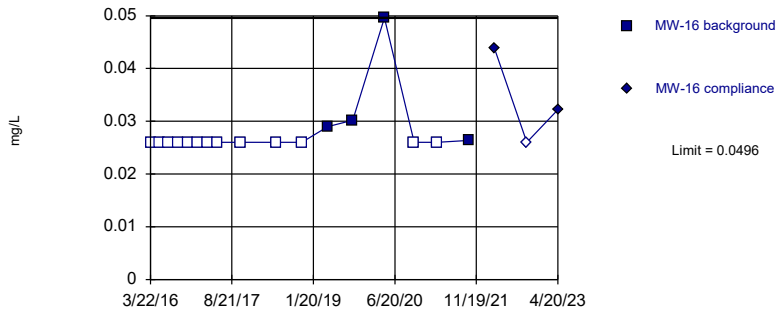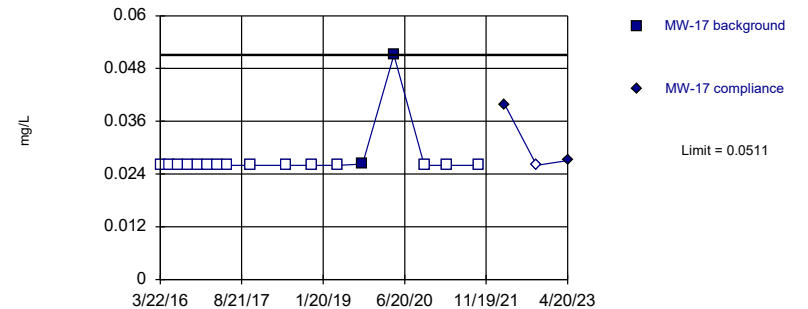
◆ MW-14 compliance

Limit = 0.0411

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 0.0484

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-16 background
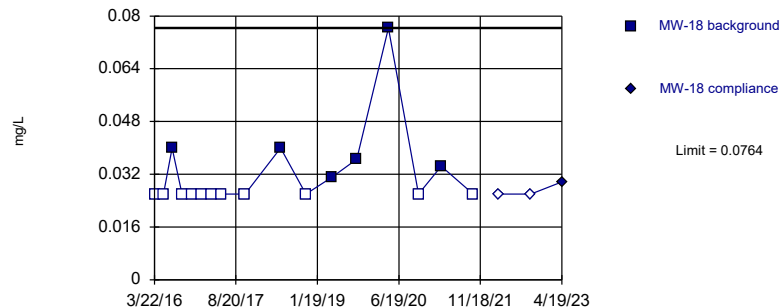
◆ MW-16 compliance

Limit = 0.0496

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

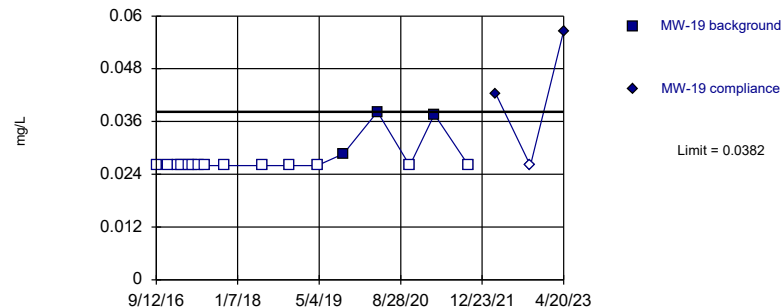■ MW-17 background

◆ MW-17 compliance

Limit = 0.0511

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

- MW-18 background
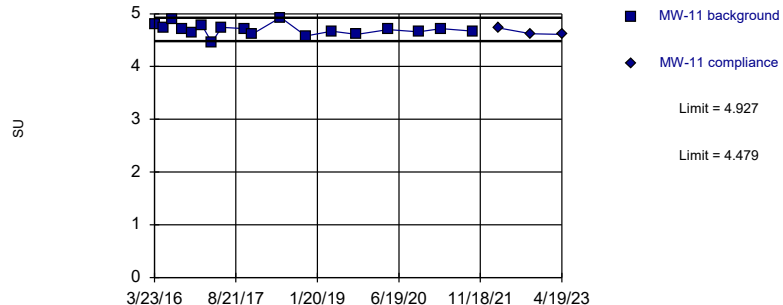- MW-18 compliance

Limit = 0.0764

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

- MW-19 background
- MW-19 compliance

Limit = 0.0382

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- MW-11 background
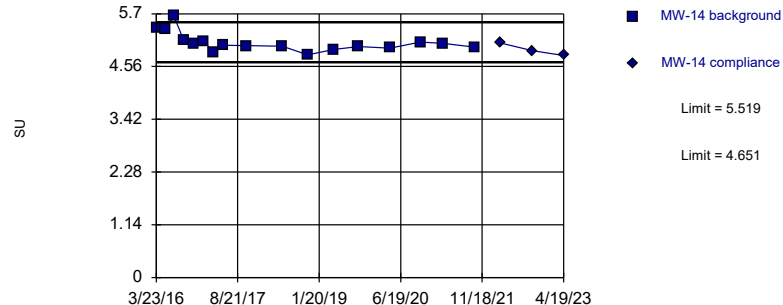- MW-11 compliance

Limit = 4.927

Limit = 4.479

Background Data Summary: Mean=4.703, Std. Dev.=0.1101, n=18.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9628, critical = 0.858.   Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- MW-14 background
- MW-14 compliance

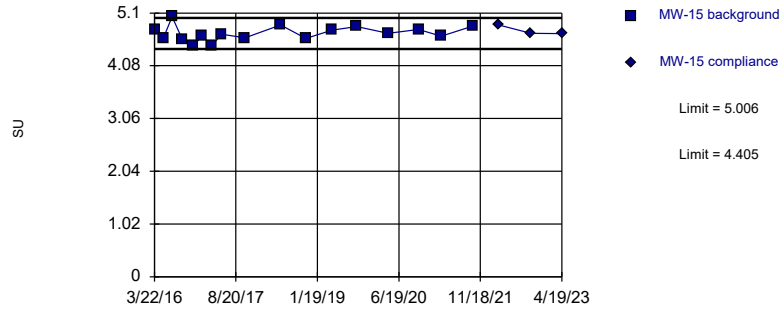Limit = 5.519

Limit = 4.651

Background Data Summary: Mean=5.085, Std. Dev.=0.2112, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8539, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 5.006
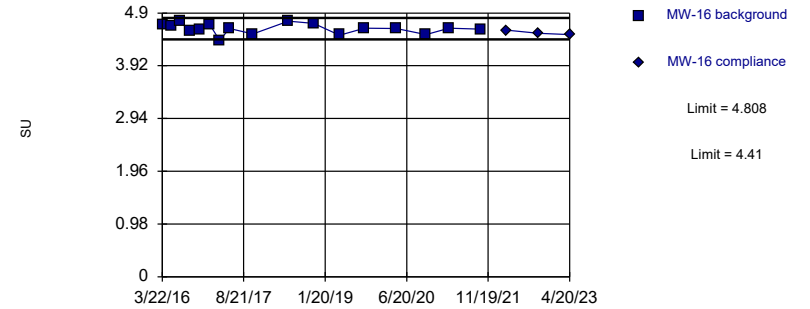
Limit = 4.405

SU

Background Data Summary: Mean=4.705, Std. Dev.=0.1462, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9668, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

■ MW-16 background

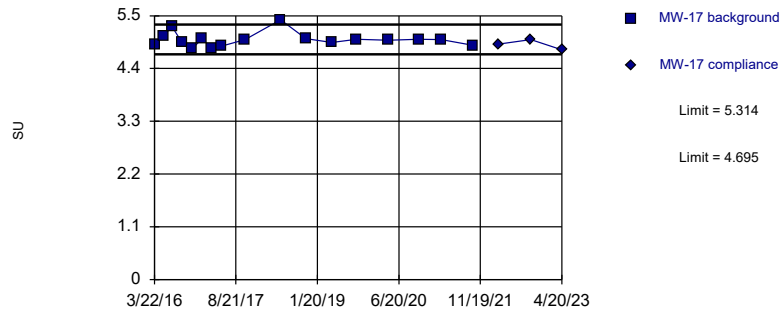◆ MW-16 compliance

Limit = 4.808

Limit = 4.41

SU

Background Data Summary: Mean=4.609, Std. Dev.=0.09695, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9549, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

■ MW-17 background

◆ MW-17 compliance
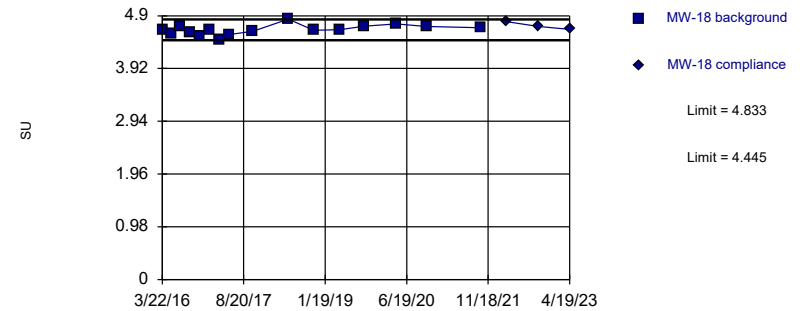
Limit = 5.314

Limit = 4.695

SU

Background Data Summary (based on cube root transformation): Mean=1.71, Std. Dev.=0.0172, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8526, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

■ MW-18 background

◆ MW-18 compliance
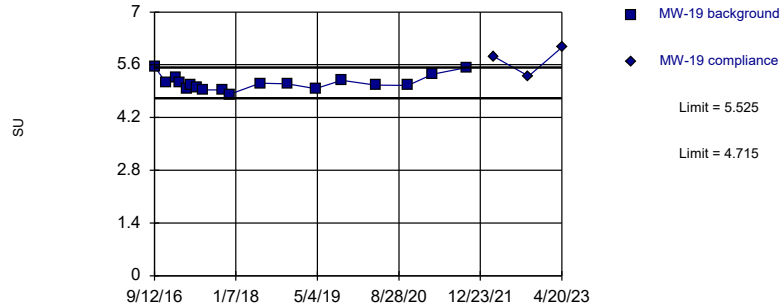
Limit = 4.833

Limit = 4.445

SU

Background Data Summary: Mean=4.639, Std. Dev.=0.09337, n=16.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9831, critical = 0.844.   Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limits

Prediction Limit

Intrawell Parametric

- MW-19 background
- MW-19 compliance

Limit = 5.525

Limit = 4.715

SU

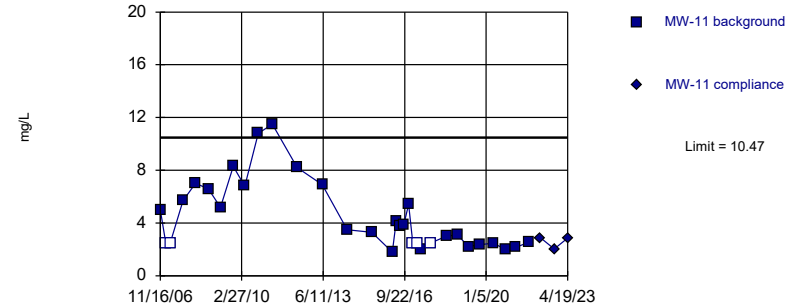9/12/16 1/7/18 5/4/19 8/28/20 12/23/21 4/20/23

Background Data Summary: Mean=5.12, Std. Dev.=0.1992, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9196, critical = 0.858. Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

- MW-11 background
- MW-11 compliance

Limit = 10.47

mg/L

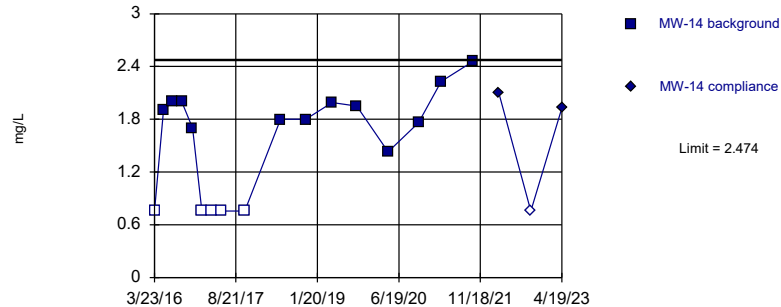11/16/06 2/27/10 6/11/13 9/22/16 1/5/20 4/19/23

Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=1.364, Std. Dev.=0.5266, n=32, 15.63% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9191, critical = 0.904. Kappa = 1.87 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

- MW-14 background
- MW-14 compliance

Limit = 2.474

mg/L

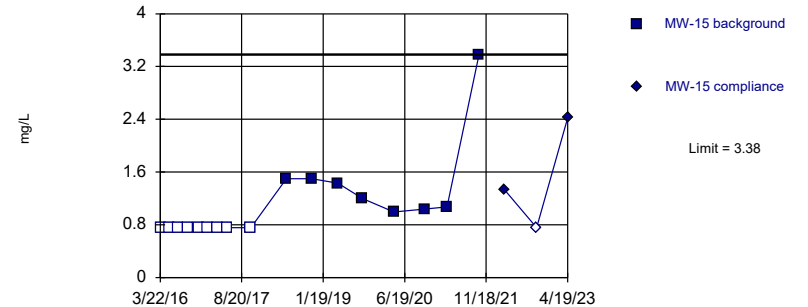3/23/16 8/21/17 1/20/19 6/19/20 11/18/21 4/19/23

Background Data Summary (based on square transformation) (after Kaplan-Meier Adjustment): Mean=2.586, Std. Dev.=1.72, n=17, 29.41% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8933, critical = 0.851. Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

- MW-15 background
- MW-15 compliance

Limit = 3.38

mg/L

3/22/16 8/20/17 1/19/19 6/19/20 11/18/21 4/19/23
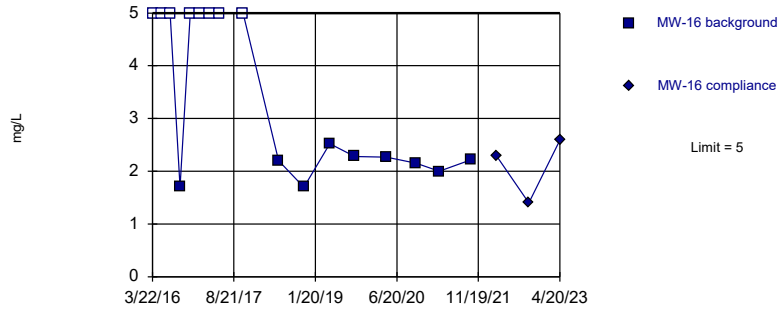
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

mg/L

■ MW-16 background

◆ MW-16 compliance

Limit = 5

3/22/16   8/21/17   1/20/19   6/20/20   11/19/21   4/20/23

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 17 background values. 47.06% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

mg/L

■ MW-17 background

◆ MW-17 compliance

Limit = 3.508

3/22/16   8/21/17   1/20/19   6/20/20   11/19/21   4/20/23

Background Data Summary: Mean=2.304, Std. Dev.=0.5866, n=17, 11.76% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9018, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit

Intrawell Parametric

mg/L

■ MW-18 background

◆ MW-18 compliance

Limit = 4.898

3/22/16   8/20/17   1/19/19   6/19/20   11/18/21   4/19/23

Background Data Summary: Mean=3.696, Std. Dev.=0.585, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9714, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

mg/L

■ MW-19 background

◆ MW-19 compliance

Limit = 5

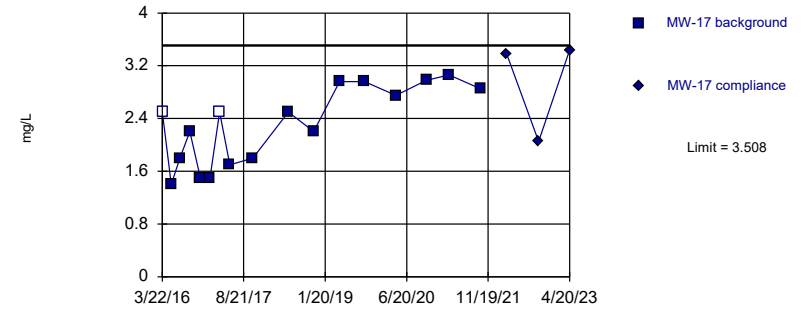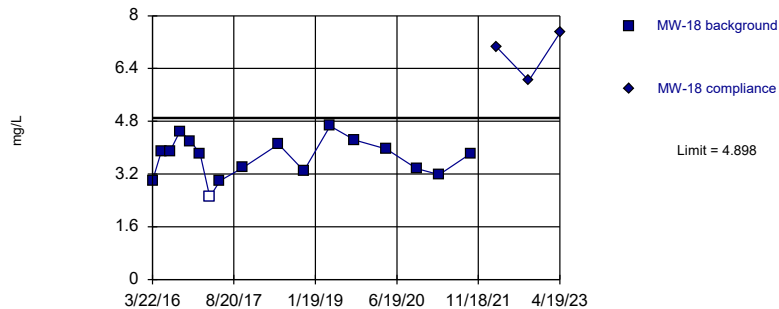9/12/16   1/7/18   5/4/19   8/28/20   12/23/21   4/20/23

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 17 background values. 41.18% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-11 background

◆ MW-11 compliance

Limit = 76.12

Background Data Summary: Mean=44, Std. Dev.=15.64, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9169, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 67.34

Background Data Summary: Mean=36.35, Std. Dev.=15.09, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9195, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 54.62

Background Data Summary: Mean=27.33, Std. Dev.=13.43, n=18.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9546, critical = 0.858.   Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 59.48

Background Data Summary (after Kaplan-Meier Adjustment): Mean=24.46, Std. Dev.=17.05, n=17, 17.65% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9377, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-17 background

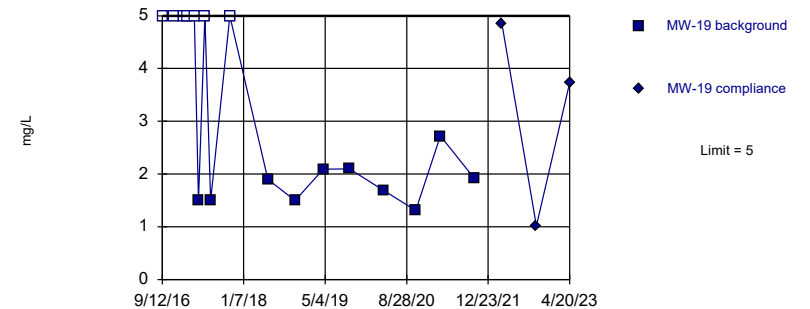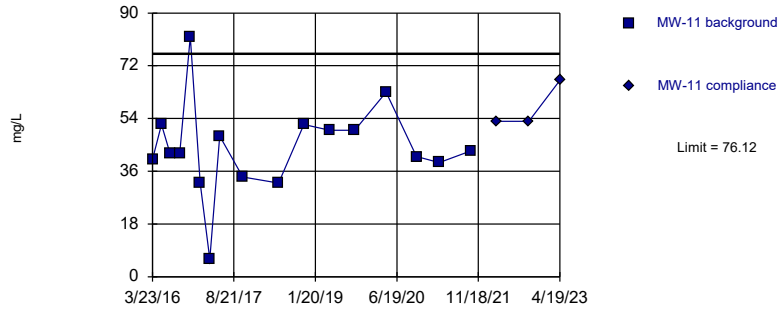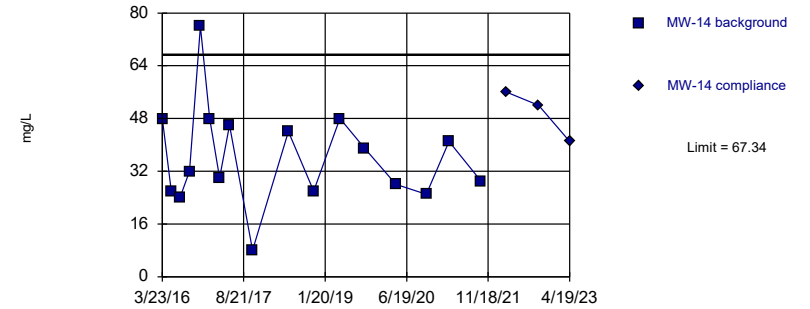◆ MW-17 compliance

Limit = 43.75

Background Data Summary: Mean=25.75, Std. Dev.=8.766, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9063, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

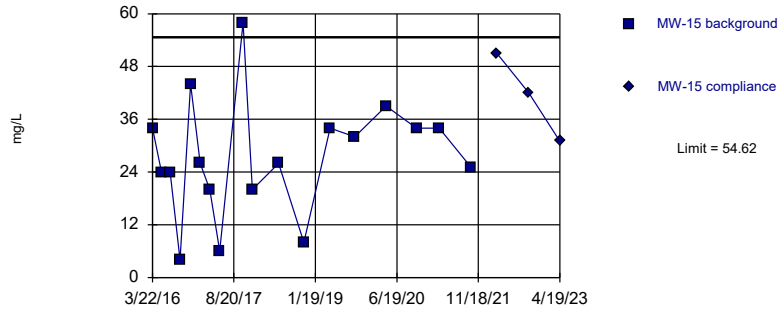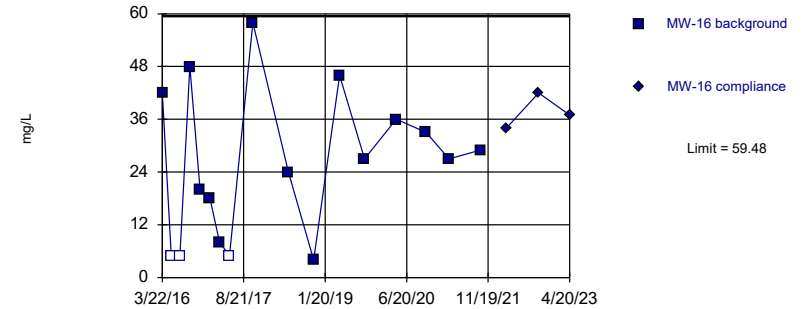# Prediction Limit

Intrawell Parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 46.41

Background Data Summary: Mean=26.88, Std. Dev.=9.506, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9103, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit

Intrawell Parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 43.34

Background Data Summary: Mean=22.09, Std. Dev.=10.35, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9883, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 5/9/2023 5:17 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/18/2016	<0.1	
1/19/2017	<0.1	
3/22/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	<0.1	
11/7/2018	<0.1	
4/22/2019	<0.1	
9/27/2019	0.0443 (J)	
4/13/2020	<0.1	
10/22/2020	0.103	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/15/2022		<0.1
10/4/2022		<0.1
4/19/2023		<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/19/2016	<0.1	
1/18/2017	<0.1	
3/22/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	<0.1	
6/1/2018	<0.1	
11/7/2018	<0.1	
4/23/2019	<0.1	
9/26/2019	<0.1	
4/13/2020	<0.1	
10/22/2020	0.0559 (J)	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/15/2022		<0.1
10/4/2022		<0.1
4/19/2023		<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-15	MW-15
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/19/2016	<0.1	
1/19/2017	<0.1	
3/21/2017	<0.1	
5/23/2017	<0.1	
10/17/2017	<0.1	
6/1/2018	<0.1	
11/7/2018	<0.1	
4/23/2019	<0.1	
9/26/2019	<0.1	
4/13/2020	<0.1	
10/22/2020	0.0437 (J)	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/15/2022		<0.1
10/4/2022		<0.1
4/19/2023		<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.0601 (B1)	
5/18/2016	<0.0601	
7/12/2016	0.026 (J)	
9/12/2016	<0.0601	
11/18/2016	<0.0601	
1/18/2017	<0.0601	
3/21/2017	<0.0601	
5/24/2017	<0.0601	
10/17/2017	0.025 (J)	
5/31/2018	0.022 (J)	
11/8/2018	<0.0601	
4/22/2019	<0.0601	
9/26/2019	0.042 (J)	
4/14/2020	<0.0601	
10/22/2020	0.0401 (J)	
3/16/2021	<0.0601	
10/5/2021	<0.0601	
3/16/2022		0.0927
10/5/2022		<0.0601
4/19/2023		0.0256 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-19	MW-19
9/12/2016	<0.0601	
11/18/2016	<0.0601	
1/18/2017	<0.0601	
2/10/2017	<0.0601	
3/21/2017	<0.0601	
4/14/2017	<0.0601	
5/23/2017	<0.0601	
6/26/2017	<0.0601	
10/17/2017	<0.0601	
5/31/2018	<0.0601	
11/8/2018	<0.0601	
4/22/2019	<0.0601	
9/26/2019	<0.0601	
4/13/2020	<0.0601	
10/21/2020	<0.0601	
3/16/2021	<0.0601	
10/5/2021	<0.0601	
3/15/2022		<0.0601
10/5/2022		<0.0601
4/20/2023		0.0318 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<1.9 (*)	
5/18/2016	1.8	
7/12/2016	1.9	
9/12/2016	2	
11/18/2016	2	
1/19/2017	1.8	
3/22/2017	1.8	
5/24/2017	2	
10/17/2017	2	
5/31/2018	1.8	
11/7/2018	2	
4/22/2019	1.71	
9/27/2019	1.99	
4/13/2020	2.03	
10/22/2020	2.02	
3/16/2021	1.74	
10/5/2021	1.87	
3/15/2022		1.87
10/4/2022		1.3
4/19/2023		1.65

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<5.9 (*)	
5/18/2016	5.5	
7/12/2016	5.3	
9/12/2016	4.9	
11/19/2016	4.8	
1/18/2017	3.8	
3/22/2017	3.3	
5/24/2017	3.6	
10/17/2017	3.7	
6/1/2018	2.8	
11/7/2018	2.9	
4/23/2019	2.76	
9/26/2019	2.4	
4/13/2020	2.74	
10/22/2020	2.17	
3/16/2021	2.4	
10/5/2021	1.89	
3/15/2022		2.59
10/4/2022		2.56
4/19/2023		2.63

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-15	MW-15
3/22/2016	1.3 (B1)	
5/18/2016	1.2	
7/12/2016	1.1	
9/12/2016	1.4	
11/19/2016	1.3	
1/19/2017	1.3	
3/21/2017	1.3	
5/23/2017	1.4	
10/17/2017	1.1	
6/1/2018	0.97	
11/7/2018	1.1	
4/23/2019	1.01	
9/26/2019	1.08	
4/13/2020	1.22	
10/22/2020	1.35	
3/16/2021	1.41	
10/5/2021	0.632	
3/15/2022		0.703
10/4/2022		1.11
4/19/2023		0.682

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	0.61 (B1)	
5/18/2016	0.89	
7/11/2016	0.82	
9/13/2016	0.82	
11/17/2016	0.75	
1/18/2017	0.58	
3/21/2017	0.6	
5/23/2017	0.65	
10/17/2017	1.1	
12/15/2017	0.89 (RS)	
5/31/2018	1.1	
11/8/2018	0.76	
4/22/2019	1.09	
9/26/2019	0.758	
4/14/2020	0.92	
10/21/2020	0.798	
3/16/2021	0.681	
10/5/2021	0.793	
3/15/2022		1.18
10/5/2022		1.19
4/20/2023		1.07

Prediction Limit

	MW-17	MW-17
3/22/2016	1.4 (B1)	
5/18/2016	1	
7/12/2016	1.1	
9/12/2016	0.98	
11/18/2016	1	
1/18/2017	1	
3/21/2017	0.91	
5/24/2017	0.96	
10/17/2017	0.96	
5/31/2018	1.1	
11/8/2018	0.96	
4/22/2019	0.946	
9/26/2019	1.11	
4/13/2020	1.03	
10/22/2020	0.969	
3/16/2021	1.12	
10/5/2021	0.883	
3/16/2022		1.04
10/5/2022		0.755
4/20/2023		0.855

Prediction Limit

	MW-18	MW-18
3/22/2016	0.93 (B1)	
5/18/2016	0.85	
7/12/2016	0.69	
9/12/2016	0.86	
11/18/2016	0.41	
1/18/2017	0.81	
3/21/2017	0.76	
5/24/2017	0.8	
10/17/2017	0.69	
5/31/2018	0.75	
11/8/2018	0.78	
4/22/2019	0.531	
9/26/2019	0.631	
4/14/2020	0.627	
10/22/2020	0.553	
3/16/2021	0.57	
10/5/2021	0.43 (J)	
3/16/2022		0.406 (J)
10/5/2022		0.285 (J)
4/19/2023		0.368 (J)

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	0.92	
11/18/2016	0.68	
1/18/2017	0.64	
2/10/2017	0.58	
3/21/2017	0.56	
4/14/2017	0.51	
5/23/2017	0.54	
6/26/2017	0.66	
10/17/2017	0.58	
5/31/2018	0.56	
11/8/2018	0.57	
4/22/2019	0.634	
9/26/2019		1.24
4/13/2020		0.687
10/21/2020		0.806
3/16/2021		2.23
10/5/2021		3.67
3/15/2022		5.84
10/5/2022		2.16
4/20/2023		15.4

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
11/16/2006	8.5	
2/5/2007	8.8	
4/12/2007	9.5	
10/17/2007	12.1	
4/17/2008	13.1	
10/24/2008	13.7	
4/21/2009	11.9	
10/26/2009	11	
4/12/2010	12.5	
10/30/2010	10.8	
5/25/2011	10	
5/25/2012	10.9	
5/28/2013	11.4	
5/31/2014	9.2	
5/29/2015	11.5	
3/23/2016	13	
5/18/2016	13	
7/12/2016	13	
9/12/2016	13	
11/18/2016	14	
1/19/2017	13	
3/22/2017	15	
5/24/2017	14	
10/17/2017	15	
5/31/2018	12	
11/7/2018	14	
4/22/2019	13.3	
9/27/2019	13.4	
4/13/2020	14.2	
10/22/2020	17.4	
3/16/2021	13.3	
10/5/2021	12.5	
3/15/2022		13.6
10/4/2022		12
4/19/2023		12.2

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	8.8 (B1)	
5/18/2016	7.2	
7/12/2016	7.5	
9/12/2016	8.4	
11/19/2016	12	
1/18/2017	11	
3/22/2017	11	
5/24/2017	10	
10/17/2017	10	
6/1/2018	9.9	
11/7/2018	10	
4/23/2019	9.3	
9/26/2019	8.35	
4/13/2020	7.9	
10/22/2020	6.5	
3/16/2021	7.32	
10/5/2021	6.59	
3/15/2022		8.36
10/4/2022		11.2
4/19/2023		10.2

Prediction Limit

	MW-15	MW-15
3/22/2016	8.4 (B1)	
5/18/2016	6	
7/12/2016	7.1	
9/12/2016	7.3	
11/19/2016	8.9	
1/19/2017	8.3	
3/21/2017	8.8	
5/23/2017	9.3	
10/17/2017	7.1	
6/1/2018	6.4	
11/7/2018	8	
4/23/2019	6.75	
9/26/2019	7.66	
4/13/2020	7.74	
10/22/2020	8.69	
3/16/2021	8.94	
10/5/2021	9.3	
3/15/2022		5.55
10/4/2022		8.22
4/19/2023		5.21

