2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

MISSISSIPPI POWER COMPANY
PLANT VICTOR DANIEL
NORTH ASH MANAGEMENT UNIT

January 31, 2021

Prepared for

Mississippi Power Company
Gulfport, Mississippi

By

Southern Company Services
Earth Science and Environmental Engineering

CERTIFICATION STATEMENT

This 2020 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.
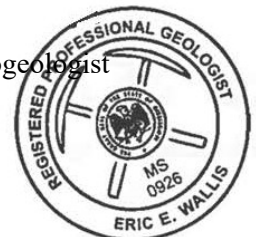
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Mississippi PG No. 0926

SITE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), this 2020 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2020 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. Statistically significant increases (SSIs) of Appendix III constituents over background were not identified in the results and the site has remained in detection monitoring.

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

Monitoring Period Summary
Plant Daniel - North Ash Management Unit

Monitoring Period:	January 1 - December 31, 2020
Beginning Status:	Detection
Ending Status:	Detection

Statistical Analysis Results *
Appendix III SSIs
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)

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1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR § 257 Subpart D), this 2020 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document the 2020 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 monitoring, and associated reporting for NAMU is performed in accordance with the monitoring requirements § 257.90 through § 257.94.

2.0 SITE DESCRIPTION

Mississippi Power Company's (MPC)'s Plant Daniel 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, NW ¼ and south half of Section 11, and the north half and NW ¼ of the SW ¼ of Section 14, all of Township 6 South, Range 6 West. Plant Daniel is situated immediately 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. **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 sand and gravel beds of Miocene age or younger, generally 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 soils therefore contain sand, silt, clay, gravel and organics.

Studies prepared by Southern Company Services, 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 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. The Citronelle and overlying coastal deposits are generally 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).

At the site, the Unit 2 sand is the uppermost aquifer for groundwater monitoring purposes.

3.0 GROUNDWATER MONITORING SYSTEM AND ACTIVITY

Pursuant to § 257.91, Plant Daniel has 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 is comprised of 7 monitoring wells. Monitoring well locations are 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 well locations 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. Downgradient locations were determined by water level monitoring and potentiometric surface maps constructed for the site.

3.2 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).

3.3 Monitoring Well Installation and Maintenance

There was no change to the groundwater monitoring system in 2020; the network remained the same as in the 2019 (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.

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

Prior to each sampling event, groundwater levels were measured and recorded to the nearest 0.01 foot within a 24-hour period. Groundwater levels recorded during the monitoring events are summarized in **Table 2, Groundwater Elevations Summary – 2020.** 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 on Figures 3 and 4, the general direction of groundwater flow is west-southwest. The groundwater flow pattern observed during the 2020 monitoring events is consistent with historic observations.

Groundwater flow rates 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 at the site is 25.09 feet per day. The hydraulic gradient was calculated between well pairs shown on **Table 3, Groundwater Flow Velocity Calculations - 2020**. 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 (U.S. USEPA, 1996).

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 0.0035 ft/ft to 0.0045 ft/ft. As presented on **Table 3,** groundwater flow velocity at the site ranges from approximately 0.4391 feet/day (or approximately 160.26 feet/year) to 0.5645 feet/day (or approximately

206.05 feet/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 Plant Daniel 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) were measured to determine stabilization. Groundwater samples were collected when the following stabilization criteria were met:

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

During purging and sampling a SmarTroll instrument 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 were performed by Eurofins Environmental Testing TestAmerica, Inc. (TAL) of Pittsburgh, Pennsylvania. TAL is accredited by National Environmental Laboratory Accreditation Program (NELAP). TestAmerica 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**. When values are followed by a "J" flag, this indicates that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (RL). The estimated value is positively identified but is below 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, a comparison of results between samples and field duplicate samples are used as measure of laboratory precision. For groundwater analytical data, quality control procedures include calculating the relative percent difference between the sample and duplicate sample duplicate concentrations. This is calculated as:

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

Where:

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

Relative percent differences are calculated for all detected concentrations 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 2020 sampling events.

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. 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 2020 semi-annual monitoring events in April and October were statistically analyzed in accordance with the PE-certified Statistical Analysis Plan (October 2017) and Statistical Background Update by GSC (December 2019).