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	6.9 (B1)	
5/18/2016	5.4	
7/11/2016	8.1	
9/13/2016	6.2	
11/17/2016	7.3	
1/18/2017	6.3	
3/21/2017	7.3	
5/23/2017	7.4	
10/17/2017	9.9	
12/19/2017	7.8 (RS)	
5/31/2018	8.7	
11/8/2018	7.6	
4/22/2019	10.2	
6/25/2019	9.4	
9/26/2019	6.54	
4/14/2020	7.03	
10/21/2020	7.36	
3/16/2021	7.14	
10/5/2021	6.55	
3/15/2022		10.8
10/5/2022		11.7
4/20/2023		10

Prediction Limit

	MW-17	MW-17
3/22/2016	7.3 (B1)	
5/18/2016	6	
7/12/2016	5.7	
9/12/2016	5.7	
11/18/2016	8.2	
1/18/2017	7.4	
3/21/2017	7.9	
5/24/2017	7.4	
10/17/2017	6.5	
5/31/2018	6.5	
11/8/2018	6.9	
4/22/2019	6.64	
9/26/2019	6.7	
4/13/2020	6.46	
10/22/2020	6.37	
3/16/2021	6.97	
10/5/2021	5.91	
3/16/2022		7
10/5/2022		5.51
4/20/2023		5.73

Prediction Limit

	MW-18	MW-18
3/22/2016	11 (B1)	
5/18/2016	8.4	
7/12/2016	7.9	
9/12/2016	7.6	
11/18/2016	8.5	
1/18/2017	9.2	
3/21/2017	10	
5/24/2017	10	
10/17/2017	8.6	
5/31/2018	6.9	
11/8/2018	8.7	
4/22/2019	6.17	
9/26/2019	6.09	
4/14/2020	6.15	
10/22/2020	6.89	
3/16/2021	8.18	
10/5/2021	5.72	
3/16/2022		6.05
10/5/2022		4.97
4/19/2023		5.08

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5	
11/18/2016	<6.3 (*)	
1/18/2017	5.3	
2/10/2017	5.4	
3/21/2017	5.3	
4/14/2017	4.9 (B)	
5/23/2017	5.5	
6/26/2017	5.4	
10/17/2017	5.4	
5/31/2018	5	
11/8/2018	5.2	
4/22/2019	4.91	
9/26/2019	5.03	
4/13/2020	4.9	
10/21/2020	5.25	
3/16/2021	5.72	
10/5/2021	5.1	
3/15/2022		6.91
10/5/2022		5.94
4/20/2023		4.84

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<0.1	
5/18/2016	<0.1	
7/12/2016	0.04 (J)	
9/12/2016	0.04 (J)	
11/18/2016	<0.1	
1/19/2017	<0.1	
3/22/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	0.04 (J)	
5/31/2018	0.04 (J)	
11/7/2018	0.05 (J)	
4/22/2019	0.0353 (J)	
9/27/2019	0.0438 (J)	
4/13/2020	0.0672 (J)	
10/22/2020	<0.1	
3/16/2021	0.0269 (J)	
10/5/2021	0.0561 (J)	
3/15/2022		<0.1
10/4/2022		0.0281 (J)
4/19/2023		0.0416 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/18/2017	<0.026	
3/22/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0335 (J)	
9/26/2019	0.0272 (J)	
4/13/2020	0.0411 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.03 (J)	
3/15/2022		0.0364 (J)
10/4/2022		<0.026
4/19/2023		0.0415 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/19/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0275 (J)	
9/26/2019	<0.026	
4/13/2020	0.0484 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	<0.026	
3/15/2022		0.0302 (J)
10/4/2022		<0.026
4/19/2023		0.0275 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/11/2016	<0.026	
9/13/2016	<0.026	
11/17/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	0.029 (J)	
9/26/2019	0.0302 (J)	
4/14/2020	0.0496 (J)	
10/21/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.0264 (J)	
3/15/2022		0.0438 (J)
10/5/2022		<0.026
4/20/2023		0.0322 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-17	MW-17
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0263 (J)	
4/13/2020	0.0511 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	<0.026	
3/16/2022		0.0399 (J)
10/5/2022		<0.026
4/20/2023		0.0271 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	0.04 (J)	
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	0.04 (J)	
11/8/2018	<0.026	
4/22/2019	0.0311 (J)	
9/26/2019	0.0366 (J)	
4/14/2020	0.0764 (J)	
10/22/2020	<0.026	
3/16/2021	0.0344 (J)	
10/5/2021	<0.026	
3/16/2022		<0.026
10/5/2022		<0.026
4/19/2023		0.0297 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-19	MW-19
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
2/10/2017	<0.026	
3/21/2017	<0.026	
4/14/2017	<0.026	
5/23/2017	<0.026	
6/26/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0287 (J)	
4/13/2020	0.0382 (J)	
10/21/2020	<0.026	
3/16/2021	0.0376 (J)	
10/5/2021	<0.026	
3/15/2022		0.0423 (J)
10/5/2022		<0.026
4/20/2023		0.0566 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH (SU)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
3/23/2016	4.8	
5/18/2016	4.74	
7/12/2016	4.9	
9/12/2016	4.72	
11/18/2016	4.65	
1/19/2017	4.77	
3/22/2017	4.46	
5/24/2017	4.74	
10/17/2017	4.72	
11/30/2017	4.61	
5/31/2018	4.93	
11/7/2018	4.58	
4/22/2019	4.67	
9/27/2019	4.61	
4/13/2020	4.7	
10/22/2020	4.66	
3/16/2021	4.72	
10/5/2021	4.67	
3/15/2022		4.73
10/4/2022		4.62
4/19/2023		4.61

Prediction Limit

	MW-14	MW-14
3/23/2016	5.4	
5/18/2016	5.38	
7/12/2016	5.65	
9/12/2016	5.14	
11/19/2016	5.05	
1/18/2017	5.11	
3/22/2017	4.86	
5/24/2017	5.02	
10/17/2017	5.01	
6/1/2018	5	
11/7/2018	4.81	
4/23/2019	4.93	
9/26/2019	4.99	
4/13/2020	4.96	
10/22/2020	5.09	
3/16/2021	5.06	
10/5/2021	4.98	
3/15/2022		5.07
10/4/2022		4.9
4/19/2023		4.8

Prediction Limit

Constituent: pH (SU)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	4.77	
5/18/2016	4.62	
7/12/2016	5.03	
9/12/2016	4.6	
11/19/2016	4.46	
1/19/2017	4.65	
3/21/2017	4.47	
5/23/2017	4.69	
10/17/2017	4.62	
6/1/2018	4.87	
11/7/2018	4.61	
4/23/2019	4.77	
9/26/2019	4.84	
4/13/2020	4.71	
10/22/2020	4.78	
3/16/2021	4.65	
10/5/2021	4.85	
3/15/2022		4.87
10/4/2022		4.71
4/19/2023		4.7

Prediction Limit

	MW-16	MW-16
3/22/2016	4.68	
5/18/2016	4.67	
7/11/2016	4.75	
9/13/2016	4.56	
11/17/2016	4.6	
1/18/2017	4.68	
3/21/2017	4.39	
5/23/2017	4.61	
10/17/2017	4.51	
5/31/2018	4.75	
11/8/2018	4.71	
4/22/2019	4.49	
9/26/2019	4.62	
4/14/2020	4.61	
10/21/2020	4.5	
3/16/2021	4.62	
10/5/2021	4.6	
3/15/2022		4.58
10/5/2022		4.52
4/20/2023		4.5

Prediction Limit

	MW-17	MW-17
3/22/2016	4.89	
5/18/2016	5.09	
7/12/2016	5.27	
9/12/2016	4.94	
11/18/2016	4.82	
1/18/2017	5.02	
3/21/2017	4.82	
5/24/2017	4.87	
10/17/2017	5	
5/31/2018	5.42	
11/8/2018	5.02	
4/22/2019	4.94	
9/26/2019	5.01	
4/13/2020	4.99	
10/22/2020	5.01	
3/16/2021	5	
10/5/2021	4.88	
3/16/2022		4.91
10/5/2022		5
4/20/2023		4.79

Prediction Limit

	MW-18	MW-18
3/22/2016	4.63	
5/18/2016	4.58	
7/12/2016	4.7	
9/12/2016	4.6	
11/18/2016	4.52	
1/18/2017	4.63	
3/21/2017	4.45	
5/24/2017	4.55	
10/17/2017	4.61	
5/31/2018	4.84	
11/8/2018	4.63	
4/22/2019	4.64	
9/26/2019	4.71	
4/14/2020	4.75	
10/22/2020	4.7	
10/5/2021	4.68	
3/16/2022		4.79
10/5/2022		4.7
4/19/2023		4.65

Prediction Limit

	MW-19	MW-19
9/12/2016	5.55	
11/18/2016	5.14	
1/18/2017	5.27	
2/10/2017	5.14	
3/21/2017	4.96	
4/14/2017	5.07	
5/23/2017	5.01	
6/26/2017	4.93	
10/17/2017	4.93	
11/30/2017	4.81	
5/31/2018	5.11	
11/8/2018	5.09	
4/22/2019	4.97	
9/26/2019	5.19	
4/13/2020	5.06	
10/21/2020	5.05	
3/16/2021	5.35	
10/5/2021	5.53	
3/15/2022		5.82
10/5/2022		5.3
4/20/2023		6.06

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
11/16/2006	5	
2/5/2007	<5	
4/12/2007	<5	
10/17/2007	5.7	
4/17/2008	7	
10/24/2008	6.6	
4/21/2009	5.2	
10/26/2009	8.3	
4/12/2010	6.8	
10/30/2010	10.8	
5/25/2011	11.5	
5/25/2012	8.2	
5/28/2013	6.9	
5/31/2014	3.5	
5/29/2015	3.3	
3/23/2016	1.8 (J)	
5/18/2016	4.1	
7/12/2016	3.8 (J)	
9/12/2016	3.9 (J)	
11/18/2016	5.4	
1/19/2017	<5	
3/22/2017	<5	
5/24/2017	2 (J)	
10/17/2017	<5	
5/31/2018	3 (J)	
11/7/2018	3.1 (J)	
4/22/2019	2.22	
9/27/2019	2.36	
4/13/2020	2.47	
10/22/2020	2.01	
3/16/2021	2.15	
10/5/2021	2.57	
3/15/2022		2.88
10/4/2022		2.04
4/19/2023		2.85

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.756	
5/18/2016	1.9	
7/12/2016	2 (J)	
9/12/2016	2 (J)	
11/19/2016	1.7 (J)	
1/18/2017	<0.756	
3/22/2017	<0.756	
5/24/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.8 (J)	
11/7/2018	1.8 (J)	
4/23/2019	1.99	
9/26/2019	1.95	
4/13/2020	1.43	
10/22/2020	1.76	
3/16/2021	2.23	
10/5/2021	2.46	
3/15/2022		2.1
10/4/2022		<0.756
4/19/2023		1.93

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.756	
5/18/2016	<0.756	
7/12/2016	<0.756	
9/12/2016	<0.756	
11/19/2016	<0.756	
1/19/2017	<0.756	
3/21/2017	<0.756	
5/23/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.5 (J)	
11/7/2018	1.5 (J)	
4/23/2019	1.43	
9/26/2019	1.2	
4/13/2020	0.992 (J)	
10/22/2020	1.04	
3/16/2021	1.07	
10/5/2021	3.38	
3/15/2022		1.33
10/4/2022		<0.756
4/19/2023		2.42

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-16	MW-16
3/22/2016	<5	
5/18/2016	<5	
7/11/2016	<5	
9/13/2016	1.7 (J)	
11/17/2016	<5	
1/18/2017	<5	
3/21/2017	<5	
5/23/2017	<5	
10/17/2017	<5	
5/31/2018	2.2 (J)	
11/8/2018	1.7 (J)	
4/22/2019	2.52	
9/26/2019	2.28	
4/14/2020	2.27	
10/21/2020	2.15	
3/16/2021	2	
10/5/2021	2.22	
3/15/2022		2.29
10/5/2022		1.4
4/20/2023		2.59

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-17	MW-17
3/22/2016	<5	
5/18/2016	1.4	
7/12/2016	1.8 (J)	
9/12/2016	2.2 (J)	
11/18/2016	1.5 (J)	
1/18/2017	1.5 (J)	
3/21/2017	<5	
5/24/2017	1.7 (J)	
10/17/2017	1.8 (J)	
5/31/2018	2.5 (J)	
11/8/2018	2.2 (J)	
4/22/2019	2.96	
9/26/2019	2.96	
4/13/2020	2.75	
10/22/2020	2.98	
3/16/2021	3.06	
10/5/2021	2.85	
3/16/2022		3.38
10/5/2022		2.05
4/20/2023		3.44

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	3 (J)	
5/18/2016	3.9 (J)	
7/12/2016	3.9 (J)	
9/12/2016	4.5 (J)	
11/18/2016	4.2 (J)	
1/18/2017	3.8 (J)	
3/21/2017	<5 (*)	
5/24/2017	3 (J)	
10/17/2017	3.4 (J)	
5/31/2018	4.1 (J)	
11/8/2018	3.3 (J)	
4/22/2019	4.66	
9/26/2019	4.23	
4/14/2020	3.96	
10/22/2020	3.37	
3/16/2021	3.18	
10/5/2021	3.83	
3/16/2022		7.04
10/5/2022		6.04
4/19/2023		7.48

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<5	
11/18/2016	<5	
1/18/2017	<5	
2/10/2017	<5	
3/21/2017	<5	
4/14/2017	1.5 (J)	
5/23/2017	<5	
6/26/2017	1.5 (J)	
10/17/2017	<5	
5/31/2018	1.9 (J)	
11/8/2018	1.5 (J)	
4/22/2019	2.09	
9/26/2019	2.1	
4/13/2020	1.69	
10/21/2020	1.31	
3/16/2021	2.72	
10/5/2021	1.91	
3/15/2022		4.86
10/5/2022		1.02
4/20/2023		3.73

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-11	MW-11
3/23/2016	40	
5/18/2016	52	
7/12/2016	42	
9/12/2016	42	
11/18/2016	82	
1/19/2017	32	
3/22/2017	6	
5/24/2017	48	
10/17/2017	34	
5/31/2018	32	
11/7/2018	52	
4/22/2019	50	
9/27/2019	50	
4/13/2020	63	
10/22/2020	41	
3/16/2021	39	
10/5/2021	43	
3/15/2022		53
10/4/2022		53
4/19/2023		67

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	48 (B1)	
5/18/2016	26	
7/12/2016	24	
9/12/2016	32	
11/19/2016	76	
1/18/2017	48	
3/22/2017	30	
5/24/2017	46	
10/17/2017	8	
6/1/2018	44	
11/7/2018	26	
4/23/2019	48	
9/26/2019	39	
4/13/2020	28	
10/22/2020	25	
3/16/2021	41	
10/5/2021	29	
3/15/2022		56
10/4/2022		52
4/19/2023		41

Prediction Limit

	MW-15	MW-15
3/22/2016	34 (B1)	
5/18/2016	24	
7/12/2016	24	
9/12/2016	4 (J)	
11/19/2016	44	
1/19/2017	26	
3/21/2017	20	
5/23/2017	6	
10/17/2017	58	
12/15/2017	20 (RS)	
6/1/2018	26	
11/7/2018	8	
4/23/2019	34	
9/26/2019	32	
4/13/2020	39	
10/22/2020	34	
3/16/2021	34	
10/5/2021	25	
3/15/2022		51
10/4/2022		42
4/19/2023		31

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	42 (B1)	
5/18/2016	<5	
7/11/2016	<5	
9/13/2016	48	
11/17/2016	20	
1/18/2017	18	
3/21/2017	8	
5/23/2017	<5	
10/17/2017	58	
5/31/2018	24	
11/8/2018	4 (J)	
4/22/2019	46	
9/26/2019	27	
4/14/2020	36	
10/21/2020	33	
3/16/2021	27	
10/5/2021	29	
3/15/2022		34
10/5/2022		42
4/20/2023		37

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-17	MW-17
3/22/2016	32 (B1)	
5/18/2016	26	
7/12/2016	22	
9/12/2016	32	
11/18/2016	16	
1/18/2017	32	
3/21/2017	16	
5/24/2017	22	
10/17/2017	26	
5/31/2018	<3.4	
11/8/2018	36	
4/22/2019	24	
9/26/2019	25	
4/13/2020	27	
10/22/2020	29	
3/16/2021	37	
10/5/2021	34	
3/16/2022		55
10/5/2022		35
4/20/2023		30

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	28 (B1)	
5/18/2016	20	
7/12/2016	24	
9/12/2016	48	
11/18/2016	10	
1/18/2017	30	
3/21/2017	6	
5/24/2017	30	
10/17/2017	32	
5/31/2018	30	
11/8/2018	22	
4/22/2019	36	
9/26/2019	30	
4/14/2020	29	
10/22/2020	22	
3/16/2021	31	
10/5/2021	29	
3/16/2022		25
10/5/2022		34
4/19/2023		29

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 5/9/2023 5:26 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	12	
11/18/2016	14	
1/18/2017	20	
2/10/2017	28	
3/21/2017	20	
4/14/2017	14	
5/23/2017	<5	
6/26/2017	34	
10/17/2017	42	
5/31/2018	22	
11/8/2018	8	
4/22/2019	31	
9/26/2019	29	
4/13/2020	20	
10/21/2020	19	
3/16/2021	25	
10/5/2021	35	
3/15/2022		36
10/5/2022		31
4/20/2023		66

ND substitution: RL or RL/2 if <15% NDs.

FIGURE E.

Appendix III Interwell Prediction Limits - Two-Step - All/Significant Results

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	4.531	n/a	4/20/2023	15.4	Yes	60	1.32	0.4539	3.333	None	sqrt(x)	0.00188	Param Inter 1 of 2
pH (SU)	MW-19	5.65	4.45	4/20/2023	6.06	Yes	60	n/a	n/a	0	n/a	n/a	0.001049	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-19	64.48	n/a	4/20/2023	66	Yes	60	37.22	15.3	0	None	No	0.00188	Param Inter 1 of 2

Exceeds Limit: MW-19
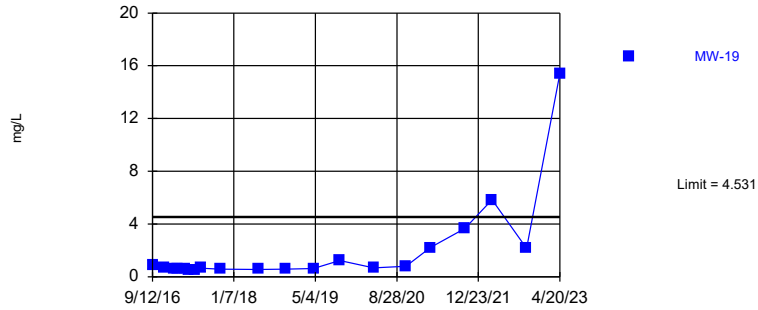
Prediction Limit
Interwell Parametric

Background Data Summary (based on square root transformation): Mean=1.32, Std. Dev.=0.4539, n=60, 3.333% NDs.   Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.964, critical = 0.945.   Kappa = 1.782 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Assumes 3 future values.

Constituent: Calcium   Analysis Run 5/12/2023 8:13 AM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limits: MW-19

Prediction Limit
Interwell Non-parametric
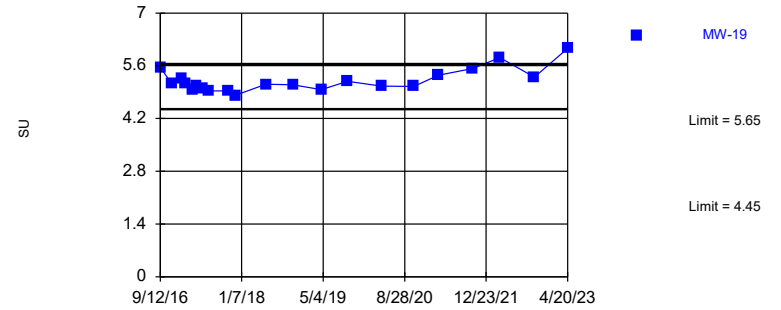
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 60 background values. Annual per-constituent alpha = 0.008374. Individual comparison alpha = 0.001049 (1 of 2). Assumes 3 future values.

Constituent: pH   Analysis Run 5/12/2023 8:13 AM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit: MW-19

Prediction Limit
Interwell Parametric
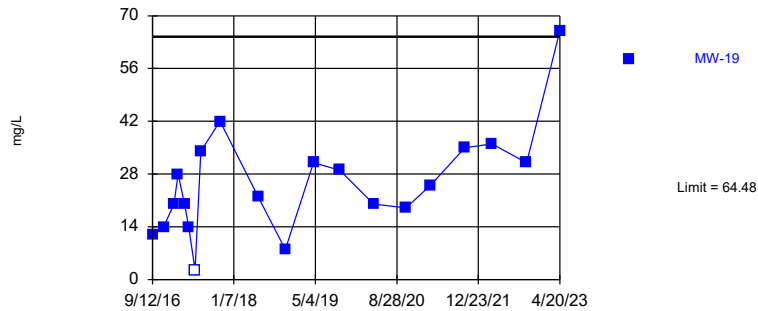
Background Data Summary: Mean=37.22, Std. Dev.=15.3, n=60.   Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9597, critical = 0.945.   Kappa = 1.782 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Assumes 3 future values.

Constituent: Total Dissolved Solids   Analysis Run 5/12/2023 8:13 AM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 5/12/2023 8:14 AM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18 (bg)	MW-11 (bg)	MW-14 (bg)	MW-19
3/22/2016	0.93 (B1)			
3/23/2016		<5.9 (*)	<5.9 (*)	
5/18/2016	0.85	1.8	5.5	
7/12/2016	0.69	1.9	5.3	
9/12/2016	0.86	2	4.9	0.92
11/18/2016	0.41	2		0.68
11/19/2016			4.8	
1/18/2017	0.81		3.8	0.64
1/19/2017		1.8		
2/10/2017				0.58
3/21/2017	0.76			0.56
3/22/2017		1.8	3.3	
4/14/2017				0.51
5/23/2017				0.54
5/24/2017	0.8	2	3.6	
6/26/2017				0.66
10/17/2017	0.69	2	3.7	0.58
5/31/2018	0.75	1.8		0.56
6/1/2018			2.8	
11/7/2018		2	2.9	
11/8/2018	0.78			0.57
4/22/2019	0.531	1.71		0.634
4/23/2019			2.76	
9/26/2019	0.631		2.4	1.24
9/27/2019		1.99		
4/13/2020		2.03	2.74	0.687
4/14/2020	0.627			
10/21/2020				0.806
10/22/2020	0.553	2.02	2.17	
3/16/2021	0.57	1.74	2.4	2.23
10/5/2021	0.43 (J)	1.87	1.89	3.67
3/15/2022		1.87	2.59	5.84
3/16/2022	0.406 (J)			
10/4/2022		1.3	2.56	
10/5/2022	0.285 (J)			2.16
4/19/2023	0.368 (J)	1.65	2.63	
4/20/2023				15.4

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH (SU)   Analysis Run 5/12/2023 8:14 AM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18 (bg)	MW-11 (bg)	MW-14 (bg)	MW-19
3/22/2016	4.63			
3/23/2016		4.8	5.4	
5/18/2016	4.58	4.74	5.38	
7/12/2016	4.7	4.9	5.65	
9/12/2016	4.6	4.72	5.14	5.55
11/18/2016	4.52	4.65		5.14
11/19/2016			5.05	
1/18/2017	4.63		5.11	5.27
1/19/2017		4.77		
2/10/2017				5.14
3/21/2017	4.45			4.96
3/22/2017		4.46	4.86	
4/14/2017				5.07
5/23/2017				5.01
5/24/2017	4.55	4.74	5.02	
6/26/2017				4.93
10/17/2017	4.61	4.72	5.01	4.93
11/30/2017		4.61		4.81
5/31/2018	4.84	4.93		5.11
6/1/2018			5	
11/7/2018		4.58	4.81	
11/8/2018	4.63			5.09
4/22/2019	4.64	4.67		4.97
4/23/2019			4.93	
9/26/2019	4.71		4.99	5.19
9/27/2019		4.61		
4/13/2020		4.7	4.96	5.06
4/14/2020	4.75			
10/21/2020				5.05
10/22/2020	4.7	4.66	5.09	
3/16/2021		4.72	5.06	5.35
10/5/2021	4.68	4.67	4.98	5.53
3/15/2022		4.73	5.07	5.82
3/16/2022	4.79			
10/4/2022		4.62	4.9	
10/5/2022	4.7			5.3
4/19/2023	4.65	4.61	4.8	
4/20/2023				6.06

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 5/12/2023 8:14 AM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18 (bg)	MW-11 (bg)	MW-14 (bg)	MW-19
3/22/2016	28 (B1)			
3/23/2016		40	48 (B1)	
5/18/2016	20	52	26	
7/12/2016	24	42	24	
9/12/2016	48	42	32	12
11/18/2016	10	82		14
11/19/2016			76	
1/18/2017	30		48	20
1/19/2017		32		
2/10/2017				28
3/21/2017	6			20
3/22/2017		6	30	
4/14/2017				14
5/23/2017				<5
5/24/2017	30	48	46	
6/26/2017				34
10/17/2017	32	34	8	42
5/31/2018	30	32		22
6/1/2018			44	
11/7/2018		52	26	
11/8/2018	22			8
4/22/2019	36	50		31
4/23/2019			48	
9/26/2019	30		39	29
9/27/2019		50		
4/13/2020		63	28	20
4/14/2020	29			
10/21/2020				19
10/22/2020	22	41	25	
3/16/2021	31	39	41	25
10/5/2021	29	43	29	35
3/15/2022		53	56	36
3/16/2022	25			
10/4/2022		53	52	
10/5/2022	34			31
4/19/2023	29	67	41	
4/20/2023				66

ND substitution: RL or RL/2 if <15% NDs.

FIGURE F.

Trend Tests - Prediction Limit Exceedances - Significant Results

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	MW-14 (bg)	-0.363	-133	-81	Yes	20	5	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-18 (bg)	-0.07165	-129	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-19	0.2253	90	81	Yes	20	0	n/a	n/a	0.01	NP
pH (SU)	MW-14 (bg)	-0.04668	-92	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-11 (bg)	-0.2485	-251	-184	Yes	35	14.29	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	MW-11 (bg)	0	-11	-81	No	20	5	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-14 (bg)**	**-0.363**	**-133**	**-81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.07165**	**-129**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.2253**	**90**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	MW-11 (bg)	-0.01735	-60	-87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	**MW-14 (bg)**	**-0.04668**	**-92**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	MW-18 (bg)	0.01861	67	74	No	19	0	n/a	n/a	0.01	NP
pH (SU)	MW-19	0.04749	44	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-11 (bg)**	**-0.2485**	**-251**	**-184**	**Yes**	**35**	**14.29**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-14 (bg)	0.04357	39	81	No	20	30	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-18 (bg)	0.2127	52	81	No	20	5	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-11 (bg)	1.963	49	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-14 (bg)	0.5865	13	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-18 (bg)	0.3801	24	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-19	3.324	79	81	No	20	5	n/a	n/a	0.01	NP

Sen's Slope Estimator

MW-11 (bg)
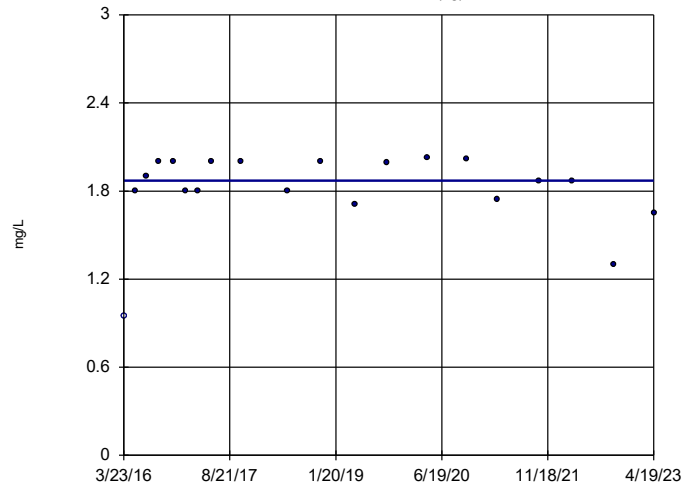
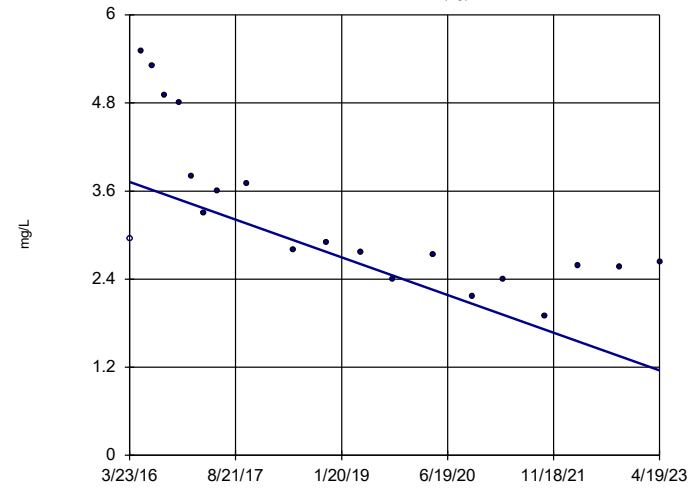n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = -11
critical = -81

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR
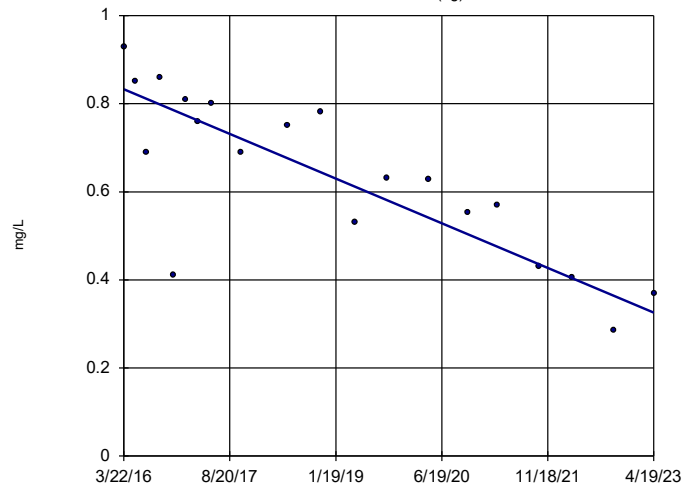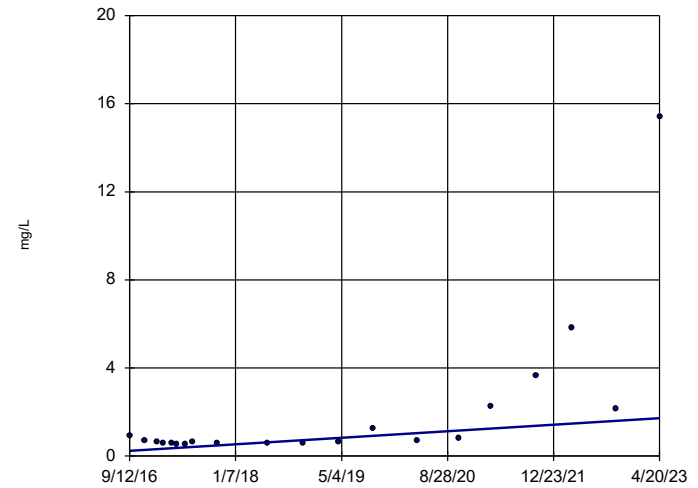
Sen's Slope Estimator
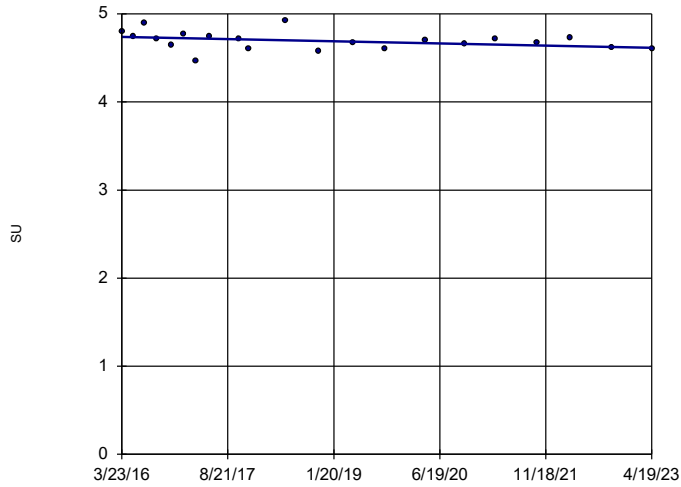
MW-14 (bg)

n = 20

Slope = -0.363
units per year.

Mann-Kendall
statistic = -133
critical = -81

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-18 (bg)

n = 20

Slope = -0.07165
units per year.

Mann-Kendall
statistic = -129
critical = -81

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-19

n = 20

Slope = 0.2253
units per year.

Mann-Kendall
statistic = 90
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-11 (bg)

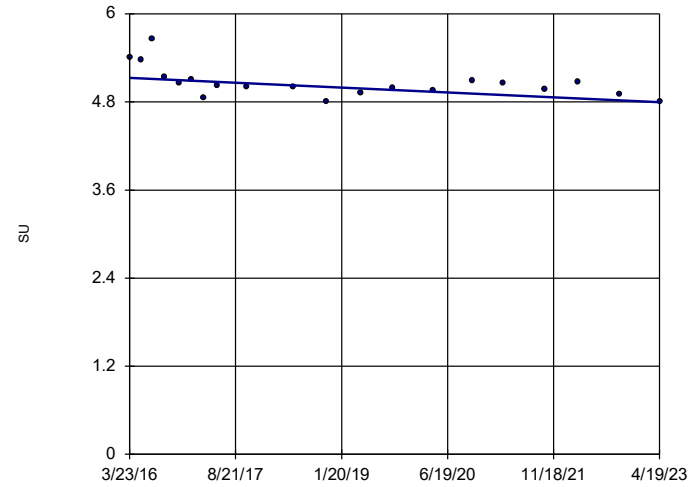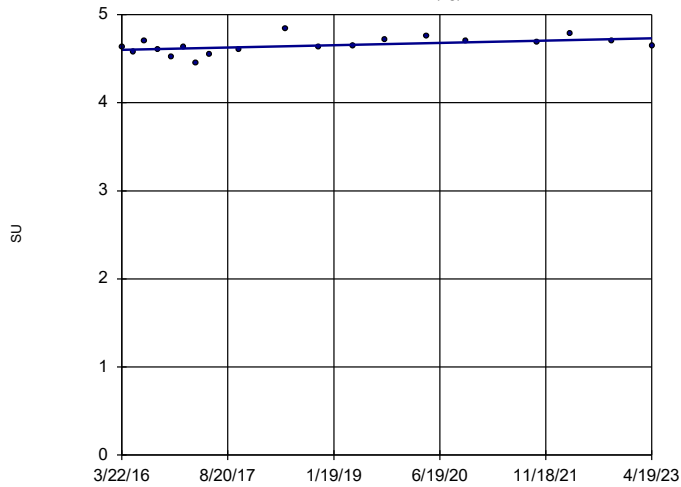

n = 21

Slope = -0.01735 units per year.

Mann-Kendall statistic = -60 critical = -87

Trend not sig- nificant at 99% confidence level (α = 0.005 per tail).

Constituent: pH   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-14 (bg)

n = 20

Slope = -0.04668 units per year.

Mann-Kendall statistic = -92 critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-18 (bg)

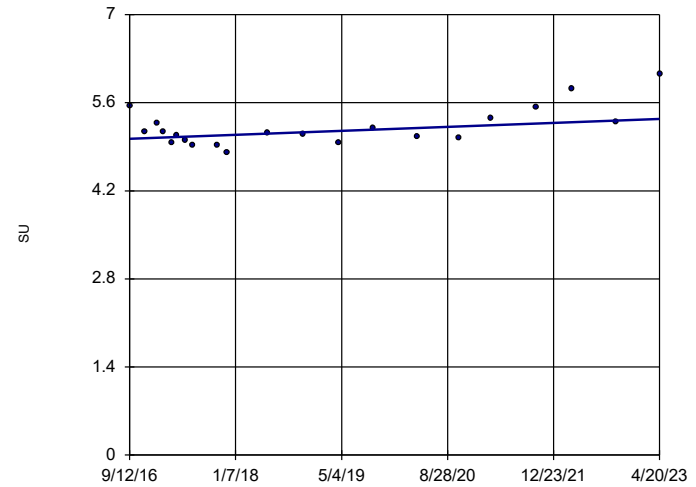n = 19

Slope = 0.01861 units per year.

Mann-Kendall statistic = 67 critical = 74

Trend not sig- nificant at 99% confidence level (α = 0.005 per tail).

Constituent: pH   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator
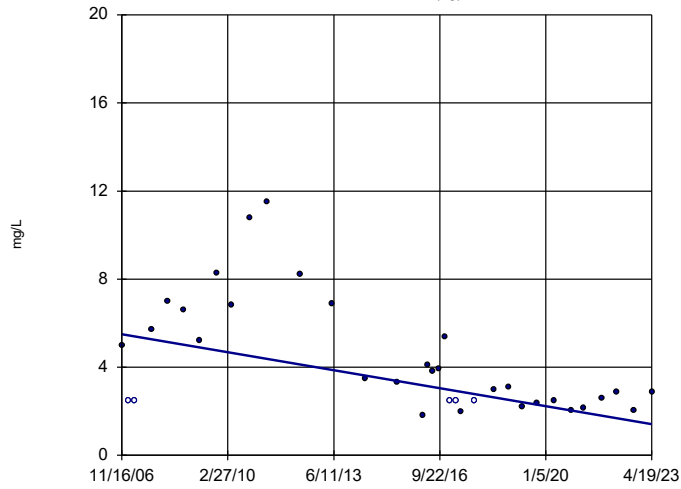
MW-19

n = 21

Slope = 0.04749 units per year.

Mann-Kendall statistic = 44 critical = 87

Trend not sig- nificant at 99% confidence level (α = 0.005 per tail).

Constituent: pH   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR
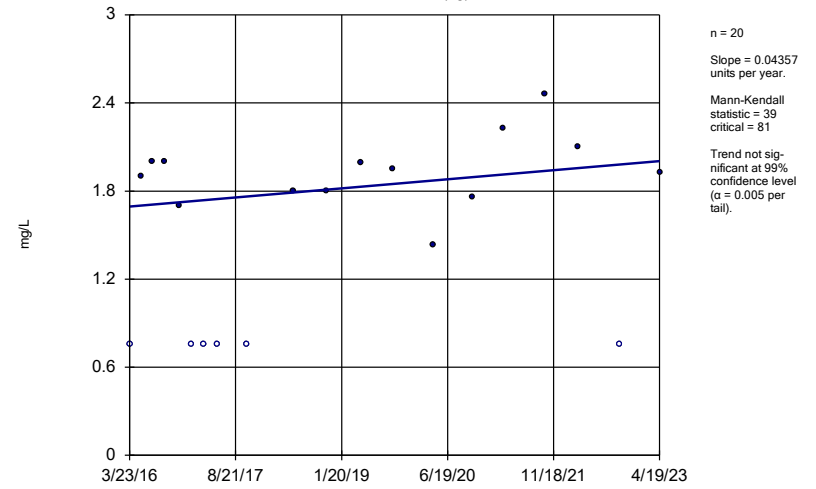
Sen's Slope Estimator

MW-11 (bg)

n = 35

Slope = -0.2485
units per year.

Mann-Kendall
statistic = -251
critical = -184

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-14 (bg)

n = 20

Slope = 0.04357
units per year.

Mann-Kendall
statistic = 39
critical = 81

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

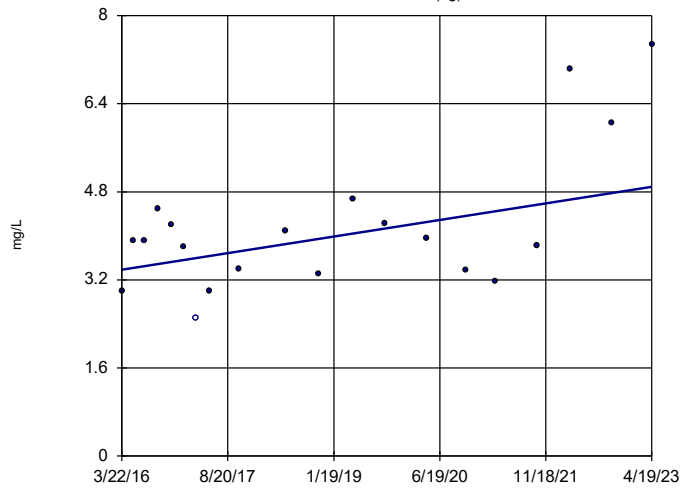Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-18 (bg)

n = 20

Slope = 0.2127
units per year.

Mann-Kendall
statistic = 52
critical = 81

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

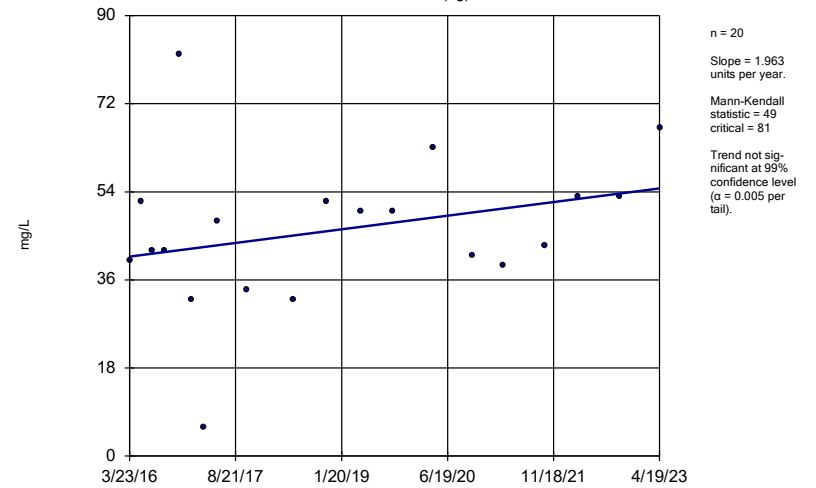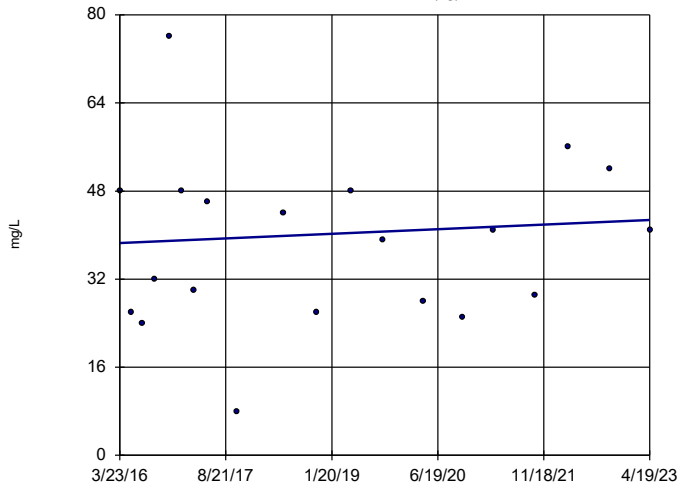Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-11 (bg)

n = 20

Slope = 1.963
units per year.

Mann-Kendall
statistic = 49
critical = 81

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Total Dissolved Solids   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-14 (bg)

n = 20

Slope = 0.5865 units per year.

Mann-Kendall statistic = 13 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-18 (bg)

n = 20

Slope = 0.3801 units per year.

Mann-Kendall statistic = 24 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR
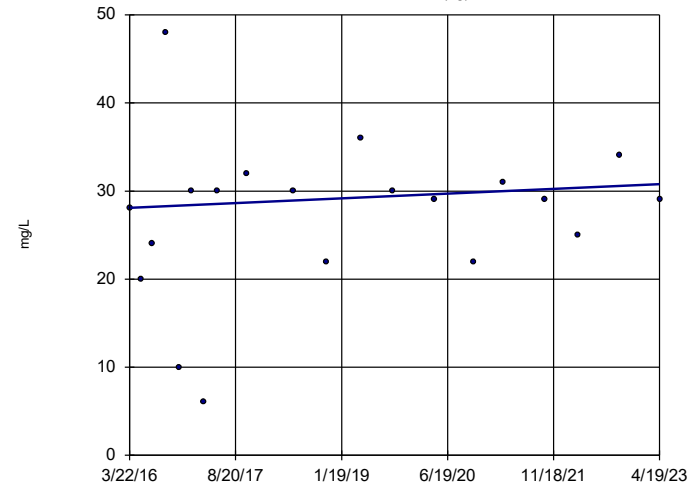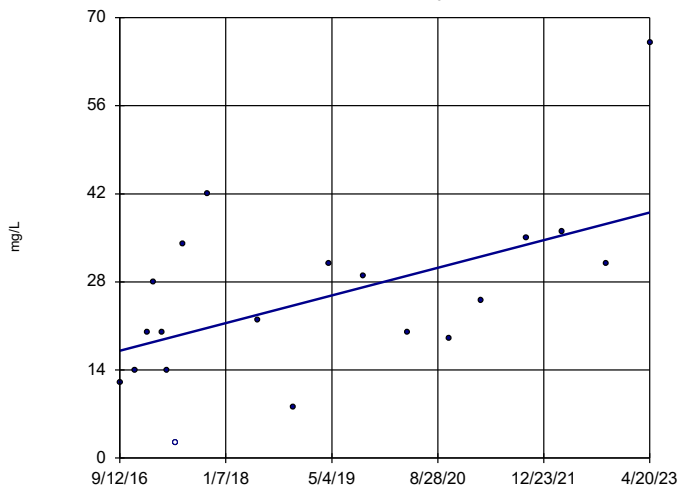
Sen's Slope Estimator

MW-19

n = 20

Slope = 3.324 units per year.

Mann-Kendall statistic = 79 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids   Analysis Run 5/12/2023 10:29 AM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

FIGURE G.

Intrawell Prediction Limits - May 2023 Resample (Significant Results)

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 6/8/2023, 3:38 PM

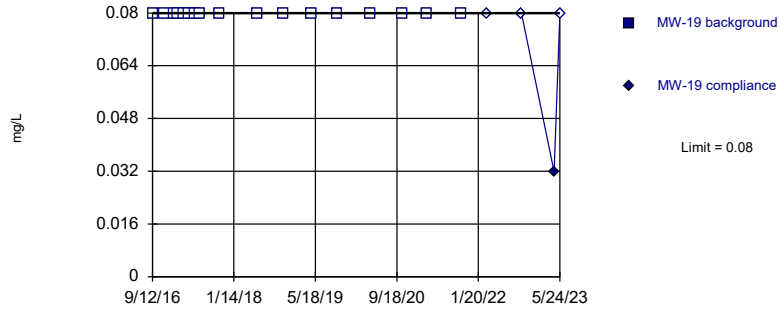| Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	0.8608	n/a	5/24/2023	1.7	Yes	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.802	n/a	5/24/2023	6.84	Yes	17	706.2	208.1	5.882	None	x^4	0.00188	Param Intra 1 of 2

Intrawell Prediction Limits - May 2023 Resample (All Results)

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 6/8/2023, 3:38 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-19	0.08	n/a	5/24/2023	0.08ND	No	17	n/a	n/a	100	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Calcium (mg/L)	**MW-19**	**0.8608**	**n/a**	**5/24/2023**	**1.7**	**Yes**	**12**	**0.7847**	**0.06412**	**0**	**None**	**sqrt(x)**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	**MW-19**	**5.802**	**n/a**	**5/24/2023**	**6.84**	**Yes**	**17**	**706.2**	**208.1**	**5.882**	**None**	**x^4**	**0.00188**	**Param Intra 1 of 2**
Fluoride (mg/L)	MW-19	0.0382	n/a	5/24/2023	0.0849J	No	17	n/a	n/a	82.35	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
pH (SU)	MW-19	5.525	4.715	5/24/2023	5.15	No	18	5.12	0.1992	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	5/24/2023	2.62	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-19	43.34	n/a	5/24/2023	32	No	17	22.09	10.35	5.882	None	No	0.00188	Param Intra 1 of 2

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-19 background
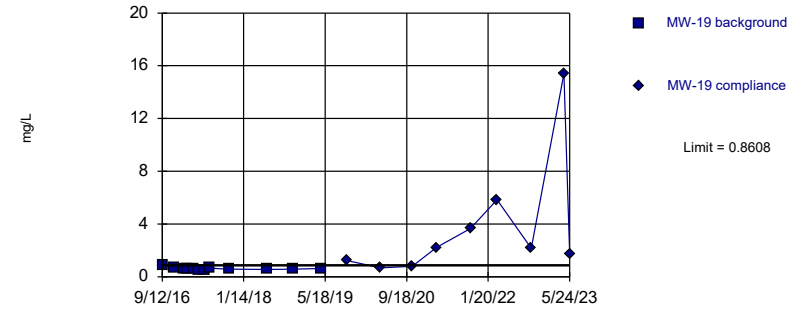
◆ MW-19 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 17) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 6/8/2023 3:36 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit

Intrawell Parametric

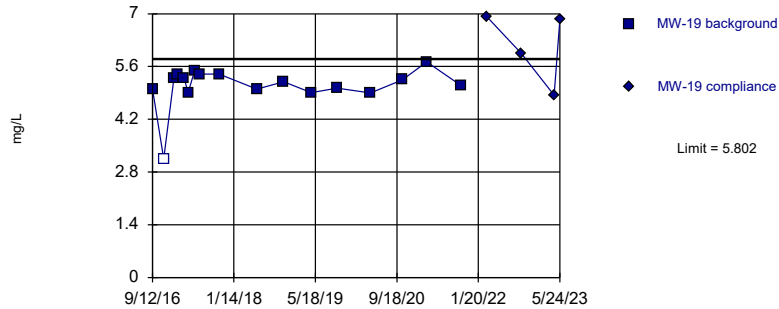■ MW-19 background

◆ MW-19 compliance

Limit = 0.8608

Background Data Summary (based on square root transformation): Mean=0.7847, Std. Dev.=0.06412, n=12.
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8069, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 6/8/2023 3:36 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit

Intrawell Parametric

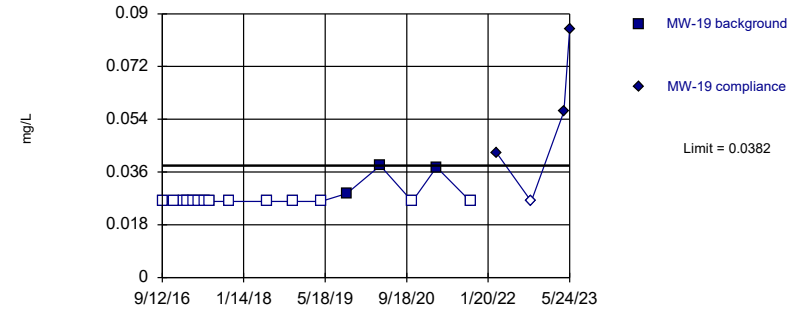■ MW-19 background

◆ MW-19 compliance

Limit = 5.802

Background Data Summary (based on x^4 transformation): Mean=706.2, Std. Dev.=208.1, n=17, 5.882% NDs.
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 6/8/2023 3:36 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 0.0382
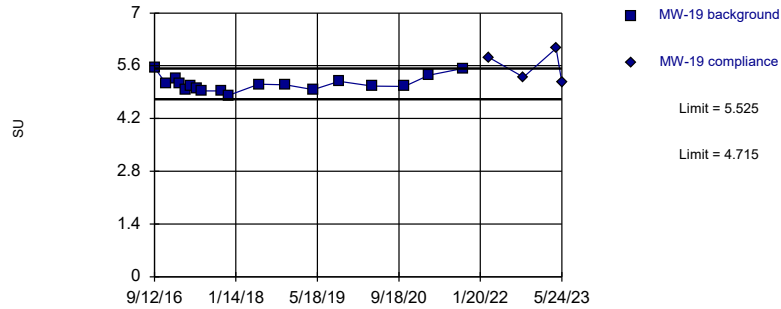
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 6/8/2023 3:36 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

- ■ MW-19 background
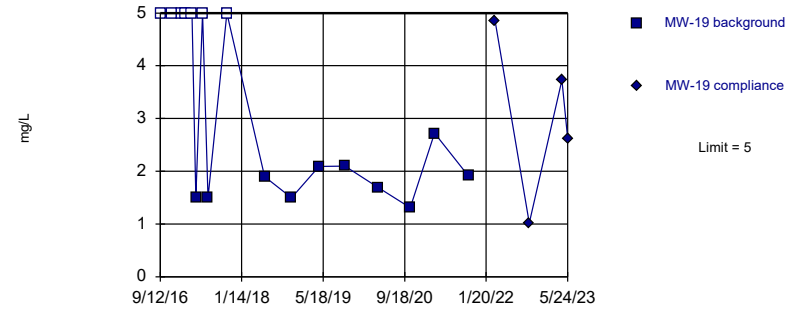- ◆ MW-19 compliance

Limit = 5.525

Limit = 4.715

Background Data Summary: Mean=5.12, Std. Dev.=0.1992, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9196, critical = 0.858. Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 6/8/2023 3:36 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ MW-19 background
- ◆ MW-19 compliance

Limit = 5

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 17 background values. 41.18% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate   Analysis Run 6/8/2023 3:36 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

- ■ MW-19 background
- ◆ MW-19 compliance

Limit = 43.34

Background Data Summary: Mean=22.09, Std. Dev.=10.35, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9883, critical = 0.851. Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 6/8/2023 3:36 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 6/8/2023 3:38 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.08	
11/18/2016	<0.08	
1/18/2017	<0.08	
2/10/2017	<0.08	
3/21/2017	<0.08	
4/14/2017	<0.08	
5/23/2017	<0.08	
6/26/2017	<0.08	
10/17/2017	<0.08	
5/31/2018	<0.08	
11/8/2018	<0.08	
4/22/2019	<0.08	
9/26/2019	<0.08	
4/13/2020	<0.08	
10/21/2020	<0.08	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022		<0.08
10/5/2022		<0.08
4/20/2023		0.0318 (J)
5/24/2023		<0.08

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 6/8/2023 3:38 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	0.92	
11/18/2016	0.68	
1/18/2017	0.64	
2/10/2017	0.58	
3/21/2017	0.56	
4/14/2017	0.51	
5/23/2017	0.54	
6/26/2017	0.66	
10/17/2017	0.58	
5/31/2018	0.56	
11/8/2018	0.57	
4/22/2019	0.634	
9/26/2019		1.24
4/13/2020		0.687
10/21/2020		0.806
3/16/2021		2.23
10/5/2021		3.67
3/15/2022		5.84
10/5/2022		2.16
4/20/2023		15.4
5/24/2023		1.7

Prediction Limit

	MW-19	MW-19
9/12/2016	5	
11/18/2016	<6.3 (*)	
1/18/2017	5.3	
2/10/2017	5.4	
3/21/2017	5.3	
4/14/2017	4.9 (B)	
5/23/2017	5.5	
6/26/2017	5.4	
10/17/2017	5.4	
5/31/2018	5	
11/8/2018	5.2	
4/22/2019	4.91	
9/26/2019	5.03	
4/13/2020	4.9	
10/21/2020	5.25	
3/16/2021	5.72	
10/5/2021	5.1	
3/15/2022		6.91
10/5/2022		5.94
4/20/2023		4.84
5/24/2023		6.84

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-19	MW-19
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
2/10/2017	<0.026	
3/21/2017	<0.026	
4/14/2017	<0.026	
5/23/2017	<0.026	
6/26/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0287 (J)	
4/13/2020	0.0382 (J)	
10/21/2020	<0.026	
3/16/2021	0.0376 (J)	
10/5/2021	<0.026	
3/15/2022		0.0423 (J)
10/5/2022		<0.026
4/20/2023		0.0566 (J)
5/24/2023		0.0849 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH (SU)   Analysis Run 6/8/2023 3:38 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5.55	
11/18/2016	5.14	
1/18/2017	5.27	
2/10/2017	5.14	
3/21/2017	4.96	
4/14/2017	5.07	
5/23/2017	5.01	
6/26/2017	4.93	
10/17/2017	4.93	
11/30/2017	4.81	
5/31/2018	5.11	
11/8/2018	5.09	
4/22/2019	4.97	
9/26/2019	5.19	
4/13/2020	5.06	
10/21/2020	5.05	
3/16/2021	5.35	
10/5/2021	5.53	
3/15/2022		5.82
10/5/2022		5.3
4/20/2023		6.06
5/24/2023		5.15

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 6/8/2023 3:38 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<5	
11/18/2016	<5	
1/18/2017	<5	
2/10/2017	<5	
3/21/2017	<5	
4/14/2017	1.5 (J)	
5/23/2017	<5	
6/26/2017	1.5 (J)	
10/17/2017	<5	
5/31/2018	1.9 (J)	
11/8/2018	1.5 (J)	
4/22/2019	2.09	
9/26/2019	2.1	
4/13/2020	1.69	
10/21/2020	1.31	
3/16/2021	2.72	
10/5/2021	1.91	
3/15/2022		4.86
10/5/2022		1.02
4/20/2023		3.73
5/24/2023		2.62

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 6/8/2023 3:38 PM   View: Intrawell Resample

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	12	
11/18/2016	14	
1/18/2017	20	
2/10/2017	28	
3/21/2017	20	
4/14/2017	14	
5/23/2017	<5	
6/26/2017	34	
10/17/2017	42	
5/31/2018	22	
11/8/2018	8	
4/22/2019	31	
9/26/2019	29	
4/13/2020	20	
10/21/2020	19	
3/16/2021	25	
10/5/2021	35	
3/15/2022		36
10/5/2022		31
4/20/2023		66
5/24/2023		32

ND substitution: RL or RL/2 if <15% NDs.

FIGURE H.

Interwell Prediction Limits - Two-Step - May 2023 Resample (No Significant)

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 6/8/2023, 3:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	4.531	n/a	5/24/2023	1.7	No	60	1.32	0.4539	3.333	None	sqrt(x)	0.00188	Param Inter 1 of 2
Chloride (mg/L)	MW-19	15.13	n/a	5/24/2023	6.84	No	75	10.26	2.757	0	None	No	0.00188	Param Inter 1 of 2

Within Limit

Prediction Limit

Interwell Parametric

mg/L

Limit = 4.531

MW-19

Background Data Summary (based on square root transformation): Mean=1.32, Std. Dev.=0.4539, n=60, 3.333% NDs.   Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.964, critical = 0.945.   Kappa = 1.782 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Assumes 3 future values.

Constituent: Calcium   Analysis Run 6/8/2023 3:39 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Interwell Parametric

mg/L

Limit = 15.13

MW-19

Background Data Summary: Mean=10.26, Std. Dev.=2.757, n=75.   Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9844, critical = 0.956.   Kappa = 1.767 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Assumes 3 future values.

Constituent: Chloride   Analysis Run 6/8/2023 3:39 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 6/8/2023 3:40 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18 (bg)	MW-14 (bg)	MW-11 (bg)	MW-19
3/22/2016	0.93 (B1)			
3/23/2016		<5.9 (*)	<5.9 (*)	
5/18/2016	0.85	5.5	1.8	
7/12/2016	0.69	5.3	1.9	
9/12/2016	0.86	4.9	2	0.92
11/18/2016	0.41		2	0.68
11/19/2016		4.8		
1/18/2017	0.81	3.8		0.64
1/19/2017			1.8	
2/10/2017				0.58
3/21/2017	0.76			0.56
3/22/2017		3.3	1.8	
4/14/2017				0.51
5/23/2017				0.54
5/24/2017	0.8	3.6	2	
6/26/2017				0.66
10/17/2017	0.69	3.7	2	0.58
5/31/2018	0.75		1.8	0.56
6/1/2018		2.8		
11/7/2018		2.9	2	
11/8/2018	0.78			0.57
4/22/2019	0.531		1.71	0.634
4/23/2019		2.76		
9/26/2019	0.631	2.4		1.24
9/27/2019			1.99	
4/13/2020		2.74	2.03	0.687
4/14/2020	0.627			
10/21/2020				0.806
10/22/2020	0.553	2.17	2.02	
3/16/2021	0.57	2.4	1.74	2.23
10/5/2021	0.43 (J)	1.89	1.87	3.67
3/15/2022		2.59	1.87	5.84
3/16/2022	0.406 (J)			
10/4/2022		2.56	1.3	
10/5/2022	0.285 (J)			2.16
4/19/2023	0.368 (J)	2.63	1.65	
4/20/2023				15.4
5/24/2023				1.7

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-11 (bg)	MW-18 (bg)	MW-14 (bg)	MW-19
11/16/2006	8.5			
2/5/2007	8.8			
4/12/2007	9.5			
10/17/2007	12.1			
4/17/2008	13.1			
10/24/2008	13.7			
4/21/2009	11.9			
10/26/2009	11			
4/12/2010	12.5			
10/30/2010	10.8			
5/25/2011	10			
5/25/2012	10.9			
5/28/2013	11.4			
5/31/2014	9.2			
5/29/2015	11.5			
3/22/2016		11 (B1)		
3/23/2016	13		8.8 (B1)	
5/18/2016	13	8.4	7.2	
7/12/2016	13	7.9	7.5	
9/12/2016	13	7.6	8.4	5
11/18/2016	14	8.5		<6.3 (*)
11/19/2016			12	
1/18/2017		9.2	11	5.3
1/19/2017	13			
2/10/2017				5.4
3/21/2017		10		5.3
3/22/2017	15		11	
4/14/2017				4.9 (B)
5/23/2017				5.5
5/24/2017	14	10	10	
6/26/2017				5.4
10/17/2017	15	8.6	10	5.4
5/31/2018	12	6.9		5
6/1/2018			9.9	
11/7/2018	14		10	
11/8/2018		8.7		5.2
4/22/2019	13.3	6.17		4.91
4/23/2019			9.3	
9/26/2019		6.09	8.35	5.03
9/27/2019	13.4			
4/13/2020	14.2		7.9	4.9
4/14/2020		6.15		
10/21/2020				5.25
10/22/2020	17.4	6.89	6.5	
3/16/2021	13.3	8.18	7.32	5.72
10/5/2021	12.5	5.72	6.59	5.1
3/15/2022	13.6		8.36	6.91
3/16/2022		6.05		
10/4/2022	12		11.2	
10/5/2022		4.97		5.94
4/19/2023	12.2	5.08	10.2	
4/20/2023				4.84

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 6/8/2023 3:40 PM   View: Interwell
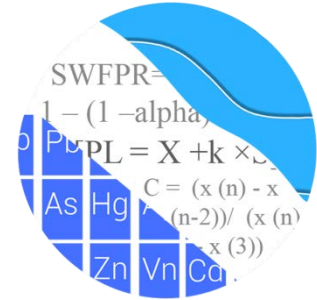
Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-18 (bg)	MW-14 (bg)	MW-19
5/24/2023				6.84

2nd Semi-Annual Monitoring Event

January 31, 2024

Southern Company Services
Attn: Mr. Trey Singleton
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Daniel North Ash Management Unit (NAMU)
        Statistical Analysis – October 2023

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 2023 Groundwater Monitoring Annual report for Mississippi Power Company's Plant Daniel NAMU. 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 United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at Daniel NAMU for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- o **Upgradient wells:** MW-11, MW-14, and MW-18
- o **Downgradient wells:** MW-15, MW-16, MW-17, and MW-19

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The CCR program monitors the constituents listed below. The terms "parameters" and "constituents" are used interchangeably throughout this report.