Exceedances were noted for boron and chloride in upgradient well MW-11 during the October 2020 sampling event. This is an indication that groundwater quality is naturally changing upgradient of the site and may eventually be observed in downgradient wells. As presented in **Appendix B,** no exceedances were observed during the first and second semi-annual event.

6.0 MONITORING PROGRAM STATUS

Presently, Plant Daniel NAMU is in detection monitoring. Statistical analysis of groundwater quality data has not identified any verified SSIs and the site will continue detection monitoring.

7.0 CONCLUSIONS & FUTURE ACTIONS

Based on results reported in the *2020 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 was resampled on a semi-annual basis. The groundwater samples were analyzed for all Appendix III parameters. Statistical evaluations of the April and October 2020 detection monitoring data identified no SSIs of Appendix III constituents above the GWPS. 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 March or April 2021 and September or October 2021.

- Submit 2021 Annual Groundwater Monitoring and Corrective Action Report by January 31, 2022.

8.0 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.

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

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

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

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

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

Tables

Table 1.
Monitoring Well Network Summary

Well ID	Purpose	Installation Date	Northing	Easting	Total Hole 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	384797.922	1068943.907	32.00	25.24	23.22	-3.78	-8.78
MW-14	Upgradient	7/24/2015	384048.468	1068916.529	47.00	23.65	20.87	-11.83	-16.83
MW-15	Downgradient	7/24/2015	383503.877	1068571.153	37.00	21.53	18.69	-12.61	-17.61
MW-16	Downgradient	7/24/2015	383593.548	1067845.867	28.00	16.12	13.16	-6.94	-11.94
MW-17	Downgradient	7/24/2015	384781.265	1067808.459	27.00	15.41	12.59	-7.91	-12.91
MW-18	Upgradient	7/24/2015	385290.588	1068774.386	47.00	28.86	26.33	-10.27	-15.27
MW-19	Downgradient	7/26/2016	384157.41	1067711.624	30.00	24.42	21.56	-3.04	-8.04

Notes:

1. Northing and Easting are referenced to MS SPCS (NAD 83) East Zone U.S. Survey Feet (2301).

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

3. MSL refers to Mean Sea Level.

Table 2.
Groundwater Elevations Summary - 2020

Well ID	Top of Casing Elevation (feet MSL)	Groundwater Elevations (feet MSL)	
		April 13, 2020	October 21, 2020
MW-11	25.24	11.59	11.99
MW-14	23.65	10.63	10.99
MW-15	21.53	9.15	9.28
MW-16	16.12	5.86	5.57
MW-17	15.41	7.66	7.61
MW-18	28.86	11.58	11.83
MW-19	24.42	5.32	4.84

Notes:

1. MSL refers to Mean Sea Level

Table 3.
Groundwater Flow Velocity Calculations - 2020

	MW-14 h_1 (ft)	MW-16 h_2 (ft)	Distance Δl (ft)	Hydraulic Gradient $\Delta h/\Delta l$ (ft/ft)	Hydraulic Conductivity K	Assumed Effective Porosity (ne)	Calculated Groundwater Flow Velocity (feet/day)	Calculated Groundwater Flow Velocity (feet/year)
				Flow Path A				
4/13/2020	10.63	5.86	1350	0.0035	25.09	0.2	0.4391	160.26
10/21/2020	10.99	5.57	1350	0.0040	25.09	0.2	0.5018	183.16

	MW-11 h_1 (ft)	MW-19 h_2 (ft)	Distance Δl (ft)	Hydraulic Gradient $\Delta h/\Delta l$ (ft/ft)	Hydraulic Conductivity K	Assumed Effective Porosity (ne)	Calculated Groundwater Flow Velocity (feet/day)	Calculated Groundwater Flow Velocity (feet/year)
				Flow Path B				
4/13/2020	11.59	5.32	1600	0.0039	25.09	0.2	0.4893	178.58
10/21/2020	11.99	4.84	1600	0.0045	25.09	0.2	0.5645	206.05

Notes:

ft=feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year

Table 4.
Relative Percent Difference Calculations

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-11	**Dup-02**	
TDS	mg/L	41	44	7.1
Chloride	mg/L	2.02	2.07	2.4
Sulfate	mg/L	17.4	17.3	0.6
Calcium	mg/L	2.01	1.81	10.5

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-16	**Dup-01**	
TDS	mg/L	33	37	11.4
Chloride	mg/L	0.798	0.812	1.7
Sulfate	mg/L	7.36	7.32	0.5
Calcium	mg/L	2.15	2.11	1.9

Figures
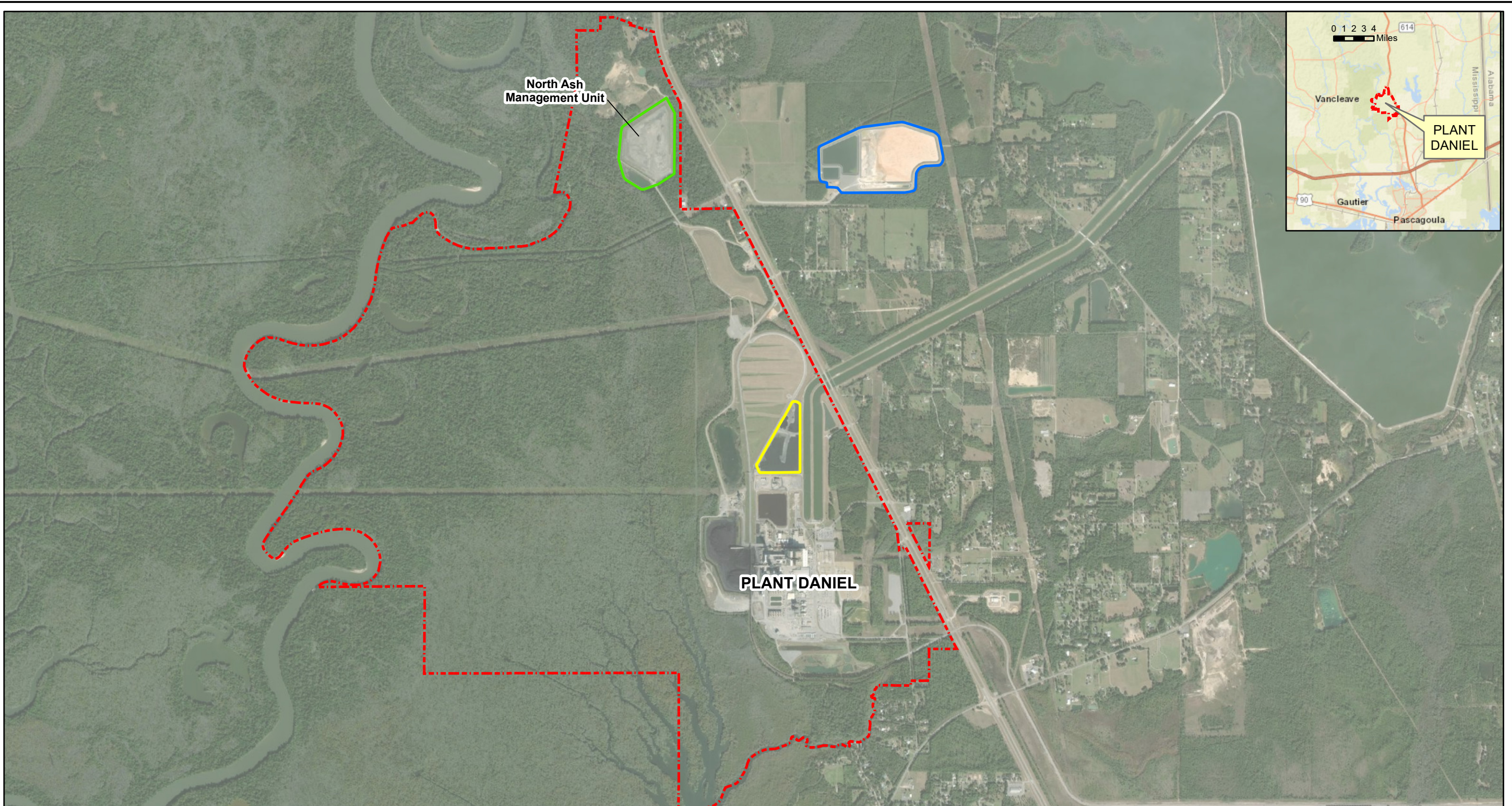
North Ash
Management Unit

PLANT DANIEL

01234
Miles

614

Vancleave

Alabama
Mississippi

PLANT
DANIEL

90

Gautier

Pascagoula

Legend

North Ash Management Unit (NAMU) Boundary

Gypsum Storage Area (GSA) Boundary

Ash Pond B Boundary

Property Boundary (Approximate)

N

0   1,000   2,000   4,000   6,000   8,000
Feet
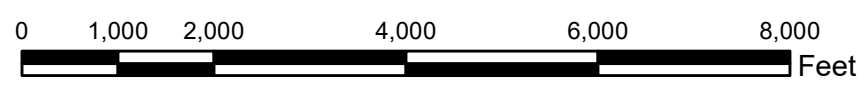
SCALE	1:24000	DRAWING TITLE	SITE LOCATION MAP PLANT DANIEL NORTH ASH MANAGEMENT UNIT
DATE	12/29/2020		
DRAWN BY	KAR		
CHECKED BY	LPC	FIGURE NO **FIGURE 1**	Southern Company

MONITORING WELL LOCATION MAP
PLANT DANIEL
NORTH ASH MANAGEMENT UNIT

Legend

⊕ Monitoring Well

☐ North Ash Management Unit

N

| 0 | 150 | 300 | 600 | 900 | 1,200 |
Feet
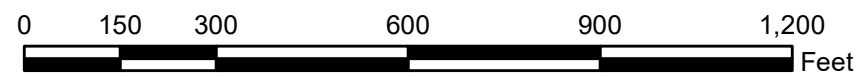
SCALE	1:3600
DATE	12/29/2020
DRAWN BY	KAR
CHECKED BY	LPC

DRAWING NO

FIGURE 2

△ Southern Company

LEGEND:

⊕ Monitoring Well

Estimated Potentiometric Surface Contour (ft NAVD88)

Approximate Groundwater Flow Direction

North Ash Management Unit

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

N

0   150   300   600   900 Feet

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

SCALE	DRAWING TITLE