- o **Appendix III** (Detection Monitoring) **-** boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of 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. For calculating intrawell prediction limits, the substitution is performed for individual wells and may differ across wells. This generally gives the most conservative limit in each case.

Time series plots for Appendix III parameters are provided for all wells and are used to evaluate concentrations over time as well as for the purpose of updating statistical limits (Figure A). Additionally, box plots are included for all constituents at upgradient and downgradient wells (Figure B). Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graph; however, no values were flagged as outliers (Figure C). 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 were 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:

- Intrawell 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 limits is based on an annual 10% (5% per semi-annual event) as recommended

2

by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The 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 intrawell case, data for all wells and constituents are re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. While this was not required for this report, 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.

Two-Step Statistical Analysis

Intrawell statistical methods, combined with a 1-of-2 resample plan, may be used as a conservative first step for identifying potential facility impacts in downgradient wells. Intrawell methods use background data for individual wells and may be overly sensitive to spatial variation. In particular for nonparametric limits with small background sample sizes, the probability of a false positive is much higher than the desired annual sitewide rate of 10%. Therefore, a large number of exceedances may occur as a result of spatial variation rather than facility impacts. A second step can be used to further evaluate those exceedances and reduce the overall number of SSIs that result from spatial variation. In

instances where intrawell statistical methods identify an apparent SSI, a second step of interwell statistical evaluation may be used to determine whether the measurement exceeds the sitewide background limit based on pooled upgradient well data. This is similar in concept to the procedure used in compliance monitoring programs where an interwell statistical limit is used to determine "background" (USEPA Unified Guidance (2009), Chapter 7, Section 7.5). For the detection monitoring program, if the result does not exceed sitewide (interwell) background, an SSI is not declared.

When the result exceeds the sitewide (interwell) background, the 1-of-2 resample plan allows for collection of an independent resample to confirm or disconfirm the initial finding. A statistically significant increase is not declared unless the resample also exceeds the intrawell prediction limit (United States Environmental Protection Agency (USEPA) Unified Guidance, March 2009, Chapter 19). When the resample confirms the initial exceedance, 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). When any resample falls within the statistical limit, the initial exceedance is considered to be a false positive result, and no further action is necessary. In cases where intrawell and interwell exceedances are noted and no resamples are collected, the initial exceedance will be considered a confirmed statistically significant increase (SSI).

Trend tests, in addition to interwell prediction limits, are recommended for well/constituent pairs found to have an initial intrawell SSI. Trend analysis will provide for detection of long-term changes and potential facility impacts at a given well in cases where the concentrations at that well remain below the sitewide upgradient limits. Thus, the two-step approach has additional capability to detect long-term changes at downgradient wells compared to interwell methods alone. While a trend may be identified by visual inspection, a quantification of the trend and its significance is needed to identify whether concentrations are statistically significantly increasing, decreasing, or remaining stable over time. The absence of a statistically significant increasing trend indicates that an initial intrawell exceedance is short-term and may be the result of spatial variation rather than facility impact to groundwater. If a facility impact has occurred, it will likely result in additional exceedances in future sampling events. When a statistically significant increasing trend is noted, additional data may be needed to demonstrate that there is reasonable evidence that the initial intrawell statistical exceedance is a result of spatial variation rather than a result of impact to groundwater quality downgradient of the facility.

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 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 data sets for Appendix III parameters. 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 few 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.

<u>Appendix III – Determination of Spatial Variation</u>

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified variation among upgradient well data at Plant Daniel NAMU for the majority of the Appendix III parameters. This facility is a lined unit with pre-waste data; therefore, due to variation noted among upgradient wells, intrawell prediction limits were recommended for this facility to accommodate the groundwater quality. A summary table of the ANOVA results was included with the screening.

Summary of Background Update – Appendix III Parameters – November 2019

Prior to updating background data, samples were re-evaluated for Appendix III constituents at all wells using Tukey's outlier test and visual screening on all historical data through the April 2019 sample event. Only one value was noted by Tukey's as a potential outlier; however, when Tukey's outlier test detects an outlier for the most recent sample, it often will not be flagged in the event that the data precede a trend that is more representative of current concentrations. Therefore, no values for Appendix III constituents were flagged as outliers at the time of the screening. An updated summary of Tukey's test results was included with the screening.

The Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through June 2017 to the new compliance samples at each well through April 2019 to evaluate whether the groups are statistically different at the 99% confidence level for each of the Appendix III parameters. When no differences exist, background data sets may be updated to include newer data for construction of prediction limits. This results in statistical limits that are representative of present-day conditions. No statistically significant differences were found between the two groups except for the following: calcium and sulfate in well MW-15. Note that the Mann-Whitney test could not be produced due to insufficient variation in the data for boron in wells MW-14, MW-15, MW-16, MW-17, and MW-19.

Groundwater Stats Consulting   •   www.groundwaterstats.com   •   913.829.1470

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data sets are not updated to include the newer data but will be reconsidered in the future. For all well/constituent pairs, except for sulfate in well MW-15, due to the limited data available and the variability in data which shows that some of the more recent data have similar concentrations to those reported in background, these data sets were updated. For sulfate at well MW-15, the historic concentrations were exclusively non-detect concentrations at a reporting limit above recent detected concentrations; therefore, the record was updated to include the recent detected measurements. In the case of calcium at well MW-15, while there is a statistically significant difference between the two medians, the magnitude of the difference is minimal, and newer data more accurately represent concentrations present in nearby wells. Therefore, the background for this well/constituent pair was updated with new data. A summary of these results was included in the 2019 Background Update report.

Summary of Background Update – Appendix III Parameters – March 2022

Outlier Analysis

Prior to updating background data, samples were re-evaluated for Appendix III constituents at all wells using Tukey's outlier test and visual screening on all historical data through the March 2022 sample event. A few values were noted by Tukey's as potential outliers; however, these values were not drastically different than concentrations within the respective wells and were not flagged as outliers. Additionally, when Tukey's outlier test detects an outlier for the most recent sample, it often will not be flagged in the event that the reported concentration precedes a trend that is more representative of current concentrations. No values for Appendix III constituents were flagged as outliers at this time. The Tukey's test results were included with the update.

Mann-Whitney Test of Medians

The Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through April 2019 to the new compliance samples at each well through October 2021 to evaluate whether the groups are statistically different at the 99% confidence level for each of the Appendix III parameters. When no differences exist, background data sets may be updated to include newer data for construction of prediction limits. This results in statistical limits that are representative of present-day conditions. Statistically significant differences were found between the two groups except for the following:

Groundwater Stats Consulting   •   www.groundwaterstats.com   •   913.829.1470

Increase:

- Calcium: MW-19

Decrease:

- Calcium: MW-14 (upgradient)
- Chloride: MW-14 and MW-18 (both upgradient)
- Fluoride: MW-19
- Sulfate: MW-11 (upgradient) and MW-15

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data sets are not updated to include the newer data but will be reconsidered in the future. For all well/constituent pairs with decreasing medians, these records were updated with more recent compliance measurements since reported concentrations are similar to those reported historically. In the case of fluoride in downgradient well MW-19, the significant difference resulted from reported trace values compared to reported non-detects in the record.

For the statistically significant increasing median identified in well MW-19, while a portion of the more recent concentrations remain below historical upgradient concentrations, the most recent compliance samples indicate an increase that would result in an elevated intrawell prediction limit. Therefore, this record was not updated at this time. This step results in construction of a statistical limit that is conservative (i.e., lower) from a regulatory perspective. A summary of the date range used for this well/constituent pair follows this report.

Statistical Analysis of Appendix III Parameters – October 2023

Intrawell Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample strategy, were established for each of the Appendix III parameters at each well using historical data through October 2021 for comparison of the October 2023 samples (Figure D). Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at the same well. The October 2023 samples from each well were compared to the prediction limits to determine whether initial exceedances are present.

Note that during this event, the reporting limit decreased for boron from 0.1 mg/L to 0.08 mg/L at wells MW-14 and MW-15 and increased for fluoride at MW-18 from 0.026 mg/L

to 0.1 mg/L. No significant changes occurred as a result of the reporting limit increase since no recent detections have been above the reporting limit in any of these wells.

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:

- Calcium: MW-19
- Chloride: MW-16 and MW-19
- Sulfate: MW-18 (upgradient) and MW-17

Two-Step Analysis

Following the two-step analysis procedure, interwell prediction limits were then constructed using pooled upgradient well data to evaluate the apparent intrawell prediction limit exceedances among downgradient wells (Figure E). No exceedances were identified.

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 to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure F). 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 unrelated to practices at the site. Statistically significant trends were identified for the following well/constituent pairs which is an indication of changing groundwater quality:

Increasing:
- Calcium: MW-19
- Chloride: MW-11 (upgradient)
- Sulfate: MW-17

9

Decreasing:
- Calcium: MW-14 and MW-18 (both upgradient)
- Chlorie: MW-18 (upgradient)
- Sulfate: MW-11 (upgradient)

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Daniel North Ash Management Unit. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins   Kristina L. Rayner
Project Manager   Senior Statistician

100% Non-Detects

Boron (mg/L)
MW-16, MW-17

Date Ranges

Date: 12/1/2023 1:34 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Calcium (mg/L)
   MW-19 background:9/12/2016-4/22/2019

Intrawell Prediction Limits - Significant Results

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	0.8608	n/a	10/30/2023	1.19	Yes	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	10.07	n/a	10/27/2023	10.4	Yes	19	7.533	1.263	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.802	n/a	10/30/2023	5.88	Yes	17	706.2	208.1	5.882	None	x^4	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-17	3.508	n/a	10/27/2023	3.82	Yes	17	2.304	0.5866	11.76	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	4.898	n/a	10/30/2023	7.39	Yes	17	3.696	0.585	5.882	None	No	0.00188	Param Intra 1 of 2

Intrawell Prediction Limits - All Results

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.103	n/a	10/27/2023	0.0305J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.08	n/a	10/27/2023	0.08ND	No	17	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.1	n/a	10/27/2023	0.0234J	No	17	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.0601	n/a	10/30/2023	0.0304J	No	17	n/a	n/a	70.59	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-19	0.08	n/a	10/30/2023	0.08ND	No	17	n/a	n/a	100	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.125	n/a	10/27/2023	1.42	No	17	24.35	9.256	5.882	None	x^5	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	5.702	n/a	10/27/2023	2.28	No	17	3.406	1.117	5.882	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.597	n/a	10/27/2023	1.13	No	17	1.187	0.2	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.146	n/a	10/27/2023	1.05	No	18	0.8117	0.1645	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.27	n/a	10/27/2023	0.916	No	17	0.01917	0.1071	0	None	ln(x)	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-18	0.9976	n/a	10/30/2023	0.427J	No	17	0.6866	0.1514	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	**MW-19**	**0.8608**	**n/a**	**10/30/2023**	**1.19**	**Yes**	**12**	**0.7847**	**0.06412**	**0**	**None**	**sqrt(x)**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	MW-11	16.08	n/a	10/27/2023	12.1	No	32	12.44	1.948	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.3	n/a	10/27/2023	9.77	No	17	8.927	1.643	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.02	n/a	10/27/2023	8.9	No	17	7.922	1.023	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	**MW-16**	**10.07**	**n/a**	**10/27/2023**	**10.4**	**Yes**	**19**	**7.533**	**1.263**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	MW-17	8.234	n/a	10/27/2023	6.16	No	17	6.738	0.7281	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.16	n/a	10/30/2023	11.1	No	17	8	1.54	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	**MW-19**	**5.802**	**n/a**	**10/30/2023**	**5.88**	**Yes**	**17**	**706.2**	**208.1**	**5.882**	**None**	**x^4**	**0.00188**	**Param Intra 1 of 2**
Fluoride (mg/L)	MW-11	0.1	n/a	10/27/2023	0.058J	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.0411	n/a	10/27/2023	0.0511J	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.0484	n/a	10/27/2023	0.0459J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.0496	n/a	10/27/2023	0.0612J	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.0511	n/a	10/27/2023	0.0494J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	10/30/2023	0.1ND	No	17	n/a	n/a	64.71	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.0382	n/a	10/30/2023	0.0511J	No	17	n/a	n/a	82.35	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.927	4.479	10/27/2023	4.7	No	18	4.703	0.1101	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.519	4.651	10/27/2023	4.8	No	17	5.085	0.2112	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	5.006	4.405	10/27/2023	4.59	No	17	4.705	0.1462	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.808	4.41	10/27/2023	4.47	No	17	4.609	0.09695	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.314	4.695	10/27/2023	4.82	No	17	1.71	0.0172	0	None	x^(1/3)	0.0009398	Param Intra 1 of 2
pH (SU)	MW-18	4.833	4.445	10/30/2023	4.64	No	16	4.639	0.09337	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	5.525	4.715	10/30/2023	5.01	No	18	5.12	0.1992	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-11	10.47	n/a	10/27/2023	2.72	No	32	1.364	0.5266	15.63	Kaplan-Meier	ln(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-14	2.474	n/a	10/27/2023	1.53	No	17	2.586	1.72	29.41	Kaplan-Meier	x^2	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-15	3.38	n/a	10/27/2023	1.7	No	17	n/a	n/a	52.94	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	10/27/2023	3.08	No	17	n/a	n/a	47.06	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Sulfate (mg/L)	**MW-17**	**3.508**	**n/a**	**10/27/2023**	**3.82**	**Yes**	**17**	**2.304**	**0.5866**	**11.76**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Sulfate (mg/L)	**MW-18**	**4.898**	**n/a**	**10/30/2023**	**7.39**	**Yes**	**17**	**3.696**	**0.585**	**5.882**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Sulfate (mg/L)	MW-19	5	n/a	10/30/2023	2.73	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	76.12	n/a	10/27/2023	21	No	17	44	15.64	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	67.34	n/a	10/27/2023	23	No	17	36.35	15.09	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	54.62	n/a	10/27/2023	24	No	18	27.33	13.43	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	59.48	n/a	10/27/2023	21	No	17	24.46	17.05	17.65	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	43.75	n/a	10/27/2023	14	No	17	25.75	8.766	5.882	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	46.41	n/a	10/30/2023	15	No	17	26.88	9.506	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	43.34	n/a	10/30/2023	29	No	17	22.09	10.35	5.882	None	No	0.00188	Param Intra 1 of 2

Interwell Prediction Limits - Two-Step - All Results (No Significant)

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	4.467	n/a	10/30/2023	1.19	No	63	1.31	0.4517	3.175	None	sqrt(x)	0.00188	Param Inter 1 of 2
Chloride (mg/L)	MW-16	15.07	n/a	10/27/2023	10.4	No	78	10.29	2.713	0	None	No	0.00188	Param Inter 1 of 2
Chloride (mg/L)	MW-19	15.07	n/a	10/30/2023	5.88	No	78	10.29	2.713	0	None	No	0.00188	Param Inter 1 of 2
Sulfate (mg/L)	MW-17	7.47	n/a	10/27/2023	3.82	No	78	1.791	0.5338	15.38	Kaplan-Meier	sqrt(x)	0.00188	Param Inter 1 of 2

Appendix III Trend Tests - Significant Results

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	MW-14 (bg)	-0.3374	-149	-87	Yes	21	4.762	n/a	0.01	NP
Calcium (mg/L)	MW-18 (bg)	-0.06556	-141	-87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	MW-19	0.127	107	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	MW-11 (bg)	0.1671	240	191	Yes	36	0	n/a	0.01	NP
Chloride (mg/L)	MW-18 (bg)	-0.4732	-89	-87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	MW-11 (bg)	-0.2348	-258	-191	Yes	36	13.89	n/a	0.01	NP
Sulfate (mg/L)	MW-17	0.247	129	87	Yes	21	9.524	n/a	0.01	NP

Appendix III Trend Tests - All Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 12/1/2023, 1:33 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	MW-11 (bg)	-0.005507	-27	-87	No	21	4.762	n/a	0.01	NP
Calcium (mg/L)	**MW-14 (bg)**	**-0.3374**	**-149**	**-87**	**Yes**	**21**	**4.762**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.06556**	**-141**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.127**	**107**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-11 (bg)**	**0.1671**	**240**	**191**	**Yes**	**36**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-14 (bg)	-0.08571	-20	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	MW-16	0.4398	98	98	No	23	0	n/a	0.01	NP
Chloride (mg/L)	**MW-18 (bg)**	**-0.4732**	**-89**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-19	0.09374	55	92	No	22	4.545	n/a	0.01	NP
Sulfate (mg/L)	**MW-11 (bg)**	**-0.2348**	**-258**	**-191**	**Yes**	**36**	**13.89**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-14 (bg)	0.02996	33	87	No	21	28.57	n/a	0.01	NP
Sulfate (mg/L)	**MW-17**	**0.247**	**129**	**87**	**Yes**	**21**	**9.524**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-18 (bg)	0.2831	70	87	No	21	4.762	n/a	0.01	NP

Table of Contents

FIGURE A.

Constituent: Boron   Analysis Run 12/1/2023 1:20 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Constituent: Calcium   Analysis Run 12/1/2023 1:20 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Constituent: Chloride   Analysis Run 12/1/2023 1:20 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Constituent: Fluoride   Analysis Run 12/1/2023 1:20 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sanitas™ v.10.0.13b Software licensed to . UG

Time Series

Constituent: pH   Analysis Run 12/1/2023 1:20 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sanitas™ v.10.0.13b Software licensed to . UG
Hollow symbols indicate censored values.

Time Series

Constituent: Sulfate   Analysis Run 12/1/2023 1:20 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sanitas™ v.10.0.13b Software licensed to . UG
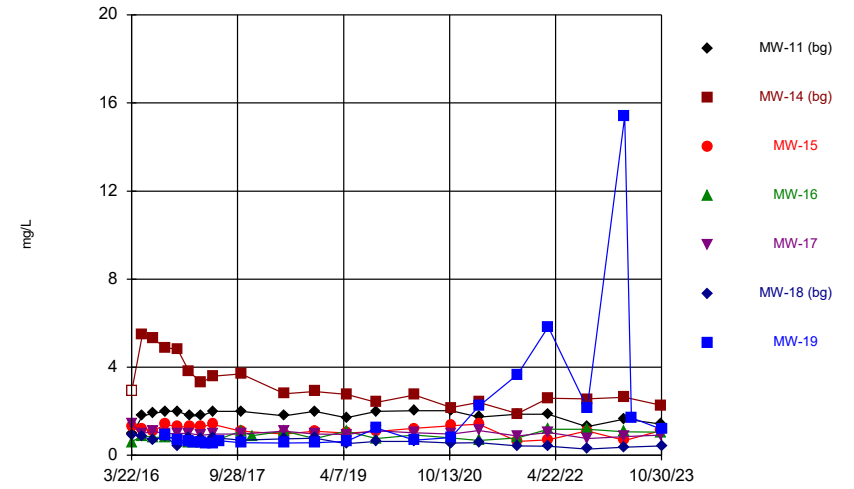Hollow symbols indicate censored values.

Time Series

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:20 PM
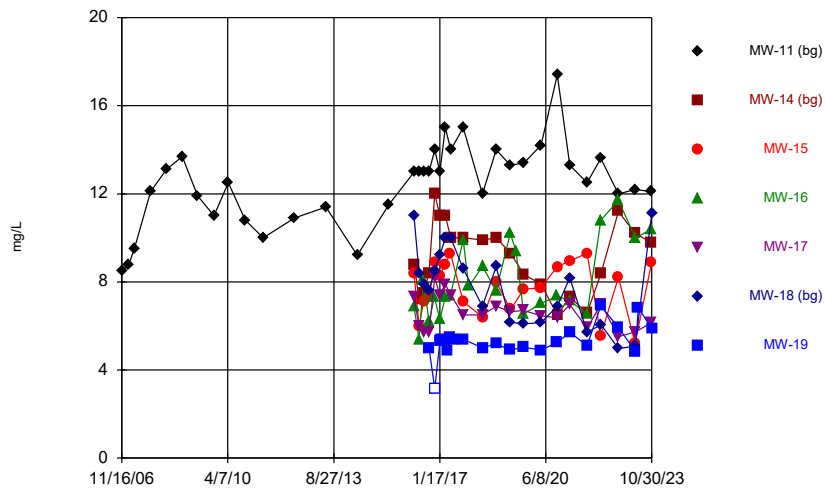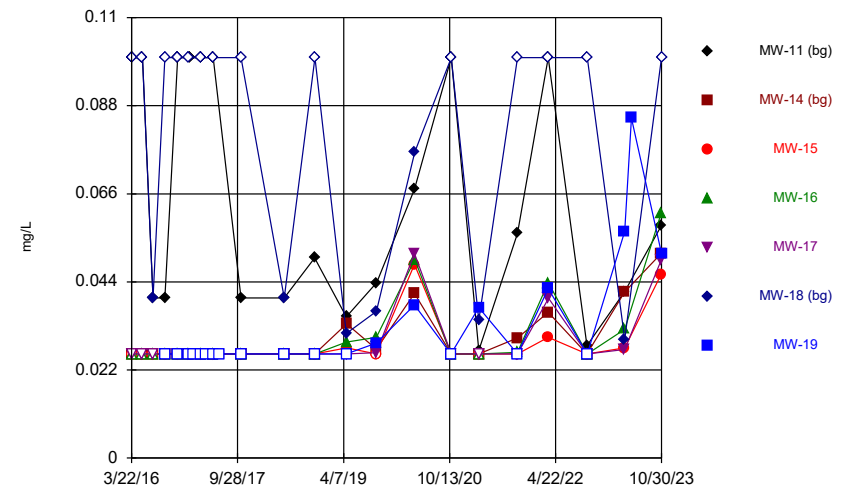
Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Boron (mg/L)   Analysis Run 12/1/2023 1:22 PM

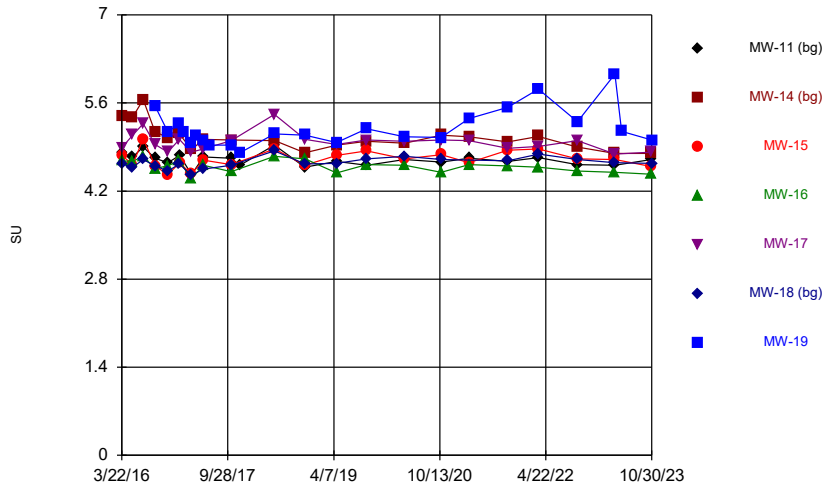Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			<0.1 (B1)	<0.08 (B1)	<0.08 (B1)	<0.0601 (B1)	
3/23/2016	<0.1 (B1)	<0.08 (B1)					
5/18/2016	<0.1	<0.08	<0.1	<0.08	<0.08	<0.0601	
7/11/2016				<0.08			
7/12/2016	<0.1	<0.08	<0.1		<0.08	0.026 (J)	
9/12/2016	<0.1	<0.08	<0.1		<0.08	<0.0601	<0.08
9/13/2016				<0.08			
11/17/2016				<0.08			
11/18/2016	<0.1				<0.08	<0.0601	<0.08
11/19/2016		<0.08	<0.1				
1/18/2017		<0.08		<0.08	<0.08	<0.0601	<0.08
1/19/2017	<0.1		<0.1				
2/10/2017							<0.08
3/21/2017			<0.1	<0.08	<0.08	<0.0601	<0.08
3/22/2017	<0.1	<0.08					
4/14/2017							<0.08
5/23/2017			<0.1	<0.08			<0.08
5/24/2017	<0.1	<0.08			<0.08	<0.0601	
6/26/2017							<0.08
10/17/2017	<0.1	<0.08	<0.1	<0.08	<0.08	0.025 (J)	<0.08
5/31/2018	<0.1			<0.08	<0.08	0.022 (J)	<0.08
6/1/2018		<0.08	<0.1				
11/7/2018	<0.1	<0.08	<0.1				
11/8/2018				<0.08	<0.08	<0.0601	<0.08
4/22/2019	<0.1			<0.08	<0.08	<0.0601	<0.08
4/23/2019		<0.08	<0.1				
9/26/2019		<0.08	<0.1	<0.08	<0.08	0.042 (J)	<0.08
9/27/2019	0.0443 (J)						
4/13/2020	<0.1	<0.08	<0.1		<0.08		<0.08
4/14/2020				<0.08		<0.0601	
10/21/2020				<0.08			<0.08
10/22/2020	0.103	0.0559 (J)	0.0437 (J)		<0.08	0.0401 (J)	
3/16/2021	<0.1	<0.08	<0.1	<0.08	<0.08	<0.0601	<0.08
10/5/2021	<0.1	<0.08	<0.1	<0.08	<0.08	<0.0601	<0.08
3/15/2022	<0.1	<0.08	<0.1	<0.08			<0.08
3/16/2022					<0.08	0.0927	
10/4/2022	<0.1	<0.08	<0.1				
10/5/2022				<0.08	<0.08	<0.0601	<0.08
4/19/2023	<0.1	<0.08	<0.1			0.0256 (J)	
4/20/2023				<0.08	<0.08		0.0318 (J)
5/24/2023							<0.08
10/27/2023	0.0305 (J)	<0.08	0.0234 (J)	<0.08	<0.08		
10/30/2023						0.0304 (J)	<0.08

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			1.3 (B1)	0.61 (B1)	1.4 (B1)	0.93 (B1)	
3/23/2016	<1.9 (*)	<5.9 (*)					
5/18/2016	1.8	5.5	1.2	0.89	1	0.85	
7/11/2016				0.82			
7/12/2016	1.9	5.3	1.1		1.1	0.69	
9/12/2016	2	4.9	1.4		0.98	0.86	0.92
9/13/2016				0.82			
11/17/2016				0.75			
11/18/2016	2				1	0.41	0.68
11/19/2016		4.8	1.3				
1/18/2017		3.8		0.58	1	0.81	0.64
1/19/2017	1.8		1.3				
2/10/2017							0.58
3/21/2017			1.3	0.6	0.91	0.76	0.56
3/22/2017	1.8	3.3					
4/14/2017							0.51
5/23/2017			1.4	0.65			0.54
5/24/2017	2	3.6			0.96	0.8	
6/26/2017							0.66
10/17/2017	2	3.7	1.1	1.1	0.96	0.69	0.58
12/15/2017				0.89 (RS)			
5/31/2018	1.8			1.1	1.1	0.75	0.56
6/1/2018		2.8	0.97				
11/7/2018	2	2.9	1.1				
11/8/2018				0.76	0.96	0.78	0.57
4/22/2019	1.71			1.09	0.946	0.531	0.634
4/23/2019		2.76	1.01				
9/26/2019		2.4	1.08	0.758	1.11	0.631	1.24
9/27/2019	1.99						
4/13/2020	2.03	2.74	1.22		1.03		0.687
4/14/2020				0.92		0.627	
10/21/2020				0.798			0.806
10/22/2020	2.02	2.17	1.35		0.969	0.553	
3/16/2021	1.74	2.4	1.41	0.681	1.12	0.57	2.23
10/5/2021	1.87	1.89	0.632	0.793	0.883	0.43 (J)	3.67
3/15/2022	1.87	2.59	0.703	1.18			5.84
3/16/2022					1.04	0.406 (J)	
10/4/2022	1.3	2.56	1.11				
10/5/2022				1.19	0.755	0.285 (J)	2.16
4/19/2023	1.65	2.63	0.682			0.368 (J)	
4/20/2023				1.07	0.855		15.4
5/24/2023							1.7
10/27/2023	1.42	2.28	1.13	1.05	0.916		
10/30/2023						0.427 (J)	1.19

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L)   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
11/16/2006	8.5						
2/5/2007	8.8						
4/12/2007	9.5						
10/17/2007	12.1						
4/17/2008	13.1						
10/24/2008	13.7						
4/21/2009	11.9						
10/26/2009	11						
4/12/2010	12.5						
10/30/2010	10.8						
5/25/2011	10						
5/25/2012	10.9						
5/28/2013	11.4						
5/31/2014	9.2						
5/29/2015	11.5						
3/22/2016			8.4 (B1)	6.9 (B1)	7.3 (B1)	11 (B1)	
3/23/2016	13	8.8 (B1)					
5/18/2016	13	7.2	6	5.4	6	8.4	
7/11/2016				8.1			
7/12/2016	13	7.5	7.1		5.7	7.9	
9/12/2016	13	8.4	7.3		5.7	7.6	5
9/13/2016				6.2			
11/17/2016				7.3			
11/18/2016	14				8.2	8.5	<6.3 (*)
11/19/2016		12	8.9				
1/18/2017		11		6.3	7.4	9.2	5.3
1/19/2017	13		8.3				
2/10/2017							5.4
3/21/2017			8.8	7.3	7.9	10	5.3
3/22/2017	15	11					
4/14/2017							4.9 (B)
5/23/2017			9.3	7.4			5.5
5/24/2017	14	10			7.4	10	
6/26/2017							5.4
10/17/2017	15	10	7.1	9.9	6.5	8.6	5.4
12/19/2017				7.8 (RS)			
5/31/2018	12			8.7	6.5	6.9	5
6/1/2018		9.9	6.4				
11/7/2018	14	10	8				
11/8/2018				7.6	6.9	8.7	5.2
4/22/2019	13.3			10.2	6.64	6.17	4.91
4/23/2019		9.3	6.75				
6/25/2019				9.4			
9/26/2019		8.35	7.66	6.54	6.7	6.09	5.03
9/27/2019	13.4						
4/13/2020	14.2	7.9	7.74		6.46		4.9
4/14/2020				7.03		6.15	
10/21/2020				7.36			5.25
10/22/2020	17.4	6.5	8.69		6.37	6.89	
3/16/2021	13.3	7.32	8.94	7.14	6.97	8.18	5.72
10/5/2021	12.5	6.59	9.3	6.55	5.91	5.72	5.1
3/15/2022	13.6	8.36	5.55	10.8			6.91