1:3600	POTENTIOMETRIC SURFACE CONTOUR MAP
DATE	APRIL13, 2020
12/29/2020	PLANT DANIEL
DRAWN BY	NORTH ASH MANAGEMENT UNIT
KAR	
CHECKED BY	DRAWING NO
LPC	**FIGURE 3**

Southern Company

Map labels:
MW-18 11.58
MW-17 7.66
MW-11 11.59
MW-19 5.32
MW-14 10.63
MW-16 5.86
MW-15 9.15
Contour values: 6, 7, 8, 9, 10, 11

LEGEND:

⊕ Monitoring Well

⎯ Estimated Potentiometric Surface Contour (ft NAVD88)

↗ Approximate Groundwater Flow Direction

☐ North Ash Management Unit

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

MW-18
11.83

MW-17
7.61

MW-11
11.99

MW-19
4.84

MW-14
10.99

MW-16
5.57

MW-15
9.28

N

0   150   300   600   900
Feet

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

SCALE	1:3600	DRAWING TITLE	POTENTIOMETRIC SURFACE CONTOUR MAP
DATE	12/29/2020		OCTOBER 21, 2020
DRAWN BY	KAR		PLANT DANIEL
			NORTH ASH MANAGEMENT UNIT
CHECKED BY	LPC	DRAWING NO	FIGURE 4

Southern Company

Appendix A

1st
Semi-Annual
Monitoring Event

ANALYTICAL REPORT

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

Laboratory Job ID: 180-104637-1
Client Project/Site: CCR - Plant Daniel NAMU
Revision: 1

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

Attn: Ms. Lauren Petty

Authorized for release by:
8/4/2020 2:24:32 PM
Veronica Bortot, Senior Project Manager
(412)963-2435
Veronica.Bortot@Eurofinset.com

Designee for

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

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Eurofins TestAmerica, Pittsburgh
8/4/2020 (Rev. 1)

Case Narrative

Job ID: 180-104637-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-104637-1

Revised : to remove sample MW-12 and Mw-13 from report

Comments
No additional comments.