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L)   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/16/2022					7	6.05	
10/4/2022	12	11.2	8.22				
10/5/2022				11.7	5.51	4.97	5.94
4/19/2023	12.2	10.2	5.21			5.08	
4/20/2023				10	5.73		4.84
5/24/2023							6.84
10/27/2023	12.1	9.77	8.9	10.4	6.16		
10/30/2023						11.1	5.88

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			<0.026 (B1)	<0.026 (B1)	<0.026 (B1)	<0.1 (B1)	
3/23/2016	<0.1	<0.026 (B1)					
5/18/2016	<0.1	<0.026	<0.026	<0.026	<0.026	<0.1	
7/11/2016				<0.026			
7/12/2016	0.04 (J)	<0.026	<0.026		<0.026	0.04 (J)	
9/12/2016	0.04 (J)	<0.026	<0.026		<0.026	<0.1	<0.026
9/13/2016				<0.026			
11/17/2016				<0.026			
11/18/2016	<0.1				<0.026	<0.1	<0.026
11/19/2016		<0.026	<0.026				
1/18/2017		<0.026		<0.026	<0.026	<0.1	<0.026
1/19/2017	<0.1		<0.026				
2/10/2017							<0.026
3/21/2017			<0.026	<0.026	<0.026	<0.1	<0.026
3/22/2017	<0.1	<0.026					
4/14/2017							<0.026
5/23/2017			<0.026	<0.026			<0.026
5/24/2017	<0.1	<0.026			<0.026	<0.1	
6/26/2017							<0.026
10/17/2017	0.04 (J)	<0.026	<0.026	<0.026	<0.026	<0.1	<0.026
5/31/2018	0.04 (J)			<0.026	<0.026	0.04 (J)	<0.026
6/1/2018		<0.026	<0.026				
11/7/2018	0.05 (J)	<0.026	<0.026				
11/8/2018				<0.026	<0.026	<0.1	<0.026
4/22/2019	0.0353 (J)			0.029 (J)	<0.026	0.0311 (J)	<0.026
4/23/2019		0.0335 (J)	0.0275 (J)				
9/26/2019		0.0272 (J)	<0.026	0.0302 (J)	0.0263 (J)	0.0366 (J)	0.0287 (J)
9/27/2019	0.0438 (J)						
4/13/2020	0.0672 (J)	0.0411 (J)	0.0484 (J)		0.0511 (J)		0.0382 (J)
4/14/2020				0.0496 (J)		0.0764 (J)	
10/21/2020				<0.026			<0.026
10/22/2020	<0.1	<0.026	<0.026		<0.026	<0.1	
3/16/2021	0.0269 (J)	<0.026	<0.026	<0.026	<0.026	0.0344 (J)	0.0376 (J)
10/5/2021	0.0561 (J)	0.03 (J)	<0.026	0.0264 (J)	<0.026	<0.1	<0.026
3/15/2022	<0.1	0.0364 (J)	0.0302 (J)	0.0438 (J)			0.0423 (J)
3/16/2022					0.0399 (J)	<0.1	
10/4/2022	0.0281 (J)	<0.026	<0.026				
10/5/2022				<0.026	<0.026	<0.1	<0.026
4/19/2023	0.0416 (J)	0.0415 (J)	0.0275 (J)			0.0297 (J)	
4/20/2023				0.0322 (J)	0.0271 (J)		0.0566 (J)
5/24/2023							0.0849 (J)
10/27/2023	0.058 (J)	0.0511 (J)	0.0459 (J)	0.0612 (J)	0.0494 (J)		
10/30/2023						<0.1	0.0511 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (SU)   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			4.77	4.68	4.89	4.63	
3/23/2016	4.8	5.4					
5/18/2016	4.74	5.38	4.62	4.67	5.09	4.58	
7/11/2016				4.75			
7/12/2016	4.9	5.65	5.03		5.27	4.7	
9/12/2016	4.72	5.14	4.6		4.94	4.6	5.55
9/13/2016				4.56			
11/17/2016				4.6			
11/18/2016	4.65				4.82	4.52	5.14
11/19/2016		5.05	4.46				
1/18/2017		5.11		4.68	5.02	4.63	5.27
1/19/2017	4.77		4.65				
2/10/2017							5.14
3/21/2017			4.47	4.39	4.82	4.45	4.96
3/22/2017	4.46	4.86					
4/14/2017							5.07
5/23/2017			4.69	4.61			5.01
5/24/2017	4.74	5.02			4.87	4.55	
6/26/2017							4.93
10/17/2017	4.72	5.01	4.62	4.51	5	4.61	4.93
11/30/2017	4.61						4.81
5/31/2018	4.93			4.75	5.42	4.84	5.11
6/1/2018		5	4.87				
11/7/2018	4.58	4.81	4.61				
11/8/2018				4.71	5.02	4.63	5.09
4/22/2019	4.67			4.49	4.94	4.64	4.97
4/23/2019		4.93	4.77				
9/26/2019		4.99	4.84	4.62	5.01	4.71	5.19
9/27/2019	4.61						
4/13/2020	4.7	4.96	4.71		4.99		5.06
4/14/2020				4.61		4.75	
10/21/2020				4.5			5.05
10/22/2020	4.66	5.09	4.78		5.01	4.7	
3/16/2021	4.72	5.06	4.65	4.62	5		5.35
10/5/2021	4.67	4.98	4.85	4.6	4.88	4.68	5.53
3/15/2022	4.73	5.07	4.87	4.58			5.82
3/16/2022					4.91	4.79	
10/4/2022	4.62	4.9	4.71				
10/5/2022				4.52	5	4.7	5.3
4/19/2023	4.61	4.8	4.7			4.65	
4/20/2023				4.5	4.79		6.06
5/24/2023							5.15
10/27/2023	4.7	4.8	4.59	4.47	4.82		
10/30/2023						4.64	5.01

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
11/16/2006	5						
2/5/2007	<5						
4/12/2007	<5						
10/17/2007	5.7						
4/17/2008	7						
10/24/2008	6.6						
4/21/2009	5.2						
10/26/2009	8.3						
4/12/2010	6.8						
10/30/2010	10.8						
5/25/2011	11.5						
5/25/2012	8.2						
5/28/2013	6.9						
5/31/2014	3.5						
5/29/2015	3.3						
3/22/2016			<0.756	<5	<5	3 (J)	
3/23/2016	1.8 (J)	<0.756					
5/18/2016	4.1	1.9	<0.756	<5	1.4	3.9 (J)	
7/11/2016				<5			
7/12/2016	3.8 (J)	2 (J)	<0.756		1.8 (J)	3.9 (J)	
9/12/2016	3.9 (J)	2 (J)	<0.756		2.2 (J)	4.5 (J)	<5
9/13/2016				1.7 (J)			
11/17/2016				<5			
11/18/2016	5.4				1.5 (J)	4.2 (J)	<5
11/19/2016		1.7 (J)	<0.756				
1/18/2017		<0.756		<5	1.5 (J)	3.8 (J)	<5
1/19/2017	<5		<0.756				
2/10/2017							<5
3/21/2017			<0.756	<5	<5	<5 (*)	<5
3/22/2017	<5	<0.756					
4/14/2017							1.5 (J)
5/23/2017			<0.756	<5			<5
5/24/2017	2 (J)	<0.756			1.7 (J)	3 (J)	
6/26/2017							1.5 (J)
10/17/2017	<5	<0.756	<0.756	<5	1.8 (J)	3.4 (J)	<5
5/31/2018	3 (J)			2.2 (J)	2.5 (J)	4.1 (J)	1.9 (J)
6/1/2018		1.8 (J)	1.5 (J)				
11/7/2018	3.1 (J)	1.8 (J)	1.5 (J)				
11/8/2018				1.7 (J)	2.2 (J)	3.3 (J)	1.5 (J)
4/22/2019	2.22			2.52	2.96	4.66	2.09
4/23/2019		1.99	1.43				
9/26/2019		1.95	1.2	2.28	2.96	4.23	2.1
9/27/2019	2.36						
4/13/2020	2.47	1.43	0.992 (J)		2.75		1.69
4/14/2020				2.27		3.96	
10/21/2020				2.15			1.31
10/22/2020	2.01	1.76	1.04		2.98	3.37	
3/16/2021	2.15	2.23	1.07	2	3.06	3.18	2.72
10/5/2021	2.57	2.46	3.38	2.22	2.85	3.83	1.91
3/15/2022	2.88	2.1	1.33	2.29			4.86
3/16/2022					3.38	7.04	
10/4/2022	2.04	<0.756	<0.756				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

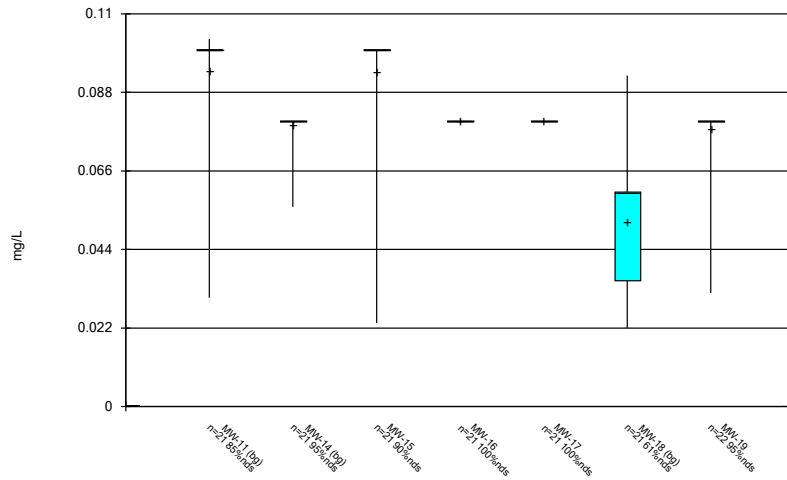|	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
10/5/2022				1.4	2.05	6.04	1.02
4/19/2023	2.85	1.93	2.42			7.48	
4/20/2023				2.59	3.44		3.73
5/24/2023							2.62
10/27/2023	2.72	1.53	1.7	3.08	3.82		
10/30/2023						7.39	2.73

Time Series

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			34 (B1)	42 (B1)	32 (B1)	28 (B1)	
3/23/2016	40	48 (B1)					
5/18/2016	52	26	24	<5	26	20	
7/11/2016				<5			
7/12/2016	42	24	24		22	24	
9/12/2016	42	32	4 (J)		32	48	12
9/13/2016				48			
11/17/2016				20			
11/18/2016	82				16	10	14
11/19/2016		76	44				
1/18/2017		48		18	32	30	20
1/19/2017	32		26				
2/10/2017							28
3/21/2017			20	8	16	6	20
3/22/2017	6	30					
4/14/2017							14
5/23/2017			6	<5			<5
5/24/2017	48	46			22	30	
6/26/2017							34
10/17/2017	34	8	58	58	26	32	42
12/15/2017			20 (RS)				
5/31/2018	32			24	<3.4	30	22
6/1/2018		44	26				
11/7/2018	52	26	8				
11/8/2018				4 (J)	36	22	8
4/22/2019	50			46	24	36	31
4/23/2019		48	34				
9/26/2019		39	32	27	25	30	29
9/27/2019	50						
4/13/2020	63	28	39		27		20
4/14/2020				36		29	
10/21/2020				33			19
10/22/2020	41	25	34		29	22	
3/16/2021	39	41	34	27	37	31	25
10/5/2021	43	29	25	29	34	29	35
3/15/2022	53	56	51	34			36
3/16/2022					55	25	
10/4/2022	53	52	42				
10/5/2022				42	35	34	31
4/19/2023	67	41	31			29	
4/20/2023				37	30		66
5/24/2023							32
10/27/2023	21	23	24	21	14		
10/30/2023						15	29

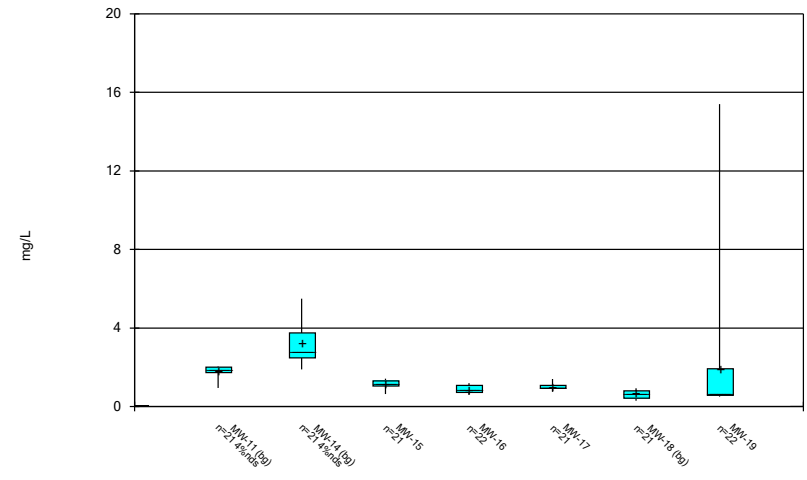ND substitution: RL or RL/2 if <15% NDs.

FIGURE B.
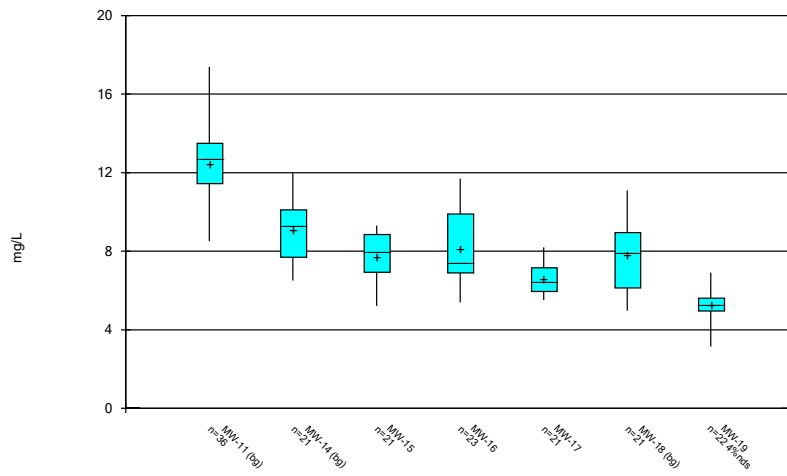
Box & Whiskers Plot

Constituent: Boron   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

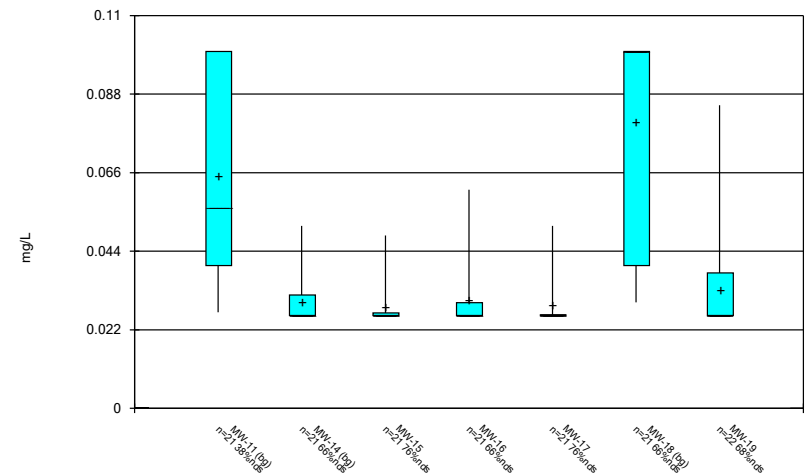### Box & Whiskers Plot

Constituent: Calcium   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

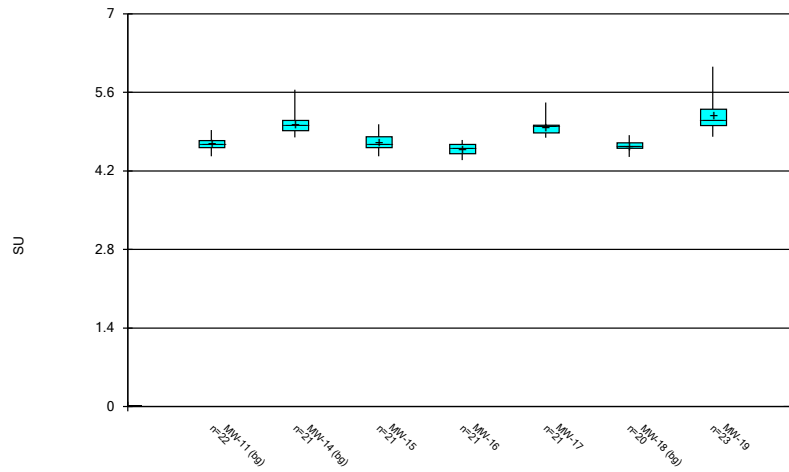### Box & Whiskers Plot

Constituent: Chloride   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR
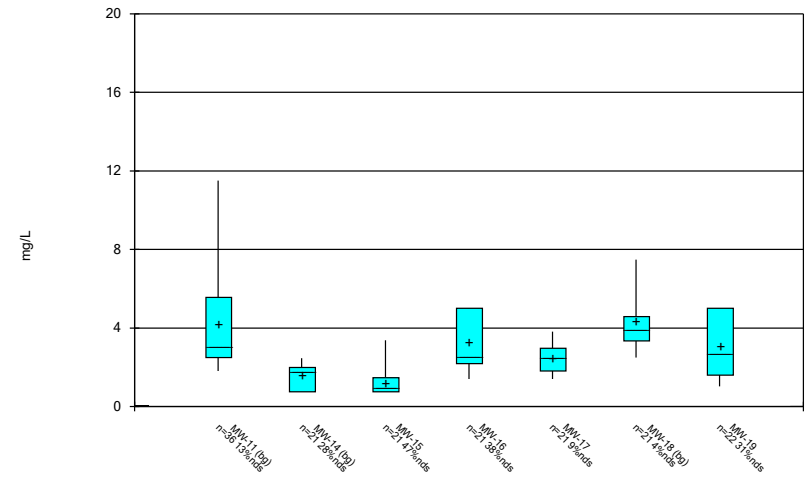
Box & Whiskers Plot

Constituent: Fluoride   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot

Constituent: pH   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot

Constituent: Sulfate   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR
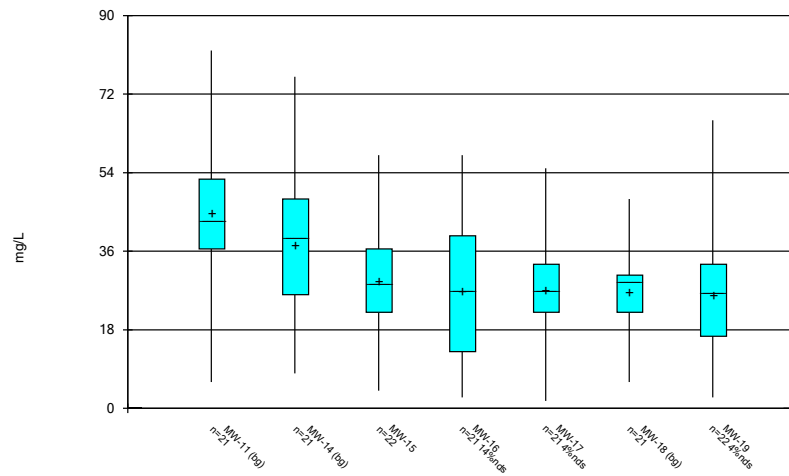
Box & Whiskers Plot

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:22 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

FIGURE C.

Outlier Summary

No values were flagged as outliers.

FIGURE D.

Intrawell Prediction Limits - Significant Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 12/1/2023, 1:27 PM

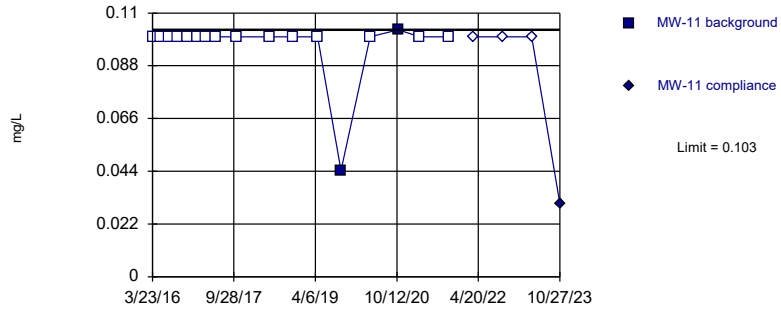| Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	0.8608	n/a	10/30/2023	1.19	Yes	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	10.07	n/a	10/27/2023	10.4	Yes	19	7.533	1.263	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.802	n/a	10/30/2023	5.88	Yes	17	706.2	208.1	5.882	None	x^4	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-17	3.508	n/a	10/27/2023	3.82	Yes	17	2.304	0.5866	11.76	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	4.898	n/a	10/30/2023	7.39	Yes	17	3.696	0.585	5.882	None	No	0.00188	Param Intra 1 of 2

Intrawell Prediction Limits - All Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 12/1/2023, 1:27 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.103	n/a	10/27/2023	0.0305J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.08	n/a	10/27/2023	0.08ND	No	17	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.1	n/a	10/27/2023	0.0234J	No	17	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.0601	n/a	10/30/2023	0.0304J	No	17	n/a	n/a	70.59	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-19	0.08	n/a	10/30/2023	0.08ND	No	17	n/a	n/a	100	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.125	n/a	10/27/2023	1.42	No	17	24.35	9.256	5.882	None	x^5	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	5.702	n/a	10/27/2023	2.28	No	17	3.406	1.117	5.882	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.597	n/a	10/27/2023	1.13	No	17	1.187	0.2	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.146	n/a	10/27/2023	1.05	No	18	0.8117	0.1645	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.27	n/a	10/27/2023	0.916	No	17	0.01917	0.1071	0	None	ln(x)	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-18	0.9976	n/a	10/30/2023	0.427J	No	17	0.6866	0.1514	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	**MW-19**	**0.8608**	**n/a**	**10/30/2023**	**1.19**	**Yes**	**12**	**0.7847**	**0.06412**	**0**	**None**	**sqrt(x)**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	MW-11	16.08	n/a	10/27/2023	12.1	No	32	12.44	1.948	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.3	n/a	10/27/2023	9.77	No	17	8.927	1.643	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.02	n/a	10/27/2023	8.9	No	17	7.922	1.023	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	**MW-16**	**10.07**	**n/a**	**10/27/2023**	**10.4**	**Yes**	**19**	**7.533**	**1.263**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	MW-17	8.234	n/a	10/27/2023	6.16	No	17	6.738	0.7281	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.16	n/a	10/30/2023	11.1	No	17	8	1.54	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	**MW-19**	**5.802**	**n/a**	**10/30/2023**	**5.88**	**Yes**	**17**	**706.2**	**208.1**	**5.882**	**None**	**x^4**	**0.00188**	**Param Intra 1 of 2**
Fluoride (mg/L)	MW-11	0.1	n/a	10/27/2023	0.058J	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.0411	n/a	10/27/2023	0.0511J	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.0484	n/a	10/27/2023	0.0459J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.0496	n/a	10/27/2023	0.0612J	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.0511	n/a	10/27/2023	0.0494J	No	17	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	10/30/2023	0.1ND	No	17	n/a	n/a	64.71	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.0382	n/a	10/30/2023	0.0511J	No	17	n/a	n/a	82.35	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.927	4.479	10/27/2023	4.7	No	18	4.703	0.1101	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.519	4.651	10/27/2023	4.8	No	17	5.085	0.2112	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	5.006	4.405	10/27/2023	4.59	No	17	4.705	0.1462	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.808	4.41	10/27/2023	4.47	No	17	4.609	0.09695	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.314	4.695	10/27/2023	4.82	No	17	1.71	0.0172	0	None	x^(1/3)	0.0009398	Param Intra 1 of 2
pH (SU)	MW-18	4.833	4.445	10/30/2023	4.64	No	16	4.639	0.09337	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	5.525	4.715	10/30/2023	5.01	No	18	5.12	0.1992	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-11	10.47	n/a	10/27/2023	2.72	No	32	1.364	0.5266	15.63	Kaplan-Meier	ln(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-14	2.474	n/a	10/27/2023	1.53	No	17	2.586	1.72	29.41	Kaplan-Meier	x^2	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-15	3.38	n/a	10/27/2023	1.7	No	17	n/a	n/a	52.94	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	10/27/2023	3.08	No	17	n/a	n/a	47.06	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Sulfate (mg/L)	**MW-17**	**3.508**	**n/a**	**10/27/2023**	**3.82**	**Yes**	**17**	**2.304**	**0.5866**	**11.76**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Sulfate (mg/L)	**MW-18**	**4.898**	**n/a**	**10/30/2023**	**7.39**	**Yes**	**17**	**3.696**	**0.585**	**5.882**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Sulfate (mg/L)	MW-19	5	n/a	10/30/2023	2.73	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	76.12	n/a	10/27/2023	21	No	17	44	15.64	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	67.34	n/a	10/27/2023	23	No	17	36.35	15.09	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	54.62	n/a	10/27/2023	24	No	18	27.33	13.43	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	59.48	n/a	10/27/2023	21	No	17	24.46	17.05	17.65	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	43.75	n/a	10/27/2023	14	No	17	25.75	8.766	5.882	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	46.41	n/a	10/30/2023	15	No	17	26.88	9.506	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	43.34	n/a	10/30/2023	29	No	17	22.09	10.35	5.882	None	No	0.00188	Param Intra 1 of 2

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

mg/L

- ■ MW-11 background
- ◆ MW-11 compliance

Limit = 0.103

0.11 · 0.088 · 0.066 · 0.044 · 0.022 · 0

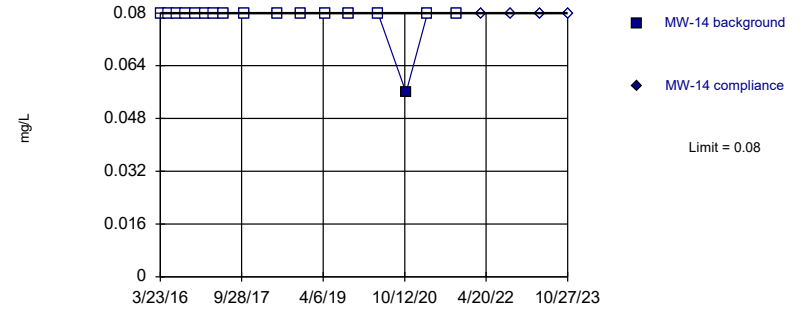3/23/16 9/28/17 4/6/19 10/12/20 4/20/22 10/27/23

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

mg/L

- ■ MW-14 background
- ◆ MW-14 compliance

Limit = 0.08

0.08 · 0.064 · 0.048 · 0.032 · 0.016 · 0

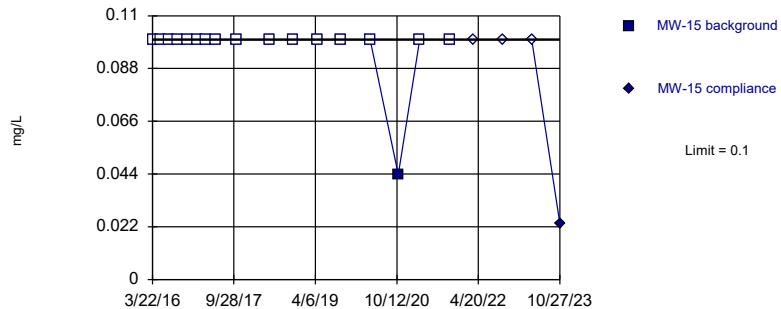3/23/16 9/28/17 4/6/19 10/12/20 4/20/22 10/27/23

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

mg/L

- ■ MW-15 background
- ◆ MW-15 compliance

Limit = 0.1

0.11 · 0.088 · 0.066 · 0.044 · 0.022 · 0

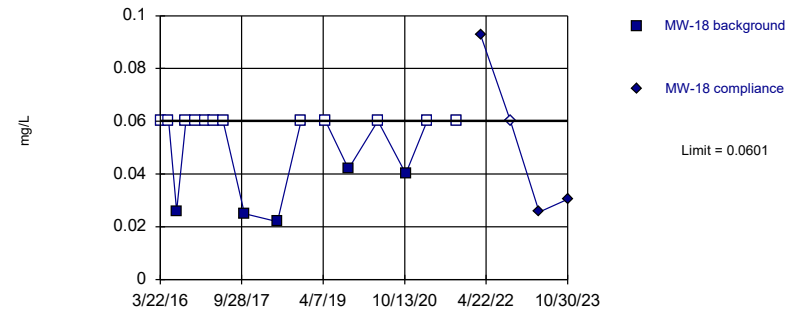3/22/16 9/28/17 4/6/19 10/12/20 4/20/22 10/27/23

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

mg/L

- ■ MW-18 background
- ◆ MW-18 compliance

Limit = 0.0601

0.1 · 0.08 · 0.06 · 0.04 · 0.02 · 0
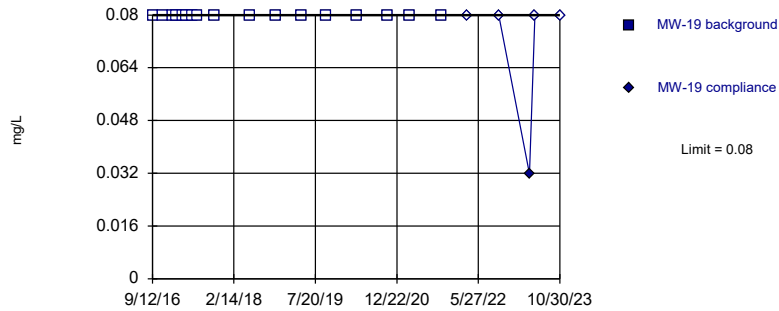
3/22/16 9/28/17 4/7/19 10/13/20 4/22/22 10/30/23

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 70.59% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Top Left Chart

Sanitas™ v.10.0.13b Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric

mg/L

0.08
0.064
0.048
0.032
0.016
0

9/12/16   2/14/18   7/20/19   12/22/20   5/27/22   10/30/23

- MW-19 background
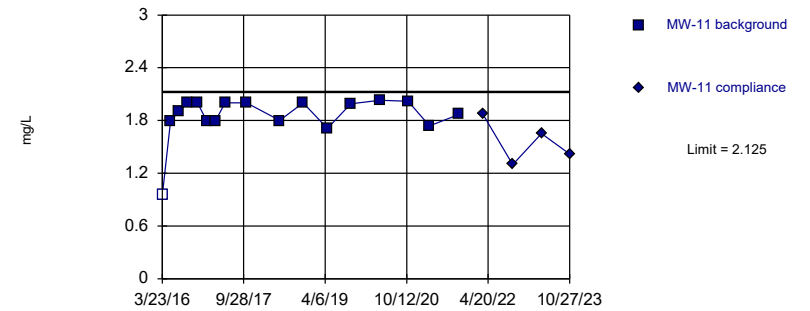- MW-19 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 17) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Boron   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Top Right Chart

Sanitas™ v.10.0.13b Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric

mg/L

3
2.4
1.8
1.2
0.6
0

3/23/16   9/28/17   4/6/19   10/12/20   4/20/22   10/27/23
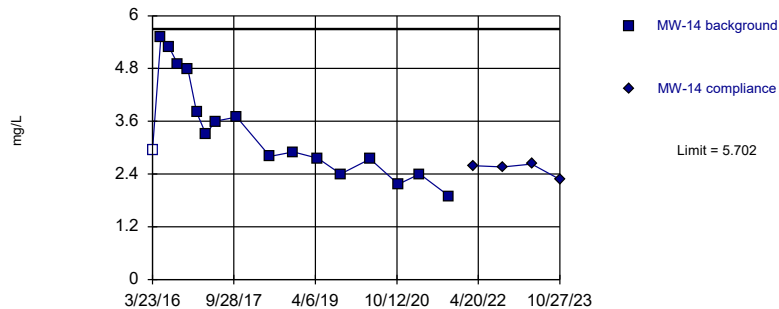
- MW-11 background
- MW-11 compliance

Limit = 2.125

Background Data Summary (based on x^5 transformation): Mean=24.35, Std. Dev.=9.256, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8606, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Bottom Left Chart

Sanitas™ v.10.0.13b Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric

mg/L

6
4.8
3.6
2.4
1.2
0

3/23/16   9/28/17   4/6/19   10/12/20   4/20/22   10/27/23

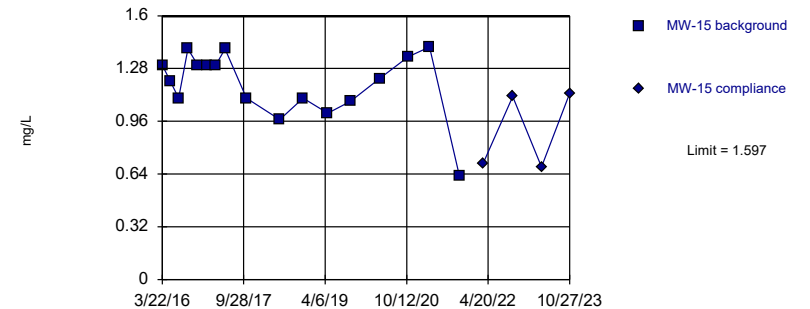- MW-14 background
- MW-14 compliance

Limit = 5.702

Background Data Summary: Mean=3.406, Std. Dev.=1.117, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9118, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Bottom Right Chart

Sanitas™ v.10.0.13b Software licensed to . UG

Within Limit

Prediction Limit

Intrawell Parametric

mg/L

1.6
1.28
0.96
0.64
0.32
0

3/22/16   9/28/17   4/6/19   10/12/20   4/20/22   10/27/23

- MW-15 background
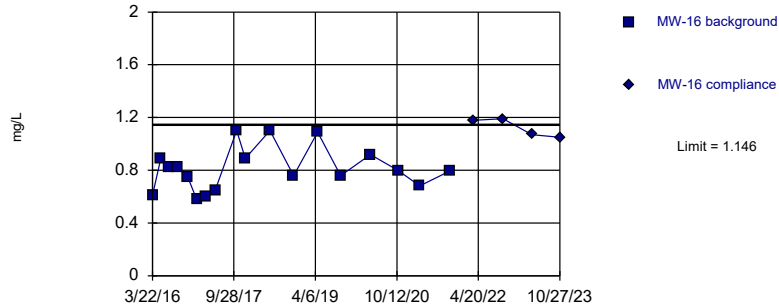- MW-15 compliance

Limit = 1.597

Background Data Summary: Mean=1.187, Std. Dev.=0.2, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8807, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-16 background
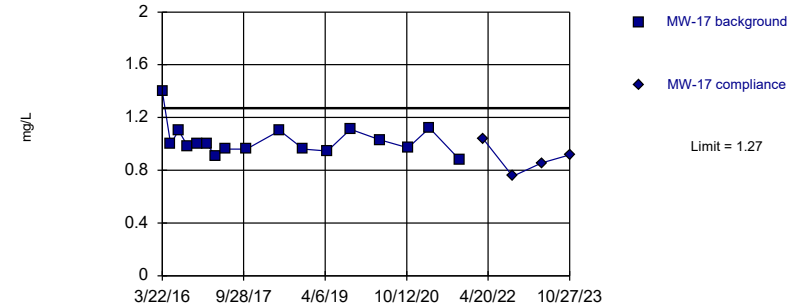
◆ MW-16 compliance

Limit = 1.146

Background Data Summary: Mean=0.8117, Std. Dev.=0.1645, n=18.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9244, critical = 0.858.   Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-17 background
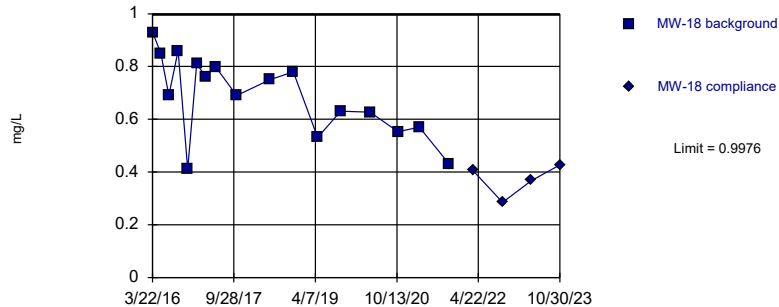
◆ MW-17 compliance

Limit = 1.27

Background Data Summary (based on natural log transformation): Mean=0.01917, Std. Dev.=0.1071, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8548, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 12/1/2023 1:24 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-18 background
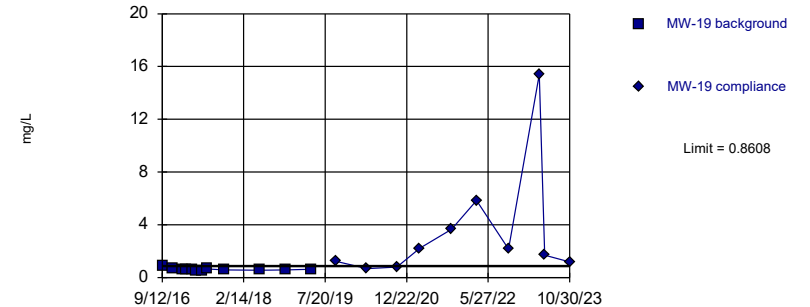
◆ MW-18 compliance

Limit = 0.9976

Background Data Summary: Mean=0.6866, Std. Dev.=0.1514, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.964, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 0.8608

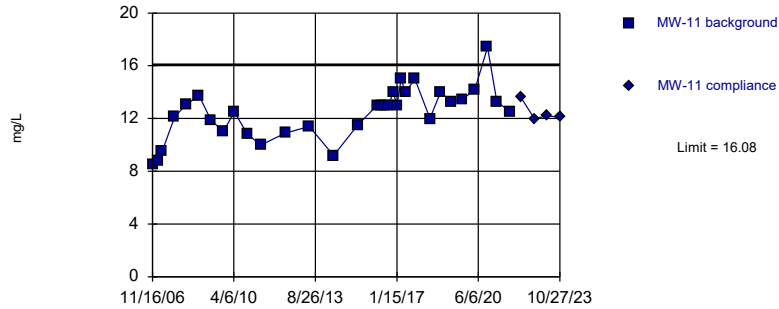Background Data Summary (based on square root transformation): Mean=0.7847, Std. Dev.=0.06412, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8069, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-11 background
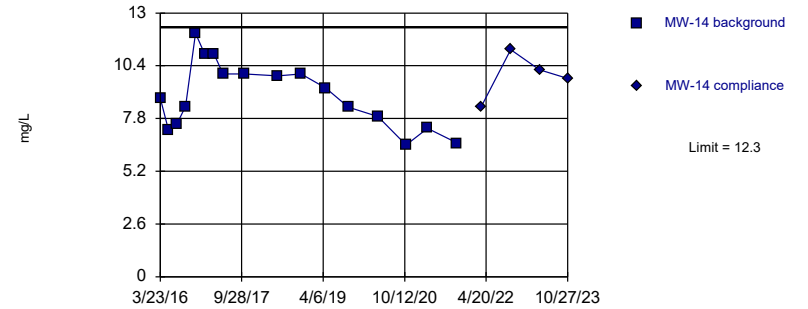
◆ MW-11 compliance

Limit = 16.08

Background Data Summary: Mean=12.44, Std. Dev.=1.948, n=32.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9664, critical = 0.904.   Kappa = 1.87 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 12.3

Background Data Summary: Mean=8.927, Std. Dev.=1.643, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9575, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-15 background

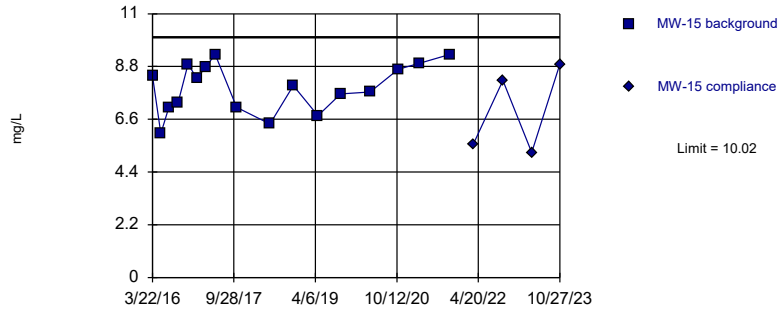◆ MW-15 compliance

Limit = 10.02

Background Data Summary: Mean=7.922, Std. Dev.=1.023, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 10.07

Background Data Summary: Mean=7.533, Std. Dev.=1.263, n=19.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9348, critical = 0.863.   Kappa = 2.01 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

MW-17 background

MW-17 compliance

Limit = 8.234

Background Data Summary: Mean=6.738, Std. Dev.=0.7281, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9598, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

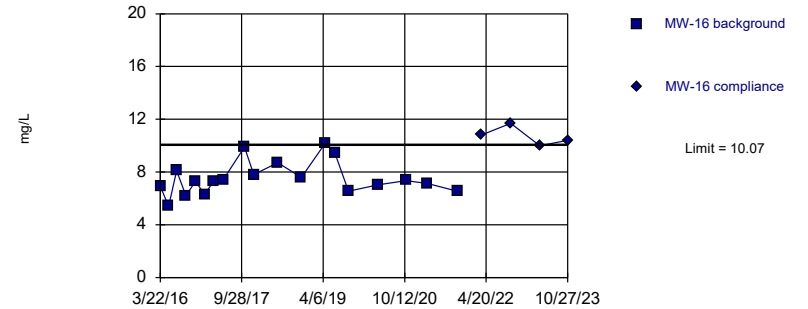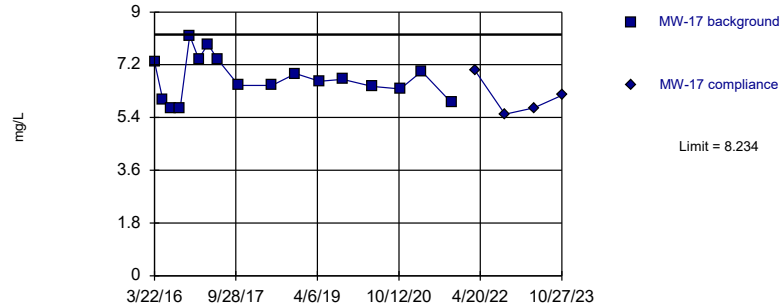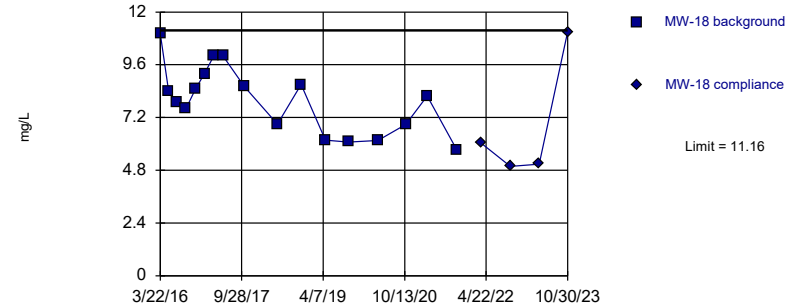## Prediction Limit
Intrawell Parametric

MW-18 background

MW-18 compliance

Limit = 11.16

Background Data Summary: Mean=8, Std. Dev.=1.54, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.958, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

MW-19 background

MW-19 compliance

Limit = 5.802

Background Data Summary (based on x^4 transformation): Mean=706.2, Std. Dev.=208.1, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

MW-11 background

MW-11 compliance

Limit = 0.1

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 17 background values. 41.18% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

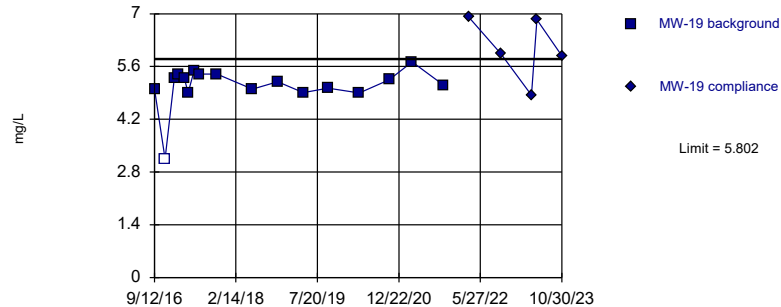Intrawell Non-parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 0.0411

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 0.0484

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
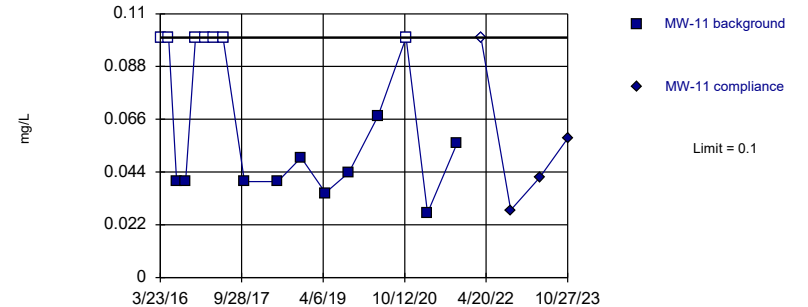

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 0.0496

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell
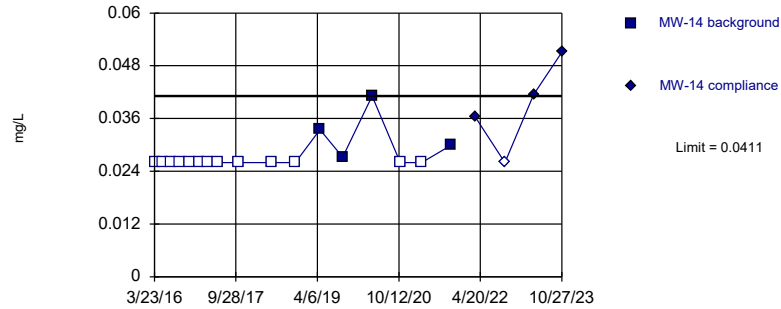
Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-17 background
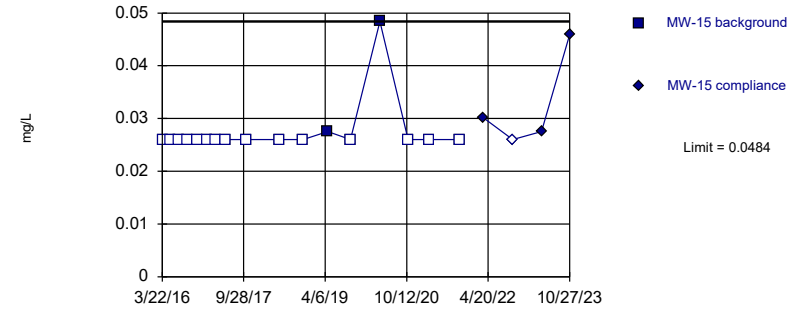
◆ MW-17 compliance

Limit = 0.0511

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

- MW-18 background
- MW-18 compliance

Limit = 0.1

mg/L axis: 0.11, 0.088, 0.066, 0.044, 0.022, 0

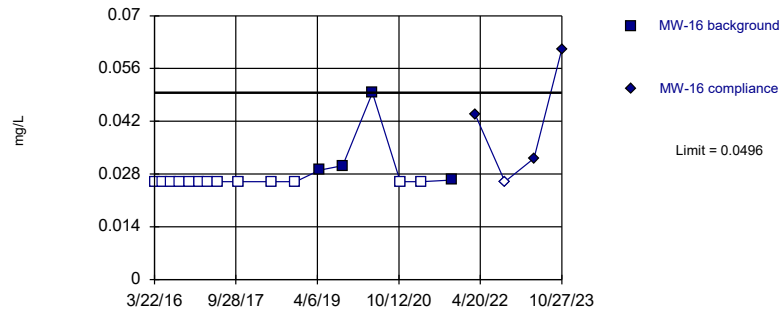x-axis: 3/22/16, 9/28/17, 4/7/19, 10/13/20, 4/22/22, 10/30/23

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

- MW-19 background
- MW-19 compliance

Limit = 0.0382

mg/L axis: 0.09, 0.072, 0.054, 0.036, 0.018, 0

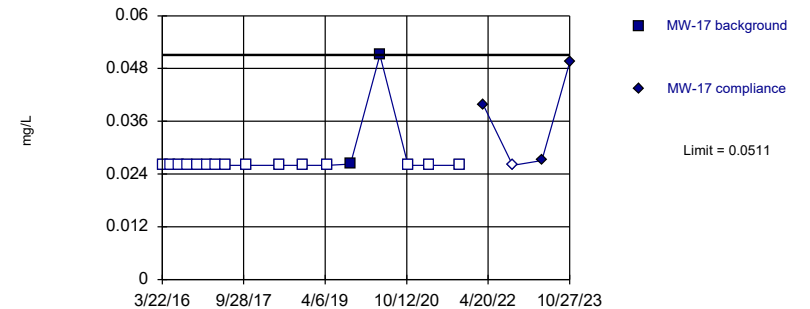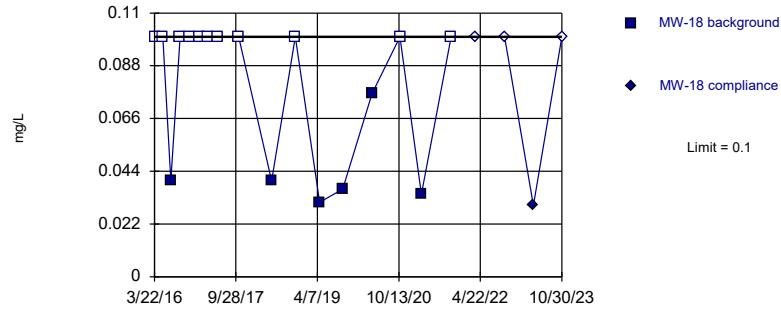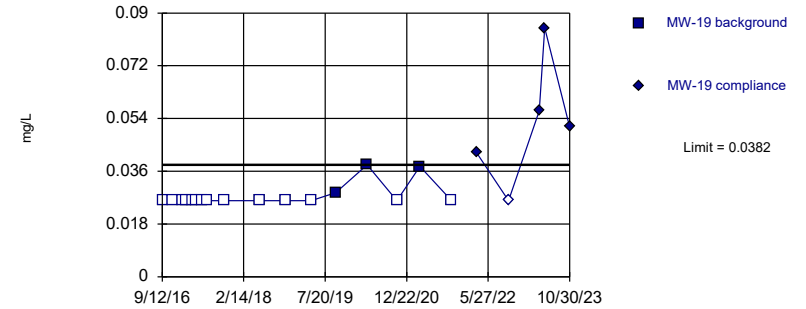x-axis: 9/12/16, 2/14/18, 7/20/19, 12/22/20, 5/27/22, 10/30/23

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- MW-11 background
- MW-11 compliance

Limit = 4.927

Limit = 4.479

SU axis: 5, 4, 3, 2, 1, 0

x-axis: 3/23/16, 9/28/17, 4/6/19, 10/12/20, 4/20/22, 10/27/23

Background Data Summary: Mean=4.703, Std. Dev.=0.1101, n=18.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9628, critical = 0.858.   Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- MW-14 background
- MW-14 compliance

Limit = 5.519

Limit = 4.651

SU axis: 5.7, 4.56, 3.42, 2.28, 1.14, 0

x-axis: 3/23/16, 9/28/17, 4/6/19, 10/12/20, 4/20/22, 10/27/23

Background Data Summary: Mean=5.085, Std. Dev.=0.2112, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8539, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- MW-15 background
- MW-15 compliance

Limit = 5.006

Limit = 4.405

Background Data Summary: Mean=4.705, Std. Dev.=0.1462, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9668, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

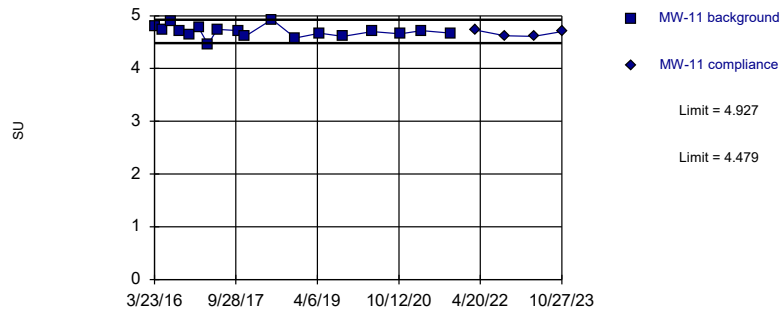Within Limits

Prediction Limit
Intrawell Parametric

- MW-16 background
- MW-16 compliance

Limit = 4.808

Limit = 4.41

Background Data Summary: Mean=4.609, Std. Dev.=0.09695, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9549, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- MW-17 background
- MW-17 compliance

Limit = 5.314

Limit = 4.695

Background Data Summary (based on cube root transformation): Mean=1.71, Std. Dev.=0.0172, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8526, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

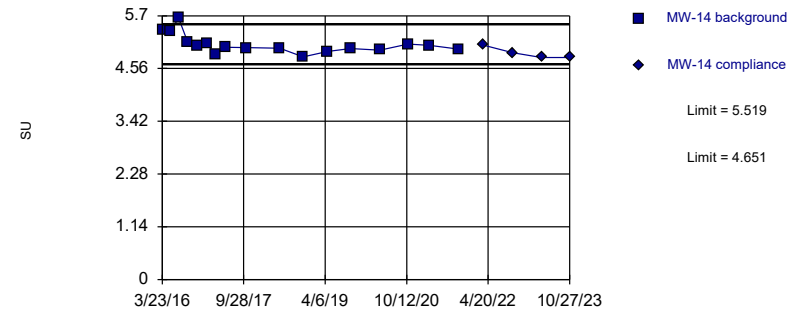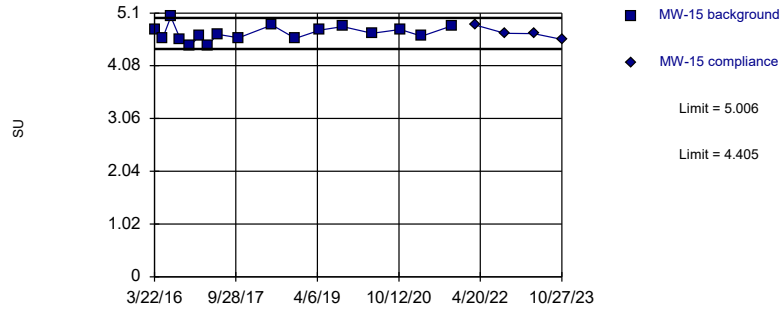Within Limits

Prediction Limit
Intrawell Parametric

- MW-18 background
- MW-18 compliance

Limit = 4.833

Limit = 4.445

Background Data Summary: Mean=4.639, Std. Dev.=0.09337, n=16.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9831, critical = 0.844.   Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

SU

■ MW-19 background

◆ MW-19 compliance

Limit = 5.525

Limit = 4.715

9/12/16   2/14/18   7/20/19   12/22/20   5/27/22   10/30/23

Background Data Summary: Mean=5.12, Std. Dev.=0.1992, n=18.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9196, critical = 0.858.   Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

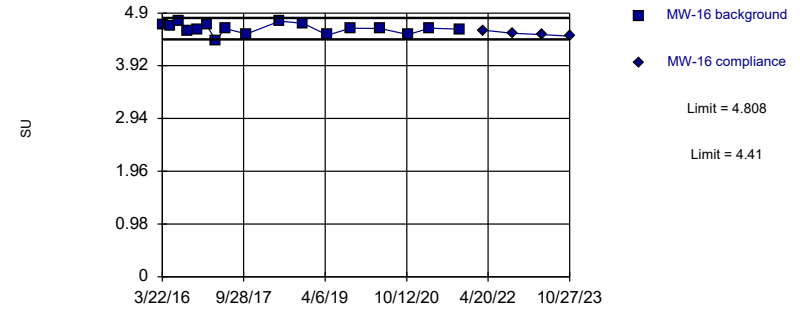Within Limit

Prediction Limit
Intrawell Parametric

mg/L

■ MW-11 background

◆ MW-11 compliance

Limit = 10.47

11/16/06   4/6/10   8/26/13   1/15/17   6/6/20   10/27/23

Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=1.364, Std. Dev.=0.5266, n=32, 15.63% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9191, critical = 0.904.   Kappa = 1.87 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

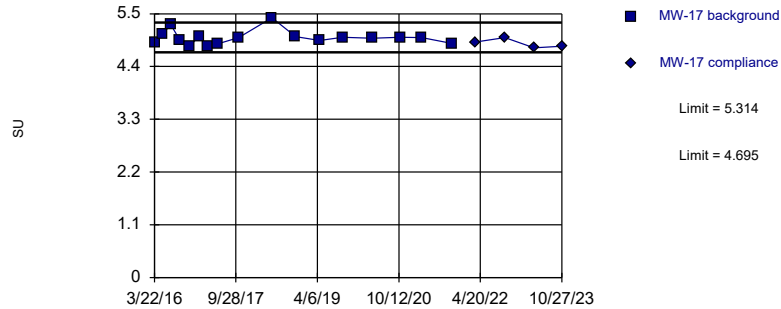Within Limit

Prediction Limit
Intrawell Parametric

mg/L

■ MW-14 background

◆ MW-14 compliance

Limit = 2.474

3/23/16   9/28/17   4/6/19   10/12/20   4/20/22   10/27/23

Background Data Summary (based on square transformation) (after Kaplan-Meier Adjustment): Mean=2.586, Std. Dev.=1.72, n=17, 29.41% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8933, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
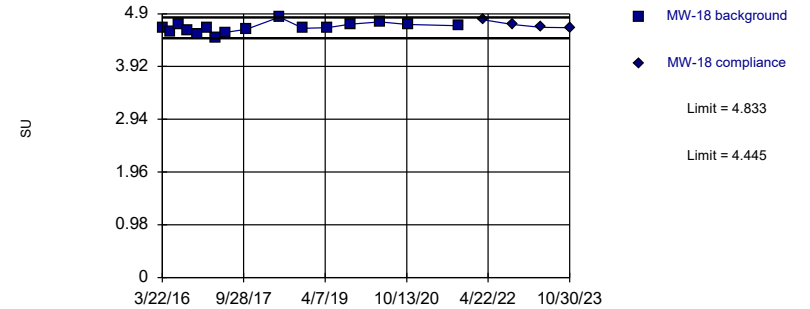### Intrawell Non-parametric

mg/L

■ MW-15 background

◆ MW-15 compliance

Limit = 3.38

3/22/16   9/28/17   4/6/19   10/12/20   4/20/22   10/27/23

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ MW-16 background
- ◆ MW-16 compliance

Limit = 5

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 17 background values. 47.06% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit

Intrawell Parametric

- ■ MW-17 background
- ◆ MW-17 compliance

Limit = 3.508

Background Data Summary: Mean=2.304, Std. Dev.=0.5866, n=17, 11.76% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9018, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit

Intrawell Parametric

- ■ MW-18 background
- ◆ MW-18 compliance

Limit = 4.898

Background Data Summary: Mean=3.696, Std. Dev.=0.585, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9714, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ MW-19 background
- ◆ MW-19 compliance

Limit = 5

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 17 background values. 41.18% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

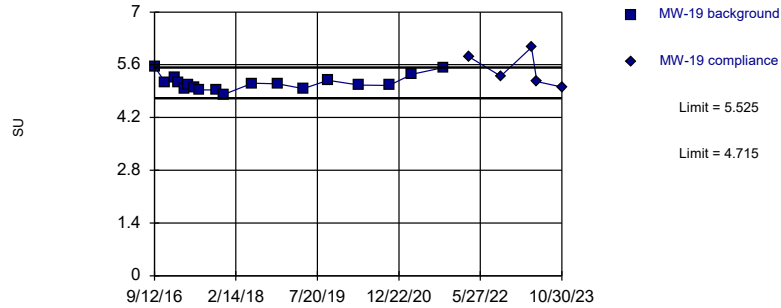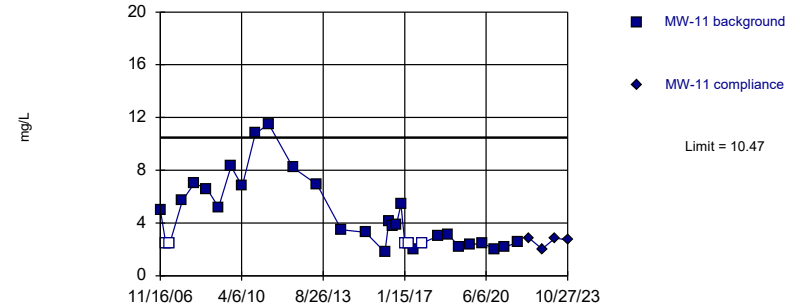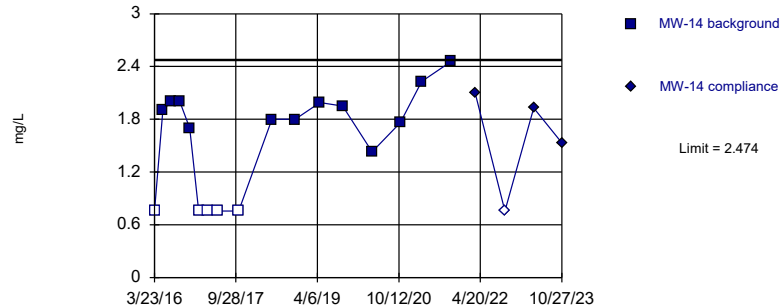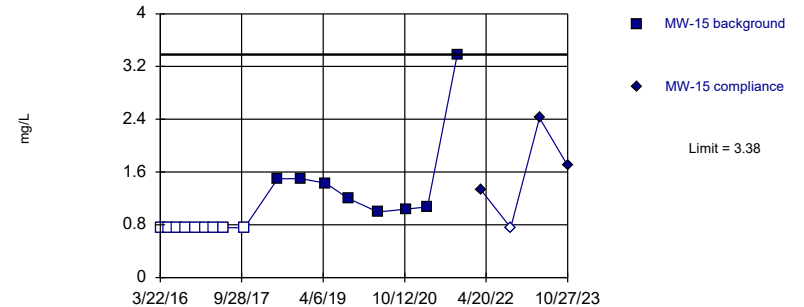## Prediction Limit