Receipt
The samples were received on 4/15/2020 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.2º C, 1.6º C, 1.8º C and 1.9º C.

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

Metals
Methods 6020A, 6020B: The following samples were diluted due to the nature of the sample matrix: (180-104060-J-12-A ^5), (180-104060-J-12-B MS ^5), (180-104060-J-12-C MSD ^5), (180-104060-J-12-A PDS ^5) and (180-104060-J-12-A SD ^25). Elevated reporting limits (RLs) are provided.

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

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

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.

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 TestAmerica, Pittsburgh

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-26-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	07-01-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

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Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-104637-1	MW-11	Water	04/13/20 12:10	04/15/20 10:15	
180-104637-2	MW-18	Water	04/14/20 07:50	04/15/20 10:15	
180-104637-3	MW-14	Water	04/13/20 14:25	04/15/20 10:15	
180-104637-4	MW-15	Water	04/13/20 15:20	04/15/20 10:15	
180-104637-5	MW-16	Water	04/14/20 07:32	04/15/20 10:15	
180-104637-6	MW-17	Water	04/13/20 14:46	04/15/20 10:15	
180-104637-7	MW-19	Water	04/13/20 13:46	04/15/20 10:15	
180-104637-8	FB-01	Water	04/14/20 07:30	04/15/20 10:15	
180-104637-9	EB-01	Water	04/14/20 07:25	04/15/20 10:15	
180-104637-10	DUP-01	Water	04/13/20 10:53	04/15/20 10:15	

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Method Summary

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

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

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

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

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

Job ID: 180-104637-1

Client Sample ID: MW-11
Date Collected: 04/13/20 12:10
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-1
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			313835	04/25/20 13:14	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313149	04/17/20 09:01	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 14:29	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-18
Date Collected: 04/14/20 07:50
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-2
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			313835	04/25/20 15:01	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313149	04/17/20 09:01	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 14:31	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-14
Date Collected: 04/13/20 14:25
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-3
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			313835	04/25/20 15:16	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313149	04/17/20 09:01	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 14:34	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-15
Date Collected: 04/13/20 15:20
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-4
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			313835	04/25/20 15:32	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313150	04/17/20 09:04	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 14:48	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Eurofins TestAmerica, Pittsburgh

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Lab Chronicle

Client Sample ID: MW-16
Date Collected: 04/14/20 07:32
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-5
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			313835	04/25/20 15:47	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313150	04/17/20 09:04	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 14:51	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-17
Date Collected: 04/13/20 14:46
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-6
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			313835	04/25/20 16:02	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313150	04/17/20 09:04	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 14:53	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-19
Date Collected: 04/13/20 13:46
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-7
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			313835	04/25/20 16:48	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313150	04/17/20 09:04	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 14:56	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: FB-01
Date Collected: 04/14/20 07:30
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-8
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			313835	04/25/20 17:03	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313150	04/17/20 09:04	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 14:58	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Daniel NAMU

Job ID: 180-104637-1

Client Sample ID: EB-01

Date Collected: 04/14/20 07:25

Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-9

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			313835	04/25/20 17:19	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313150	04/17/20 09:04	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 15:01	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: DUP-01

Date Collected: 04/13/20 10:53

Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-10

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			313835	04/25/20 17:34	SAC	TAL PIT
		Instrument ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	313150	04/17/20 09:04	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313842	04/24/20 15:03	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	313060	04/16/20 10:22	AVS	TAL PIT
		Instrument ID: NOEQUIP								

Laboratory References:

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

Analyst References:

Lab: TAL PIT

    Batch Type: Prep

        KEM = Kimberly Mahoney

    Batch Type: Analysis

        AVS = Abbey Smith

        RSK = Robert Kurtz

        SAC = Shawn Clemente

Eurofins TestAmerica, Pittsburgh

Client Sample Results

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

Job ID: 180-104637-1

Client Sample ID: MW-11
Date Collected: 04/13/20 12:10
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-1
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.2		1.00	0.320	mg/L			04/25/20 13:14	1
Fluoride	0.0672	J	0.100	0.0263	mg/L			04/25/20 13:14	1
Sulfate	2.47		1.00	0.380	mg/L			04/25/20 13:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:01	04/24/20 14:29	1
Calcium	2.03		0.500	0.127	mg/L		04/17/20 09:01	04/24/20 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	63.0		10.0	10.0	mg/L			04/16/20 10:22	1

Client Sample ID: MW-18
Date Collected: 04/14/20 07:50
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-2
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.15		1.00	0.320	mg/L			04/25/20 15:01	1
Fluoride	0.0764	J	0.100	0.0263	mg/L			04/25/20 15:01	1
Sulfate	3.96		1.00	0.380	mg/L			04/25/20 15:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:01	04/24/20 14:31	1
Calcium	0.627		0.500	0.127	mg/L		04/17/20 09:01	04/24/20 14:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	29.0		10.0	10.0	mg/L			04/16/20 10:22	1

Client Sample ID: MW-14
Date Collected: 04/13/20 14:25
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-3
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.90		1.00	0.320	mg/L			04/25/20 15:16	1
Fluoride	0.0411	J	0.100	0.0263	mg/L			04/25/20 15:16	1
Sulfate	1.43		1.00	0.380	mg/L			04/25/20 15:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:01	04/24/20 14:34	1
Calcium	2.74		0.500	0.127	mg/L		04/17/20 09:01	04/24/20 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28.0		10.0	10.0	mg/L			04/16/20 10:22	1

Eurofins TestAmerica, Pittsburgh

Client Sample ID: MW-15
Date Collected: 04/13/20 15:20
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-4
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.74		1.00	0.320	mg/L			04/25/20 15:32	1
Fluoride	0.0484	J	0.100	0.0263	mg/L			04/25/20 15:32	1
Sulfate	0.992	J	1.00	0.380	mg/L			04/25/20 15:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:04	04/24/20 14:48	1
Calcium	1.22		0.500	0.127	mg/L		04/17/20 09:04	04/24/20 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	39.0		10.0	10.0	mg/L			04/16/20 10:22	1

Client Sample ID: MW-16
Date Collected: 04/14/20 07:32
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-5
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.03		1.00	0.320	mg/L			04/25/20 15:47	1
Fluoride	0.0496	J	0.100	0.0263	mg/L			04/25/20 15:47	1
Sulfate	2.27		1.00	0.380	mg/L			04/25/20 15:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:04	04/24/20 14:51	1
Calcium	0.920		0.500	0.127	mg/L		04/17/20 09:04	04/24/20 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	36.0		10.0	10.0	mg/L			04/16/20 10:22	1

Client Sample ID: MW-17
Date Collected: 04/13/20 14:46
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-6
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.46		1.00	0.320	mg/L			04/25/20 16:02	1
Fluoride	0.0511	J	0.100	0.0263	mg/L			04/25/20 16:02	1
Sulfate	2.75		1.00	0.380	mg/L			04/25/20 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:04	04/24/20 14:53	1
Calcium	1.03		0.500	0.127	mg/L		04/17/20 09:04	04/24/20 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	27.0		10.0	10.0	mg/L			04/16/20 10:22	1

Eurofins TestAmerica, Pittsburgh

Client Sample Results

Client Sample ID: MW-19
Date Collected: 04/13/20 13:46
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-7
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.90		1.00	0.320	mg/L			04/25/20 16:48	1
Fluoride	0.0382	J	0.100	0.0263	mg/L			04/25/20 16:48	1
Sulfate	1.69		1.00	0.380	mg/L			04/25/20 16:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:04	04/24/20 14:56	1
Calcium	0.687		0.500	0.127	mg/L		04/17/20 09:04	04/24/20 14:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20.0		10.0	10.0	mg/L			04/16/20 10:22	1