Intrawell Parametric

- ■ MW-11 background
- ◆ MW-11 compliance

Limit = 76.12

Background Data Summary: Mean=44, Std. Dev.=15.64, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9169, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

- ■ MW-14 background
- ◆ MW-14 compliance

Limit = 67.34

Background Data Summary: Mean=36.35, Std. Dev.=15.09, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9195, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
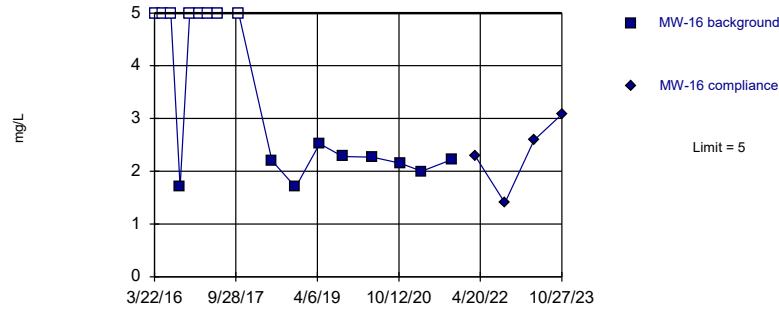
Within Limit

Prediction Limit

Intrawell Parametric

- ■ MW-15 background
- ◆ MW-15 compliance

Limit = 54.62

Background Data Summary: Mean=27.33, Std. Dev.=13.43, n=18.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9546, critical = 0.858.   Kappa = 2.032 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
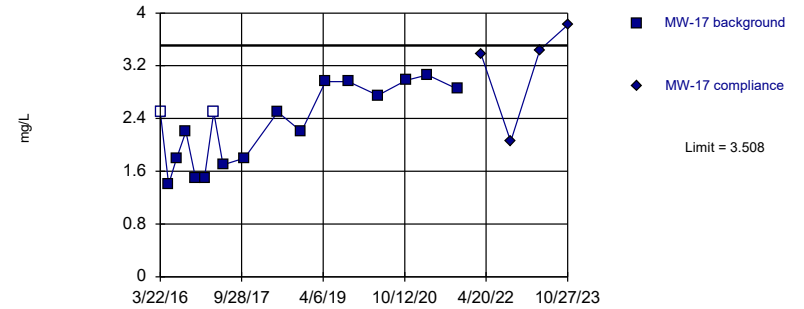
Within Limit

Prediction Limit

Intrawell Parametric

- ■ MW-16 background
- ◆ MW-16 compliance

Limit = 59.48

Background Data Summary (after Kaplan-Meier Adjustment): Mean=24.46, Std. Dev.=17.05, n=17, 17.65% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9408, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

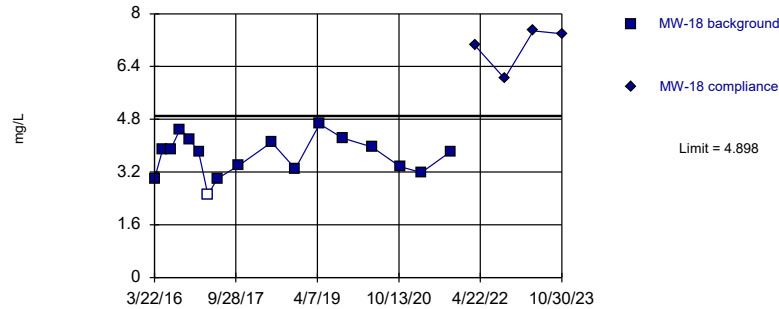- ■ MW-17 background
- ◆ MW-17 compliance

Limit = 43.75

Background Data Summary: Mean=25.75, Std. Dev.=8.766, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9063, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

- ■ MW-18 background
- ◆ MW-18 compliance

Limit = 46.41

Background Data Summary: Mean=26.88, Std. Dev.=9.506, n=17.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9103, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

- ■ MW-19 background
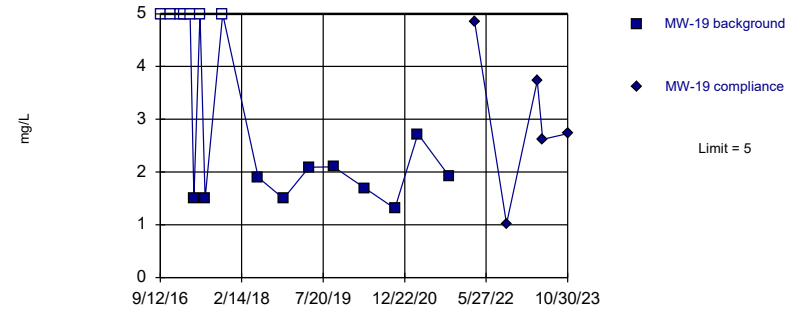- ◆ MW-19 compliance

Limit = 43.34

Background Data Summary: Mean=22.09, Std. Dev.=10.35, n=17, 5.882% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9883, critical = 0.851.   Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/1/2023 1:25 PM   View: Intrawell

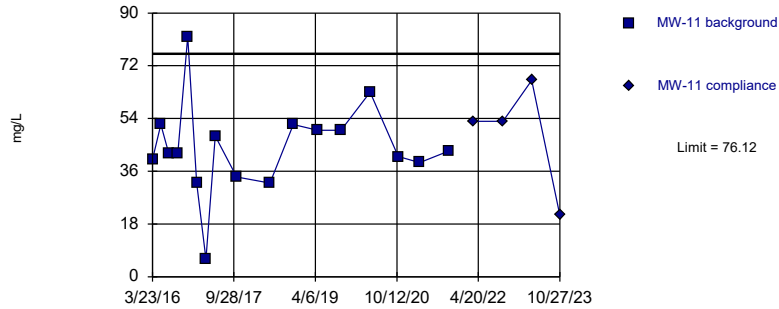Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/18/2016	<0.1	
1/19/2017	<0.1	
3/22/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	<0.1	
11/7/2018	<0.1	
4/22/2019	<0.1	
9/27/2019	0.0443 (J)	
4/13/2020	<0.1	
10/22/2020	0.103	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/15/2022		<0.1
10/4/2022		<0.1
4/19/2023		<0.1
10/27/2023		0.0305 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	<0.08	
9/12/2016	<0.08	
11/19/2016	<0.08	
1/18/2017	<0.08	
3/22/2017	<0.08	
5/24/2017	<0.08	
10/17/2017	<0.08	
6/1/2018	<0.08	
11/7/2018	<0.08	
4/23/2019	<0.08	
9/26/2019	<0.08	
4/13/2020	<0.08	
10/22/2020	0.0559 (J)	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022		<0.08
10/4/2022		<0.08
4/19/2023		<0.08
10/27/2023		<0.08

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/19/2016	<0.1	
1/19/2017	<0.1	
3/21/2017	<0.1	
5/23/2017	<0.1	
10/17/2017	<0.1	
6/1/2018	<0.1	
11/7/2018	<0.1	
4/23/2019	<0.1	
9/26/2019	<0.1	
4/13/2020	<0.1	
10/22/2020	0.0437 (J)	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/15/2022		<0.1
10/4/2022		<0.1
4/19/2023		<0.1
10/27/2023		0.0234 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.0601 (B1)	
5/18/2016	<0.0601	
7/12/2016	0.026 (J)	
9/12/2016	<0.0601	
11/18/2016	<0.0601	
1/18/2017	<0.0601	
3/21/2017	<0.0601	
5/24/2017	<0.0601	
10/17/2017	0.025 (J)	
5/31/2018	0.022 (J)	
11/8/2018	<0.0601	
4/22/2019	<0.0601	
9/26/2019	0.042 (J)	
4/14/2020	<0.0601	
10/22/2020	0.0401 (J)	
3/16/2021	<0.0601	
10/5/2021	<0.0601	
3/16/2022		0.0927
10/5/2022		<0.0601
4/19/2023		0.0256 (J)
10/30/2023		0.0304 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.08	
11/18/2016	<0.08	
1/18/2017	<0.08	
2/10/2017	<0.08	
3/21/2017	<0.08	
4/14/2017	<0.08	
5/23/2017	<0.08	
6/26/2017	<0.08	
10/17/2017	<0.08	
5/31/2018	<0.08	
11/8/2018	<0.08	
4/22/2019	<0.08	
9/26/2019	<0.08	
4/13/2020	<0.08	
10/21/2020	<0.08	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022		<0.08
10/5/2022		<0.08
4/20/2023		0.0318 (J)
5/24/2023		<0.08
10/30/2023		<0.08

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<1.9 (*)	
5/18/2016	1.8	
7/12/2016	1.9	
9/12/2016	2	
11/18/2016	2	
1/19/2017	1.8	
3/22/2017	1.8	
5/24/2017	2	
10/17/2017	2	
5/31/2018	1.8	
11/7/2018	2	
4/22/2019	1.71	
9/27/2019	1.99	
4/13/2020	2.03	
10/22/2020	2.02	
3/16/2021	1.74	
10/5/2021	1.87	
3/15/2022		1.87
10/4/2022		1.3
4/19/2023		1.65
10/27/2023		1.42

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<5.9 (*)	
5/18/2016	5.5	
7/12/2016	5.3	
9/12/2016	4.9	
11/19/2016	4.8	
1/18/2017	3.8	
3/22/2017	3.3	
5/24/2017	3.6	
10/17/2017	3.7	
6/1/2018	2.8	
11/7/2018	2.9	
4/23/2019	2.76	
9/26/2019	2.4	
4/13/2020	2.74	
10/22/2020	2.17	
3/16/2021	2.4	
10/5/2021	1.89	
3/15/2022		2.59
10/4/2022		2.56
4/19/2023		2.63
10/27/2023		2.28

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	1.3 (B1)	
5/18/2016	1.2	
7/12/2016	1.1	
9/12/2016	1.4	
11/19/2016	1.3	
1/19/2017	1.3	
3/21/2017	1.3	
5/23/2017	1.4	
10/17/2017	1.1	
6/1/2018	0.97	
11/7/2018	1.1	
4/23/2019	1.01	
9/26/2019	1.08	
4/13/2020	1.22	
10/22/2020	1.35	
3/16/2021	1.41	
10/5/2021	0.632	
3/15/2022		0.703
10/4/2022		1.11
4/19/2023		0.682
10/27/2023		1.13

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	0.61 (B1)	
5/18/2016	0.89	
7/11/2016	0.82	
9/13/2016	0.82	
11/17/2016	0.75	
1/18/2017	0.58	
3/21/2017	0.6	
5/23/2017	0.65	
10/17/2017	1.1	
12/15/2017	0.89 (RS)	
5/31/2018	1.1	
11/8/2018	0.76	
4/22/2019	1.09	
9/26/2019	0.758	
4/14/2020	0.92	
10/21/2020	0.798	
3/16/2021	0.681	
10/5/2021	0.793	
3/15/2022		1.18
10/5/2022		1.19
4/20/2023		1.07
10/27/2023		1.05

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-17	MW-17
3/22/2016	1.4 (B1)	
5/18/2016	1	
7/12/2016	1.1	
9/12/2016	0.98	
11/18/2016	1	
1/18/2017	1	
3/21/2017	0.91	
5/24/2017	0.96	
10/17/2017	0.96	
5/31/2018	1.1	
11/8/2018	0.96	
4/22/2019	0.946	
9/26/2019	1.11	
4/13/2020	1.03	
10/22/2020	0.969	
3/16/2021	1.12	
10/5/2021	0.883	
3/16/2022		1.04
10/5/2022		0.755
4/20/2023		0.855
10/27/2023		0.916

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	0.93 (B1)	
5/18/2016	0.85	
7/12/2016	0.69	
9/12/2016	0.86	
11/18/2016	0.41	
1/18/2017	0.81	
3/21/2017	0.76	
5/24/2017	0.8	
10/17/2017	0.69	
5/31/2018	0.75	
11/8/2018	0.78	
4/22/2019	0.531	
9/26/2019	0.631	
4/14/2020	0.627	
10/22/2020	0.553	
3/16/2021	0.57	
10/5/2021	0.43 (J)	
3/16/2022		0.406 (J)
10/5/2022		0.285 (J)
4/19/2023		0.368 (J)
10/30/2023		0.427 (J)

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	0.92	
11/18/2016	0.68	
1/18/2017	0.64	
2/10/2017	0.58	
3/21/2017	0.56	
4/14/2017	0.51	
5/23/2017	0.54	
6/26/2017	0.66	
10/17/2017	0.58	
5/31/2018	0.56	
11/8/2018	0.57	
4/22/2019	0.634	
9/26/2019		1.24
4/13/2020		0.687
10/21/2020		0.806
3/16/2021		2.23
10/5/2021		3.67
3/15/2022		5.84
10/5/2022		2.16
4/20/2023		15.4
5/24/2023		1.7
10/30/2023		1.19

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
11/16/2006	8.5	
2/5/2007	8.8	
4/12/2007	9.5	
10/17/2007	12.1	
4/17/2008	13.1	
10/24/2008	13.7	
4/21/2009	11.9	
10/26/2009	11	
4/12/2010	12.5	
10/30/2010	10.8	
5/25/2011	10	
5/25/2012	10.9	
5/28/2013	11.4	
5/31/2014	9.2	
5/29/2015	11.5	
3/23/2016	13	
5/18/2016	13	
7/12/2016	13	
9/12/2016	13	
11/18/2016	14	
1/19/2017	13	
3/22/2017	15	
5/24/2017	14	
10/17/2017	15	
5/31/2018	12	
11/7/2018	14	
4/22/2019	13.3	
9/27/2019	13.4	
4/13/2020	14.2	
10/22/2020	17.4	
3/16/2021	13.3	
10/5/2021	12.5	
3/15/2022		13.6
10/4/2022		12
4/19/2023		12.2
10/27/2023		12.1

Prediction Limit

	MW-14	MW-14
3/23/2016	8.8 (B1)	
5/18/2016	7.2	
7/12/2016	7.5	
9/12/2016	8.4	
11/19/2016	12	
1/18/2017	11	
3/22/2017	11	
5/24/2017	10	
10/17/2017	10	
6/1/2018	9.9	
11/7/2018	10	
4/23/2019	9.3	
9/26/2019	8.35	
4/13/2020	7.9	
10/22/2020	6.5	
3/16/2021	7.32	
10/5/2021	6.59	
3/15/2022		8.36
10/4/2022		11.2
4/19/2023		10.2
10/27/2023		9.77

Prediction Limit

	MW-15	MW-15
3/22/2016	8.4 (B1)	
5/18/2016	6	
7/12/2016	7.1	
9/12/2016	7.3	
11/19/2016	8.9	
1/19/2017	8.3	
3/21/2017	8.8	
5/23/2017	9.3	
10/17/2017	7.1	
6/1/2018	6.4	
11/7/2018	8	
4/23/2019	6.75	
9/26/2019	7.66	
4/13/2020	7.74	
10/22/2020	8.69	
3/16/2021	8.94	
10/5/2021	9.3	
3/15/2022		5.55
10/4/2022		8.22
4/19/2023		5.21
10/27/2023		8.9

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	6.9 (B1)	
5/18/2016	5.4	
7/11/2016	8.1	
9/13/2016	6.2	
11/17/2016	7.3	
1/18/2017	6.3	
3/21/2017	7.3	
5/23/2017	7.4	
10/17/2017	9.9	
12/19/2017	7.8 (RS)	
5/31/2018	8.7	
11/8/2018	7.6	
4/22/2019	10.2	
6/25/2019	9.4	
9/26/2019	6.54	
4/14/2020	7.03	
10/21/2020	7.36	
3/16/2021	7.14	
10/5/2021	6.55	
3/15/2022		10.8
10/5/2022		11.7
4/20/2023		10
10/27/2023		10.4

Prediction Limit

	MW-17	MW-17
3/22/2016	7.3 (B1)	
5/18/2016	6	
7/12/2016	5.7	
9/12/2016	5.7	
11/18/2016	8.2	
1/18/2017	7.4	
3/21/2017	7.9	
5/24/2017	7.4	
10/17/2017	6.5	
5/31/2018	6.5	
11/8/2018	6.9	
4/22/2019	6.64	
9/26/2019	6.7	
4/13/2020	6.46	
10/22/2020	6.37	
3/16/2021	6.97	
10/5/2021	5.91	
3/16/2022		7
10/5/2022		5.51
4/20/2023		5.73
10/27/2023		6.16

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	11 (B1)	
5/18/2016	8.4	
7/12/2016	7.9	
9/12/2016	7.6	
11/18/2016	8.5	
1/18/2017	9.2	
3/21/2017	10	
5/24/2017	10	
10/17/2017	8.6	
5/31/2018	6.9	
11/8/2018	8.7	
4/22/2019	6.17	
9/26/2019	6.09	
4/14/2020	6.15	
10/22/2020	6.89	
3/16/2021	8.18	
10/5/2021	5.72	
3/16/2022		6.05
10/5/2022		4.97
4/19/2023		5.08
10/30/2023		11.1

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5	
11/18/2016	<6.3 (*)	
1/18/2017	5.3	
2/10/2017	5.4	
3/21/2017	5.3	
4/14/2017	4.9 (B)	
5/23/2017	5.5	
6/26/2017	5.4	
10/17/2017	5.4	
5/31/2018	5	
11/8/2018	5.2	
4/22/2019	4.91	
9/26/2019	5.03	
4/13/2020	4.9	
10/21/2020	5.25	
3/16/2021	5.72	
10/5/2021	5.1	
3/15/2022		6.91
10/5/2022		5.94
4/20/2023		4.84
5/24/2023		6.84
10/30/2023		5.88

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-11	MW-11
3/23/2016	<0.1	
5/18/2016	<0.1	
7/12/2016	0.04 (J)	
9/12/2016	0.04 (J)	
11/18/2016	<0.1	
1/19/2017	<0.1	
3/22/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	0.04 (J)	
5/31/2018	0.04 (J)	
11/7/2018	0.05 (J)	
4/22/2019	0.0353 (J)	
9/27/2019	0.0438 (J)	
4/13/2020	0.0672 (J)	
10/22/2020	<0.1	
3/16/2021	0.0269 (J)	
10/5/2021	0.0561 (J)	
3/15/2022		<0.1
10/4/2022		0.0281 (J)
4/19/2023		0.0416 (J)
10/27/2023		0.058 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-14	MW-14
3/23/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/18/2017	<0.026	
3/22/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0335 (J)	
9/26/2019	0.0272 (J)	
4/13/2020	0.0411 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.03 (J)	
3/15/2022		0.0364 (J)
10/4/2022		<0.026
4/19/2023		0.0415 (J)
10/27/2023		0.0511 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/19/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0275 (J)	
9/26/2019	<0.026	
4/13/2020	0.0484 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	<0.026	
3/15/2022		0.0302 (J)
10/4/2022		<0.026
4/19/2023		0.0275 (J)
10/27/2023		0.0459 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-16	MW-16
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/11/2016	<0.026	
9/13/2016	<0.026	
11/17/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	0.029 (J)	
9/26/2019	0.0302 (J)	
4/14/2020	0.0496 (J)	
10/21/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.0264 (J)	
3/15/2022		0.0438 (J)
10/5/2022		<0.026
4/20/2023		0.0322 (J)
10/27/2023		0.0612 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-17	MW-17
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0263 (J)	
4/13/2020	0.0511 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	<0.026	
3/16/2022		0.0399 (J)
10/5/2022		<0.026
4/20/2023		0.0271 (J)
10/27/2023		0.0494 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	0.04 (J)	
9/12/2016	<0.1	
11/18/2016	<0.1	
1/18/2017	<0.1	
3/21/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	0.04 (J)	
11/8/2018	<0.1	
4/22/2019	0.0311 (J)	
9/26/2019	0.0366 (J)	
4/14/2020	0.0764 (J)	
10/22/2020	<0.1	
3/16/2021	0.0344 (J)	
10/5/2021	<0.1	
3/16/2022		<0.1
10/5/2022		<0.1
4/19/2023		0.0297 (J)
10/30/2023		<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
2/10/2017	<0.026	
3/21/2017	<0.026	
4/14/2017	<0.026	
5/23/2017	<0.026	
6/26/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0287 (J)	
4/13/2020	0.0382 (J)	
10/21/2020	<0.026	
3/16/2021	0.0376 (J)	
10/5/2021	<0.026	
3/15/2022		0.0423 (J)
10/5/2022		<0.026
4/20/2023		0.0566 (J)
5/24/2023		0.0849 (J)
10/30/2023		0.0511 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-11	MW-11
3/23/2016	4.8	
5/18/2016	4.74	
7/12/2016	4.9	
9/12/2016	4.72	
11/18/2016	4.65	
1/19/2017	4.77	
3/22/2017	4.46	
5/24/2017	4.74	
10/17/2017	4.72	
11/30/2017	4.61	
5/31/2018	4.93	
11/7/2018	4.58	
4/22/2019	4.67	
9/27/2019	4.61	
4/13/2020	4.7	
10/22/2020	4.66	
3/16/2021	4.72	
10/5/2021	4.67	
3/15/2022		4.73
10/4/2022		4.62
4/19/2023		4.61
10/27/2023		4.7

Prediction Limit

	MW-14	MW-14
3/23/2016	5.4	
5/18/2016	5.38	
7/12/2016	5.65	
9/12/2016	5.14	
11/19/2016	5.05	
1/18/2017	5.11	
3/22/2017	4.86	
5/24/2017	5.02	
10/17/2017	5.01	
6/1/2018	5	
11/7/2018	4.81	
4/23/2019	4.93	
9/26/2019	4.99	
4/13/2020	4.96	
10/22/2020	5.09	
3/16/2021	5.06	
10/5/2021	4.98	
3/15/2022		5.07
10/4/2022		4.9
4/19/2023		4.8
10/27/2023		4.8

Prediction Limit

	MW-15	MW-15
3/22/2016	4.77	
5/18/2016	4.62	
7/12/2016	5.03	
9/12/2016	4.6	
11/19/2016	4.46	
1/19/2017	4.65	
3/21/2017	4.47	
5/23/2017	4.69	
10/17/2017	4.62	
6/1/2018	4.87	
11/7/2018	4.61	
4/23/2019	4.77	
9/26/2019	4.84	
4/13/2020	4.71	
10/22/2020	4.78	
3/16/2021	4.65	
10/5/2021	4.85	
3/15/2022		4.87
10/4/2022		4.71
4/19/2023		4.7
10/27/2023		4.59

Prediction Limit

Constituent: pH (SU)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	4.68	
5/18/2016	4.67	
7/11/2016	4.75	
9/13/2016	4.56	
11/17/2016	4.6	
1/18/2017	4.68	
3/21/2017	4.39	
5/23/2017	4.61	
10/17/2017	4.51	
5/31/2018	4.75	
11/8/2018	4.71	
4/22/2019	4.49	
9/26/2019	4.62	
4/14/2020	4.61	
10/21/2020	4.5	
3/16/2021	4.62	
10/5/2021	4.6	
3/15/2022		4.58
10/5/2022		4.52
4/20/2023		4.5
10/27/2023		4.47

Prediction Limit

	MW-17	MW-17
3/22/2016	4.89	
5/18/2016	5.09	
7/12/2016	5.27	
9/12/2016	4.94	
11/18/2016	4.82	
1/18/2017	5.02	
3/21/2017	4.82	
5/24/2017	4.87	
10/17/2017	5	
5/31/2018	5.42	
11/8/2018	5.02	
4/22/2019	4.94	
9/26/2019	5.01	
4/13/2020	4.99	
10/22/2020	5.01	
3/16/2021	5	
10/5/2021	4.88	
3/16/2022		4.91
10/5/2022		5
4/20/2023		4.79
10/27/2023		4.82

Prediction Limit

Constituent: pH (SU)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	4.63	
5/18/2016	4.58	
7/12/2016	4.7	
9/12/2016	4.6	
11/18/2016	4.52	
1/18/2017	4.63	
3/21/2017	4.45	
5/24/2017	4.55	
10/17/2017	4.61	
5/31/2018	4.84	
11/8/2018	4.63	
4/22/2019	4.64	
9/26/2019	4.71	
4/14/2020	4.75	
10/22/2020	4.7	
10/5/2021	4.68	
3/16/2022		4.79
10/5/2022		4.7
4/19/2023		4.65
10/30/2023		4.64

Prediction Limit

Constituent: pH (SU)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5.55	
11/18/2016	5.14	
1/18/2017	5.27	
2/10/2017	5.14	
3/21/2017	4.96	
4/14/2017	5.07	
5/23/2017	5.01	
6/26/2017	4.93	
10/17/2017	4.93	
11/30/2017	4.81	
5/31/2018	5.11	
11/8/2018	5.09	
4/22/2019	4.97	
9/26/2019	5.19	
4/13/2020	5.06	
10/21/2020	5.05	
3/16/2021	5.35	
10/5/2021	5.53	
3/15/2022		5.82
10/5/2022		5.3
4/20/2023		6.06
5/24/2023		5.15
10/30/2023		5.01

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
11/16/2006	5	
2/5/2007	<5	
4/12/2007	<5	
10/17/2007	5.7	
4/17/2008	7	
10/24/2008	6.6	
4/21/2009	5.2	
10/26/2009	8.3	
4/12/2010	6.8	
10/30/2010	10.8	
5/25/2011	11.5	
5/25/2012	8.2	
5/28/2013	6.9	
5/31/2014	3.5	
5/29/2015	3.3	
3/23/2016	1.8 (J)	
5/18/2016	4.1	
7/12/2016	3.8 (J)	
9/12/2016	3.9 (J)	
11/18/2016	5.4	
1/19/2017	<5	
3/22/2017	<5	
5/24/2017	2 (J)	
10/17/2017	<5	
5/31/2018	3 (J)	
11/7/2018	3.1 (J)	
4/22/2019	2.22	
9/27/2019	2.36	
4/13/2020	2.47	
10/22/2020	2.01	
3/16/2021	2.15	
10/5/2021	2.57	
3/15/2022		2.88
10/4/2022		2.04
4/19/2023		2.85
10/27/2023		2.72

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.756	
5/18/2016	1.9	
7/12/2016	2 (J)	
9/12/2016	2 (J)	
11/19/2016	1.7 (J)	
1/18/2017	<0.756	
3/22/2017	<0.756	
5/24/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.8 (J)	
11/7/2018	1.8 (J)	
4/23/2019	1.99	
9/26/2019	1.95	
4/13/2020	1.43	
10/22/2020	1.76	
3/16/2021	2.23	
10/5/2021	2.46	
3/15/2022		2.1
10/4/2022		<0.756
4/19/2023		1.93
10/27/2023		1.53

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-15	MW-15
3/22/2016	<0.756	
5/18/2016	<0.756	
7/12/2016	<0.756	
9/12/2016	<0.756	
11/19/2016	<0.756	
1/19/2017	<0.756	
3/21/2017	<0.756	
5/23/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.5 (J)	
11/7/2018	1.5 (J)	
4/23/2019	1.43	
9/26/2019	1.2	
4/13/2020	0.992 (J)	
10/22/2020	1.04	
3/16/2021	1.07	
10/5/2021	3.38	
3/15/2022		1.33
10/4/2022		<0.756
4/19/2023		2.42
10/27/2023		1.7

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	<5	
5/18/2016	<5	
7/11/2016	<5	
9/13/2016	1.7 (J)	
11/17/2016	<5	
1/18/2017	<5	
3/21/2017	<5	
5/23/2017	<5	
10/17/2017	<5	
5/31/2018	2.2 (J)	
11/8/2018	1.7 (J)	
4/22/2019	2.52	
9/26/2019	2.28	
4/14/2020	2.27	
10/21/2020	2.15	
3/16/2021	2	
10/5/2021	2.22	
3/15/2022		2.29
10/5/2022		1.4
4/20/2023		2.59
10/27/2023		3.08

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-17	MW-17
3/22/2016	<5	
5/18/2016	1.4	
7/12/2016	1.8 (J)	
9/12/2016	2.2 (J)	
11/18/2016	1.5 (J)	
1/18/2017	1.5 (J)	
3/21/2017	<5	
5/24/2017	1.7 (J)	
10/17/2017	1.8 (J)	
5/31/2018	2.5 (J)	
11/8/2018	2.2 (J)	
4/22/2019	2.96	
9/26/2019	2.96	
4/13/2020	2.75	
10/22/2020	2.98	
3/16/2021	3.06	
10/5/2021	2.85	
3/16/2022		3.38
10/5/2022		2.05
4/20/2023		3.44
10/27/2023		3.82

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	3 (J)	
5/18/2016	3.9 (J)	
7/12/2016	3.9 (J)	
9/12/2016	4.5 (J)	
11/18/2016	4.2 (J)	
1/18/2017	3.8 (J)	
3/21/2017	<5 (*)	
5/24/2017	3 (J)	
10/17/2017	3.4 (J)	
5/31/2018	4.1 (J)	
11/8/2018	3.3 (J)	
4/22/2019	4.66	
9/26/2019	4.23	
4/14/2020	3.96	
10/22/2020	3.37	
3/16/2021	3.18	
10/5/2021	3.83	
3/16/2022		7.04
10/5/2022		6.04
4/19/2023		7.48
10/30/2023		7.39

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<5	
11/18/2016	<5	
1/18/2017	<5	
2/10/2017	<5	
3/21/2017	<5	
4/14/2017	1.5 (J)	
5/23/2017	<5	
6/26/2017	1.5 (J)	
10/17/2017	<5	
5/31/2018	1.9 (J)	
11/8/2018	1.5 (J)	
4/22/2019	2.09	
9/26/2019	2.1	
4/13/2020	1.69	
10/21/2020	1.31	
3/16/2021	2.72	
10/5/2021	1.91	
3/15/2022		4.86
10/5/2022		1.02
4/20/2023		3.73
5/24/2023		2.62
10/30/2023		2.73

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
3/23/2016	40	
5/18/2016	52	
7/12/2016	42	
9/12/2016	42	
11/18/2016	82	
1/19/2017	32	
3/22/2017	6	
5/24/2017	48	
10/17/2017	34	
5/31/2018	32	
11/7/2018	52	
4/22/2019	50	
9/27/2019	50	
4/13/2020	63	
10/22/2020	41	
3/16/2021	39	
10/5/2021	43	
3/15/2022		53
10/4/2022		53
4/19/2023		67
10/27/2023		21

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	48 (B1)	
5/18/2016	26	
7/12/2016	24	
9/12/2016	32	
11/19/2016	76	
1/18/2017	48	
3/22/2017	30	
5/24/2017	46	
10/17/2017	8	
6/1/2018	44	
11/7/2018	26	
4/23/2019	48	
9/26/2019	39	
4/13/2020	28	
10/22/2020	25	
3/16/2021	41	
10/5/2021	29	
3/15/2022		56
10/4/2022		52
4/19/2023		41
10/27/2023		23

Prediction Limit

	MW-15	MW-15
3/22/2016	34 (B1)	
5/18/2016	24	
7/12/2016	24	
9/12/2016	4 (J)	
11/19/2016	44	
1/19/2017	26	
3/21/2017	20	
5/23/2017	6	
10/17/2017	58	
12/15/2017	20 (RS)	
6/1/2018	26	
11/7/2018	8	
4/23/2019	34	
9/26/2019	32	
4/13/2020	39	
10/22/2020	34	
3/16/2021	34	
10/5/2021	25	
3/15/2022		51
10/4/2022		42
4/19/2023		31
10/27/2023		24

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	42 (B1)	
5/18/2016	<5	
7/11/2016	<5	
9/13/2016	48	
11/17/2016	20	
1/18/2017	18	
3/21/2017	8	
5/23/2017	<5	
10/17/2017	58	
5/31/2018	24	
11/8/2018	4 (J)	
4/22/2019	46	
9/26/2019	27	
4/14/2020	36	
10/21/2020	33	
3/16/2021	27	
10/5/2021	29	
3/15/2022		34
10/5/2022		42
4/20/2023		37
10/27/2023		21

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-17	MW-17
3/22/2016	32 (B1)	
5/18/2016	26	
7/12/2016	22	
9/12/2016	32	
11/18/2016	16	
1/18/2017	32	
3/21/2017	16	
5/24/2017	22	
10/17/2017	26	
5/31/2018	<3.4	
11/8/2018	36	
4/22/2019	24	
9/26/2019	25	
4/13/2020	27	
10/22/2020	29	
3/16/2021	37	
10/5/2021	34	
3/16/2022		55
10/5/2022		35
4/20/2023		30
10/27/2023		14

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

	MW-18	MW-18
3/22/2016	28 (B1)	
5/18/2016	20	
7/12/2016	24	
9/12/2016	48	
11/18/2016	10	
1/18/2017	30	
3/21/2017	6	
5/24/2017	30	
10/17/2017	32	
5/31/2018	30	
11/8/2018	22	
4/22/2019	36	
9/26/2019	30	
4/14/2020	29	
10/22/2020	22	
3/16/2021	31	
10/5/2021	29	
3/16/2022		25
10/5/2022		34
4/19/2023		29
10/30/2023		15

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/1/2023 1:27 PM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-19	MW-19
9/12/2016	12	
11/18/2016	14	
1/18/2017	20	
2/10/2017	28	
3/21/2017	20	
4/14/2017	14	
5/23/2017	<5	
6/26/2017	34	
10/17/2017	42	
5/31/2018	22	
11/8/2018	8	
4/22/2019	31	
9/26/2019	29	
4/13/2020	20	
10/21/2020	19	
3/16/2021	25	
10/5/2021	35	
3/15/2022		36
10/5/2022		31
4/20/2023		66
5/24/2023		32
10/30/2023		29

ND substitution: RL or RL/2 if <15% NDs.