Client Sample ID: FB-01
Date Collected: 04/14/20 07:30
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-8
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.320		1.00	0.320	mg/L			04/25/20 17:03	1
Fluoride	0.0413	J	0.100	0.0263	mg/L			04/25/20 17:03	1
Sulfate	<0.380		1.00	0.380	mg/L			04/25/20 17:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:04	04/24/20 14:58	1
Calcium	<0.127		0.500	0.127	mg/L		04/17/20 09:04	04/24/20 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			04/16/20 10:22	1

Client Sample ID: EB-01
Date Collected: 04/14/20 07:25
Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-9
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.320		1.00	0.320	mg/L			04/25/20 17:19	1
Fluoride	0.0431	J	0.100	0.0263	mg/L			04/25/20 17:19	1
Sulfate	<0.380		1.00	0.380	mg/L			04/25/20 17:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:04	04/24/20 15:01	1
Calcium	<0.127		0.500	0.127	mg/L		04/17/20 09:04	04/24/20 15:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			04/16/20 10:22	1

Eurofins TestAmerica, Pittsburgh

Client Sample Results

Client Sample ID: DUP-01

Date Collected: 04/13/20 10:53

Date Received: 04/15/20 10:15

Lab Sample ID: 180-104637-10

Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.4**		1.00	0.320	mg/L			04/25/20 17:34	1
Fluoride	**0.0402**	J	0.100	0.0263	mg/L			04/25/20 17:34	1
Sulfate	**5.00**		1.00	0.380	mg/L			04/25/20 17:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:04	04/24/20 15:03	1
Calcium	**1.69**		0.500	0.127	mg/L		04/17/20 09:04	04/24/20 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**54.0**		10.0	10.0	mg/L			04/16/20 10:22	1

Eurofins TestAmerica, Pittsburgh

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-313835/42
Matrix: Water
Analysis Batch: 313835

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.320		1.00	0.320	mg/L			04/25/20 19:52	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/25/20 19:52	1
Sulfate	<0.380		1.00	0.380	mg/L			04/25/20 19:52	1

Lab Sample ID: MB 180-313835/6
Matrix: Water
Analysis Batch: 313835

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.320		1.00	0.320	mg/L			04/25/20 10:56	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/25/20 10:56	1
Sulfate	<0.380		1.00	0.380	mg/L			04/25/20 10:56	1

Lab Sample ID: LCS 180-313835/41
Matrix: Water
Analysis Batch: 313835

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.44		mg/L		99	80 - 120
Fluoride	2.50	2.564		mg/L		103	80 - 120
Sulfate	50.0	49.42		mg/L		99	80 - 120

Lab Sample ID: LCS 180-313835/5
Matrix: Water
Analysis Batch: 313835

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.94		mg/L		100	80 - 120
Fluoride	2.50	2.604		mg/L		104	80 - 120
Sulfate	50.0	49.64		mg/L		99	80 - 120

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

Lab Sample ID: MB 180-313149/1-A
Matrix: Water
Analysis Batch: 313842

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 313149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:01	04/24/20 13:16	1
Calcium	<0.127		0.500	0.127	mg/L		04/17/20 09:01	04/24/20 13:16	1

Lab Sample ID: LCS 180-313149/2-A
Matrix: Water
Analysis Batch: 313842

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 313149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.322		mg/L		106	80 - 120
Calcium	25.0	26.24		mg/L		105	80 - 120

Eurofins TestAmerica, Pittsburgh

QC Sample Results

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

Lab Sample ID: MB 180-313150/1-A
Matrix: Water
Analysis Batch: 313842

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 313150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		04/17/20 09:04	04/24/20 14:36	1
Calcium	<0.127		0.500	0.127	mg/L		04/17/20 09:04	04/24/20 14:36	1

Lab Sample ID: LCS 180-313150/2-A
Matrix: Water
Analysis Batch: 313842

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 313150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.293		mg/L		103	80 - 120
Calcium	25.0	25.59		mg/L		102	80 - 120

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

Lab Sample ID: MB 180-313060/2
Matrix: Water
Analysis Batch: 313060

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			04/16/20 10:22	1

Lab Sample ID: LCS 180-313060/1
Matrix: Water
Analysis Batch: 313060

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	242	274.0		mg/L		113	80 - 120