FIGURE E.

Interwell Prediction Limits - Two-Step - All Results (No Significant)

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-19	4.467	n/a	10/30/2023	1.19	No	63	1.31	0.4517	3.175	None	sqrt(x)	0.00188	Param Inter 1 of 2
Chloride (mg/L)	MW-16	15.07	n/a	10/27/2023	10.4	No	78	10.29	2.713	0	None	No	0.00188	Param Inter 1 of 2
Chloride (mg/L)	MW-19	15.07	n/a	10/30/2023	5.88	No	78	10.29	2.713	0	None	No	0.00188	Param Inter 1 of 2
Sulfate (mg/L)	MW-17	7.47	n/a	10/27/2023	3.82	No	78	1.791	0.5338	15.38	Kaplan-Meier	sqrt(x)	0.00188	Param Inter 1 of 2

Within Limit

Prediction Limit

Interwell Parametric

Background Data Summary (based on square root transformation): Mean=1.31, Std. Dev.=0.4517, n=63, 3.175% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9647, critical = 0.947. Kappa = 1.779 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Assumes 3 future values.

Constituent: Calcium   Analysis Run 12/1/2023 1:29 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Interwell Parametric
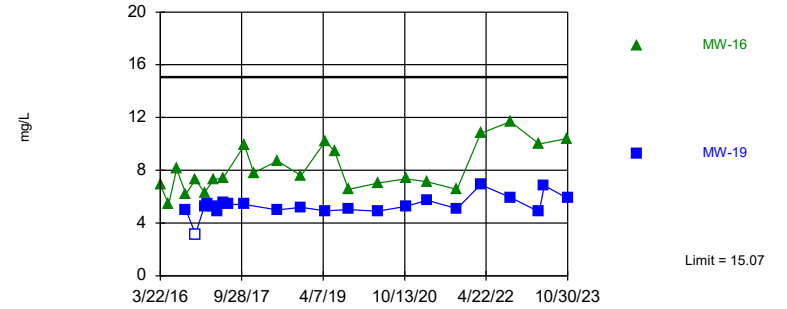
Background Data Summary: Mean=10.29, Std. Dev.=2.713, n=78. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9863, critical = 0.957. Kappa = 1.764 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Comparing 2 points to limit. Assumes 2 future values.

Constituent: Chloride   Analysis Run 12/1/2023 1:29 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Interwell Parametric
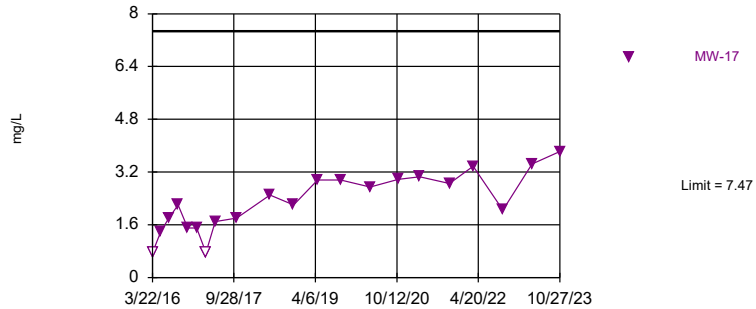
Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=1.791, Std. Dev.=0.5338, n=78, 15.38% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9601, critical = 0.957. Kappa = 1.764 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Assumes 3 future values.

Constituent: Sulfate   Analysis Run 12/1/2023 1:29 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/1/2023 1:30 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18 (bg)	MW-14 (bg)	MW-11 (bg)	MW-19
3/22/2016	0.93 (B1)			
3/23/2016		<5.9 (*)	<5.9 (*)	
5/18/2016	0.85	5.5	1.8	
7/12/2016	0.69	5.3	1.9	
9/12/2016	0.86	4.9	2	0.92
11/18/2016	0.41		2	0.68
11/19/2016		4.8		
1/18/2017	0.81	3.8		0.64
1/19/2017			1.8	
2/10/2017				0.58
3/21/2017	0.76			0.56
3/22/2017		3.3	1.8	
4/14/2017				0.51
5/23/2017				0.54
5/24/2017	0.8	3.6	2	
6/26/2017				0.66
10/17/2017	0.69	3.7	2	0.58
5/31/2018	0.75		1.8	0.56
6/1/2018		2.8		
11/7/2018		2.9	2	
11/8/2018	0.78			0.57
4/22/2019	0.531		1.71	0.634
4/23/2019		2.76		
9/26/2019	0.631	2.4		1.24
9/27/2019			1.99	
4/13/2020		2.74	2.03	0.687
4/14/2020	0.627			
10/21/2020				0.806
10/22/2020	0.553	2.17	2.02	
3/16/2021	0.57	2.4	1.74	2.23
10/5/2021	0.43 (J)	1.89	1.87	3.67
3/15/2022		2.59	1.87	5.84
3/16/2022	0.406 (J)			
10/4/2022		2.56	1.3	
10/5/2022	0.285 (J)			2.16
4/19/2023	0.368 (J)	2.63	1.65	
4/20/2023				15.4
5/24/2023				1.7
10/27/2023		2.28	1.42	
10/30/2023	0.427 (J)			1.19

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/1/2023 1:30 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-16	MW-18 (bg)	MW-14 (bg)	MW-19
11/16/2006	8.5				
2/5/2007	8.8				
4/12/2007	9.5				
10/17/2007	12.1				
4/17/2008	13.1				
10/24/2008	13.7				
4/21/2009	11.9				
10/26/2009	11				
4/12/2010	12.5				
10/30/2010	10.8				
5/25/2011	10				
5/25/2012	10.9				
5/28/2013	11.4				
5/31/2014	9.2				
5/29/2015	11.5				
3/22/2016		6.9 (B1)	11 (B1)		
3/23/2016	13			8.8 (B1)	
5/18/2016	13	5.4	8.4	7.2	
7/11/2016		8.1			
7/12/2016	13		7.9	7.5	
9/12/2016	13		7.6	8.4	5
9/13/2016		6.2			
11/17/2016		7.3			
11/18/2016	14		8.5		<6.3 (*)
11/19/2016				12	
1/18/2017		6.3	9.2	11	5.3
1/19/2017	13				
2/10/2017					5.4
3/21/2017		7.3	10		5.3
3/22/2017	15			11	
4/14/2017					4.9 (B)
5/23/2017		7.4			5.5
5/24/2017	14		10	10	
6/26/2017					5.4
10/17/2017	15	9.9	8.6	10	5.4
12/19/2017		7.8 (RS)			
5/31/2018	12	8.7	6.9		5
6/1/2018				9.9	
11/7/2018	14			10	
11/8/2018		7.6	8.7		5.2
4/22/2019	13.3	10.2	6.17		4.91
4/23/2019				9.3	
6/25/2019		9.4			
9/26/2019		6.54	6.09	8.35	5.03
9/27/2019	13.4				
4/13/2020	14.2			7.9	4.9
4/14/2020		7.03	6.15		
10/21/2020		7.36			5.25
10/22/2020	17.4		6.89	6.5	
3/16/2021	13.3	7.14	8.18	7.32	5.72
10/5/2021	12.5	6.55	5.72	6.59	5.1
3/15/2022	13.6	10.8		8.36	6.91

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/1/2023 1:30 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-16	MW-18 (bg)	MW-14 (bg)	MW-19
3/16/2022			6.05		
10/4/2022	12			11.2	
10/5/2022		11.7	4.97		5.94
4/19/2023	12.2		5.08	10.2	
4/20/2023		10			4.84
5/24/2023					6.84
10/27/2023	12.1	10.4		9.77	
10/30/2023			11.1		5.88

	MW-11 (bg)	MW-16	MW-18 (bg)	MW-14 (bg)	MW-19

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/1/2023 1:30 PM   View: Interwell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11 (bg)	MW-18 (bg)	MW-17	MW-14 (bg)
11/16/2006	5			
2/5/2007	<0.756			
4/12/2007	<0.756			
10/17/2007	5.7			
4/17/2008	7			
10/24/2008	6.6			
4/21/2009	5.2			
10/26/2009	8.3			
4/12/2010	6.8			
10/30/2010	10.8			
5/25/2011	11.5			
5/25/2012	8.2			
5/28/2013	6.9			
5/31/2014	3.5			
5/29/2015	3.3			
3/22/2016		3 (J)	<0.756	
3/23/2016	1.8 (J)			<0.756
5/18/2016	4.1	3.9 (J)	1.4	1.9
7/12/2016	3.8 (J)	3.9 (J)	1.8 (J)	2 (J)
9/12/2016	3.9 (J)	4.5 (J)	2.2 (J)	2 (J)
11/18/2016	5.4	4.2 (J)	1.5 (J)	
11/19/2016				1.7 (J)
1/18/2017		3.8 (J)	1.5 (J)	<0.756
1/19/2017	<0.756			
3/21/2017		<0.756 (*)	<0.756	
3/22/2017	<0.756			<0.756
5/24/2017	2 (J)	3 (J)	1.7 (J)	<0.756
10/17/2017	<0.756	3.4 (J)	1.8 (J)	<0.756
5/31/2018	3 (J)	4.1 (J)	2.5 (J)	
6/1/2018				1.8 (J)
11/7/2018	3.1 (J)			1.8 (J)
11/8/2018		3.3 (J)	2.2 (J)	
4/22/2019	2.22	4.66	2.96	
4/23/2019				1.99
9/26/2019		4.23	2.96	1.95
9/27/2019	2.36			
4/13/2020	2.47		2.75	1.43
4/14/2020		3.96		
10/22/2020	2.01	3.37	2.98	1.76
3/16/2021	2.15	3.18	3.06	2.23
10/5/2021	2.57	3.83	2.85	2.46
3/15/2022	2.88			2.1
3/16/2022		7.04	3.38	
10/4/2022	2.04			<0.756
10/5/2022		6.04	2.05	
4/19/2023	2.85	7.48		1.93
4/20/2023			3.44	
10/27/2023	2.72		3.82	1.53
10/30/2023		7.39		

ND substitution: RL or RL/2 if <15% NDs.

FIGURE F.

Appendix III Trend Tests - Significant Results

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	MW-14 (bg)	-0.3374	-149	-87	Yes	21	4.762	n/a	0.01	NP
Calcium (mg/L)	MW-18 (bg)	-0.06556	-141	-87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	MW-19	0.127	107	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	MW-11 (bg)	0.1671	240	191	Yes	36	0	n/a	0.01	NP
Chloride (mg/L)	MW-18 (bg)	-0.4732	-89	-87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	MW-11 (bg)	-0.2348	-258	-191	Yes	36	13.89	n/a	0.01	NP
Sulfate (mg/L)	MW-17	0.247	129	87	Yes	21	9.524	n/a	0.01	NP

Appendix III Trend Tests - All Results

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	MW-11 (bg)	-0.005507	-27	-87	No	21	4.762	n/a	0.01	NP
Calcium (mg/L)	**MW-14 (bg)**	**-0.3374**	**-149**	**-87**	**Yes**	**21**	**4.762**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.06556**	**-141**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.127**	**107**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-11 (bg)**	**0.1671**	**240**	**191**	**Yes**	**36**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-14 (bg)	-0.08571	-20	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	MW-16	0.4398	98	98	No	23	0	n/a	0.01	NP
Chloride (mg/L)	**MW-18 (bg)**	**-0.4732**	**-89**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-19	0.09374	55	92	No	22	4.545	n/a	0.01	NP
Sulfate (mg/L)	**MW-11 (bg)**	**-0.2348**	**-258**	**-191**	**Yes**	**36**	**13.89**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-14 (bg)	0.02996	33	87	No	21	28.57	n/a	0.01	NP
Sulfate (mg/L)	**MW-17**	**0.247**	**129**	**87**	**Yes**	**21**	**9.524**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-18 (bg)	0.2831	70	87	No	21	4.762	n/a	0.01	NP

Sen's Slope Estimator

MW-11 (bg)
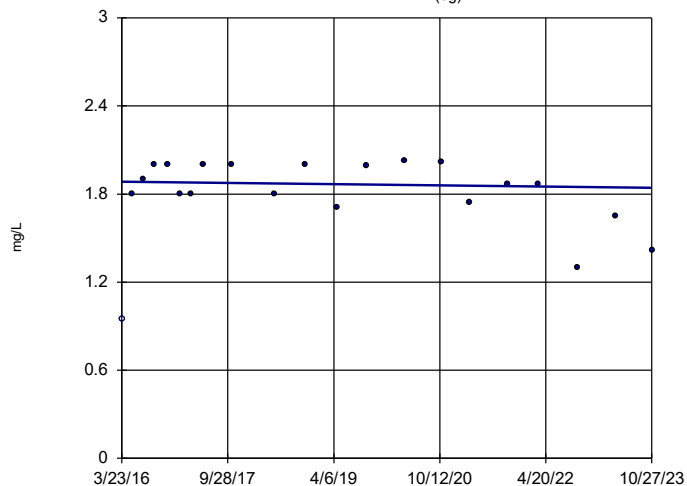
n = 21

Slope = -0.005507
units per year.

Mann-Kendall
statistic = -27
critical = -87

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 12/1/2023 1:32 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR
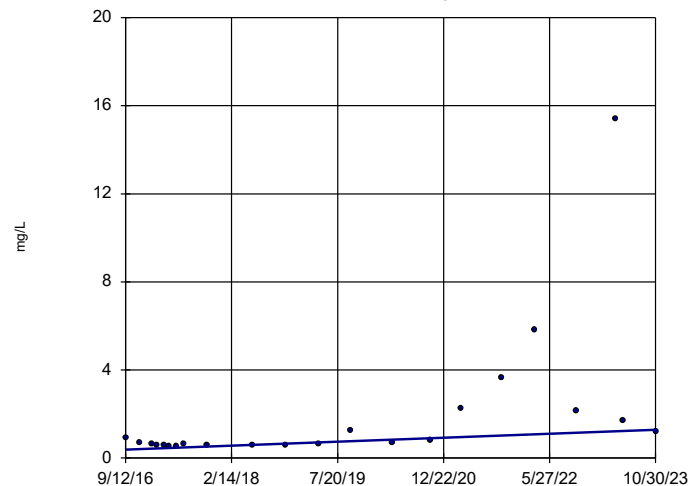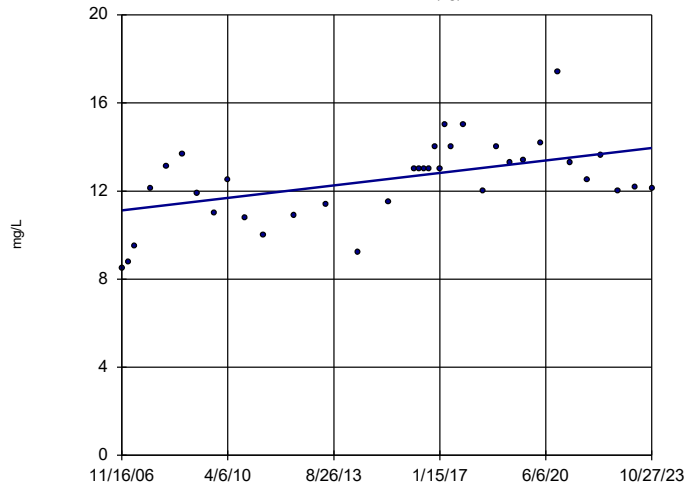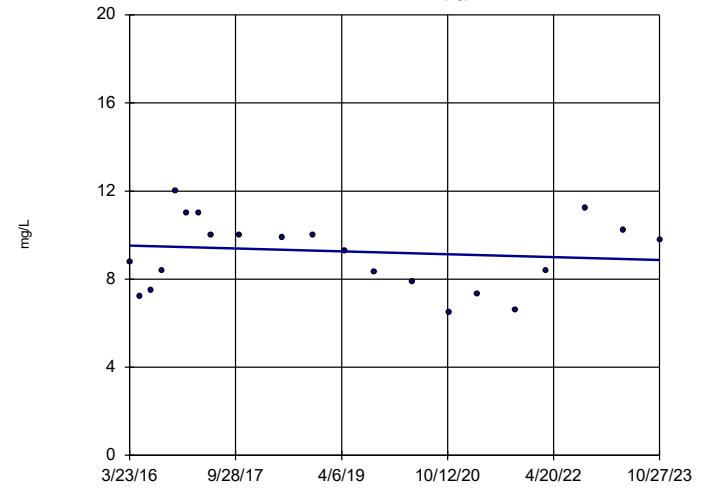
Sen's Slope Estimator

MW-14 (bg)
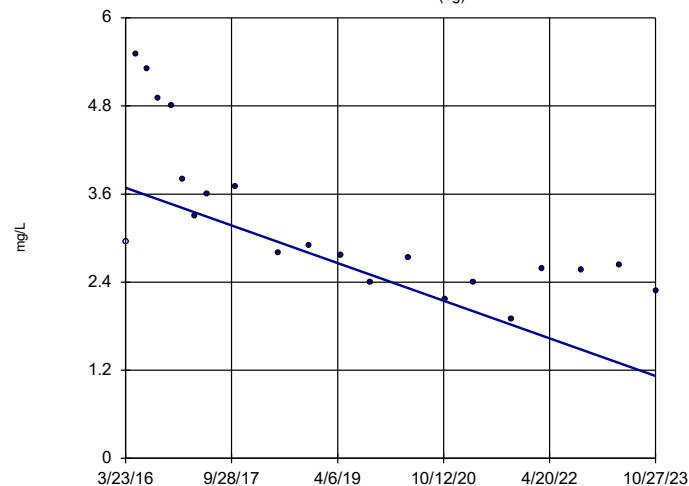
n = 21

Slope = -0.3374
units per year.

Mann-Kendall
statistic = -149
critical = -87

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 12/1/2023 1:32 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR
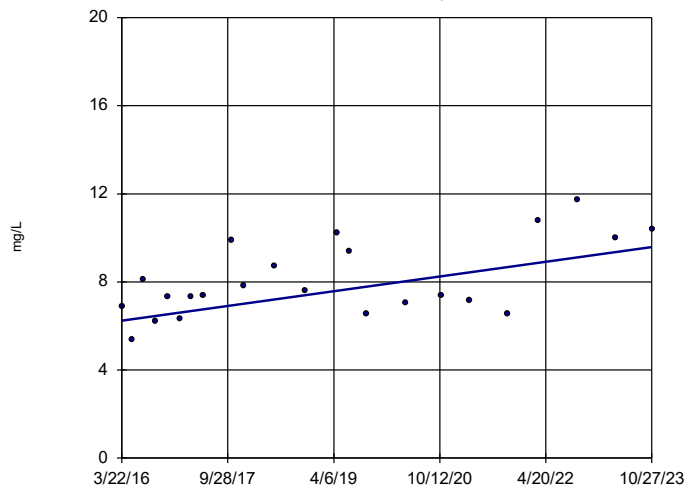
Sen's Slope Estimator

MW-18 (bg)
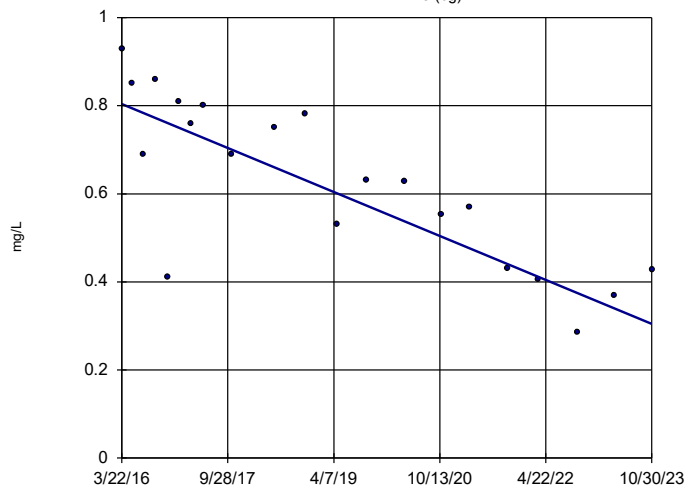
n = 21

Slope = -0.06556
units per year.

Mann-Kendall
statistic = -141
critical = -87

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 12/1/2023 1:32 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-19

n = 22

Slope = 0.127
units per year.

Mann-Kendall
statistic = 107
critical = 92

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 12/1/2023 1:32 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator
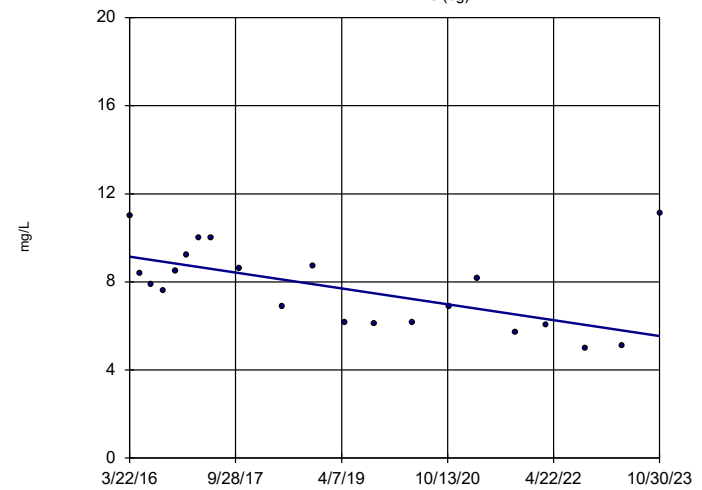
MW-11 (bg)

n = 36

Slope = 0.1671 units per year.

Mann-Kendall statistic = 240 critical = 191

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 12/1/2023 1:32 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-14 (bg)

n = 21

Slope = -0.08571 units per year.

Mann-Kendall statistic = -20 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 12/1/2023 1:32 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-16

n = 23

Slope = 0.4398 units per year.

Mann-Kendall statistic = 98 critical = 98

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 12/1/2023 1:32 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-18 (bg)

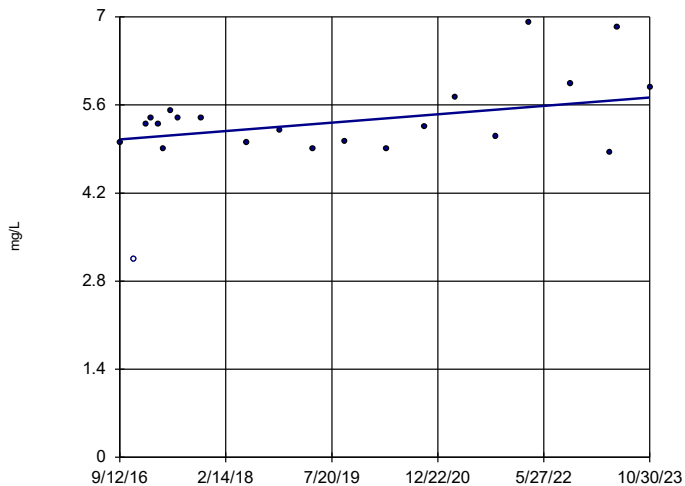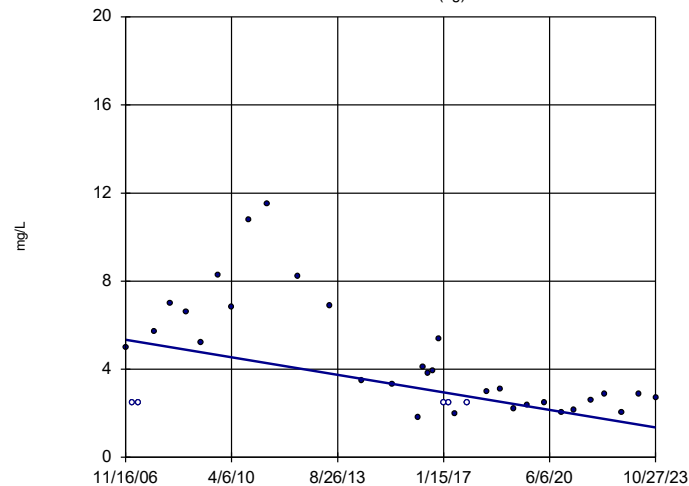
n = 21

Slope = -0.4732 units per year.

Mann-Kendall statistic = -89 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 12/1/2023 1:33 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator
MW-19

n = 22

Slope = 0.09374 units per year.

Mann-Kendall statistic = 55 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

mg/L

9/12/16   2/14/18   7/20/19   12/22/20   5/27/22   10/30/23

Constituent: Chloride   Analysis Run 12/1/2023 1:33 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator
MW-11 (bg)
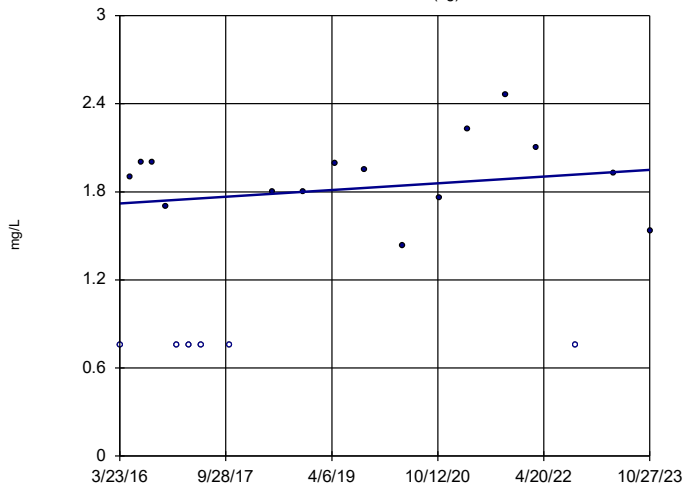
n = 36

Slope = -0.2348 units per year.

Mann-Kendall statistic = -258 critical = -191

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

mg/L

11/16/06   4/6/10   8/26/13   1/15/17   6/6/20   10/27/23

Constituent: Sulfate   Analysis Run 12/1/2023 1:33 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR
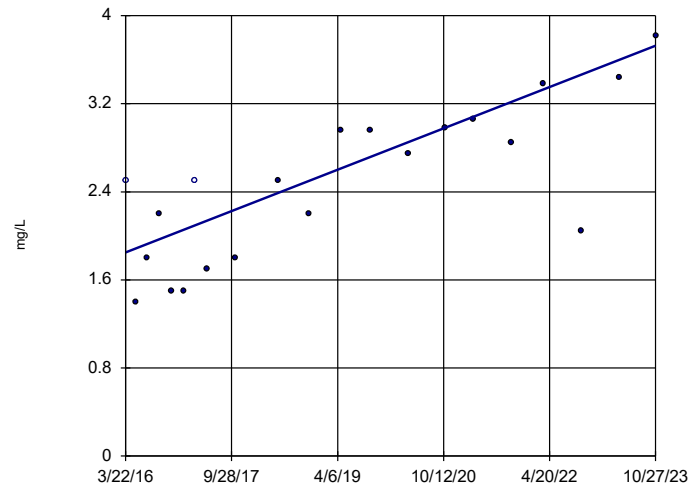
Sen's Slope Estimator
MW-14 (bg)

n = 21

Slope = 0.02996 units per year.

Mann-Kendall statistic = 33 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

mg/L

3/23/16   9/28/17   4/6/19   10/12/20   4/20/22   10/27/23

Constituent: Sulfate   Analysis Run 12/1/2023 1:33 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR
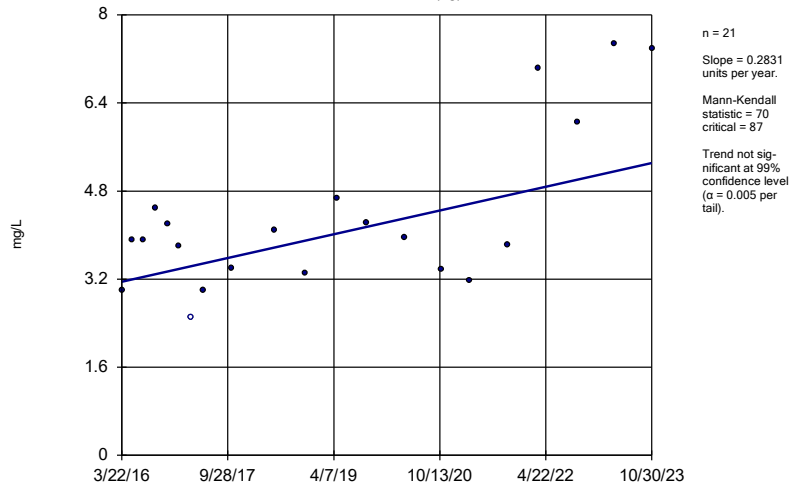
Sen's Slope Estimator
MW-17

n = 21

Slope = 0.247 units per year.

Mann-Kendall statistic = 129 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

mg/L

3/22/16   9/28/17   4/6/19   10/12/20   4/20/22   10/27/23

Constituent: Sulfate   Analysis Run 12/1/2023 1:33 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Sen's Slope Estimator

MW-18 (bg)

n = 21

Slope = 0.2831
units per year.

Mann-Kendall
statistic = 70
critical = 87

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate   Analysis Run 12/1/2023 1:33 PM   View: Trend Tests

Plant Daniel   Client: Southern Company   Data: NAMU CCR