Lab Sample ID: 180-104637-11 DU
Matrix: Water
Analysis Batch: 313060

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	57.0		59.00		mg/L		3	10

QC Association Summary

HPLC/IC

Analysis Batch: 313835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104637-1	MW-11	Total/NA	Water	EPA 9056A	
180-104637-2	MW-18	Total/NA	Water	EPA 9056A	
180-104637-3	MW-14	Total/NA	Water	EPA 9056A	
180-104637-4	MW-15	Total/NA	Water	EPA 9056A	
180-104637-5	MW-16	Total/NA	Water	EPA 9056A	
180-104637-6	MW-17	Total/NA	Water	EPA 9056A	
180-104637-7	MW-19	Total/NA	Water	EPA 9056A	
180-104637-8	FB-01	Total/NA	Water	EPA 9056A	
180-104637-9	EB-01	Total/NA	Water	EPA 9056A	
180-104637-10	DUP-01	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 313149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104637-1	MW-11	Total Recoverable	Water	3005A	
180-104637-2	MW-18	Total Recoverable	Water	3005A	
180-104637-3	MW-14	Total Recoverable	Water	3005A	

Prep Batch: 313150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104637-4	MW-15	Total Recoverable	Water	3005A	
180-104637-5	MW-16	Total Recoverable	Water	3005A	
180-104637-6	MW-17	Total Recoverable	Water	3005A	
180-104637-7	MW-19	Total Recoverable	Water	3005A	
180-104637-8	FB-01	Total Recoverable	Water	3005A	
180-104637-9	EB-01	Total Recoverable	Water	3005A	
180-104637-10	DUP-01	Total Recoverable	Water	3005A	

Analysis Batch: 313842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104637-1	MW-11	Total Recoverable	Water	EPA 6020B	313149
180-104637-2	MW-18	Total Recoverable	Water	EPA 6020B	313149
180-104637-3	MW-14	Total Recoverable	Water	EPA 6020B	313149
180-104637-4	MW-15	Total Recoverable	Water	EPA 6020B	313150
180-104637-5	MW-16	Total Recoverable	Water	EPA 6020B	313150
180-104637-6	MW-17	Total Recoverable	Water	EPA 6020B	313150
180-104637-7	MW-19	Total Recoverable	Water	EPA 6020B	313150
180-104637-8	FB-01	Total Recoverable	Water	EPA 6020B	313150
180-104637-9	EB-01	Total Recoverable	Water	EPA 6020B	313150
180-104637-10	DUP-01	Total Recoverable	Water	EPA 6020B	313150

General Chemistry

Analysis Batch: 313060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104637-1	MW-11	Total/NA	Water	SM 2540C	
180-104637-2	MW-18	Total/NA	Water	SM 2540C	
180-104637-3	MW-14	Total/NA	Water	SM 2540C	
180-104637-4	MW-15	Total/NA	Water	SM 2540C	
180-104637-5	MW-16	Total/NA	Water	SM 2540C	
180-104637-6	MW-17	Total/NA	Water	SM 2540C	

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General Chemistry (Continued)

Analysis Batch: 313060 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104637-7	MW-19	Total/NA	Water	SM 2540C	
180-104637-8	FB-01	Total/NA	Water	SM 2540C	
180-104637-9	EB-01	Total/NA	Water	SM 2540C	
180-104637-10	DUP-01	Total/NA	Water	SM 2540C	

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Chain of Custody Record

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

COC No:

Page: Page 1 of 1

Job #:

Client Information

Client Contact:	Lauren Petty & Lauren Parker
Company:	SCS
Address:	PO BOX 2641 GSC8
City:	Birmingham, AL 35291
State, Zip:	AL 35291
Phone:	
Email:	lmpetty@southernco.COM ; laparker@southern.com
Project Name:	Plant Daniel
Site:	NAMU

Sampler:	Philip Evans
Phone:	850-336-0192
Due Date Requested:	
TAT Requested (days):	
PO #:	SCS10382606
WO #:	
Project #:	18020047
SSOW#:	

Lab PM:	Bortol, Veronica
E-Mail:	veronica.bortol@testamericainc.com

Carrier Tracking No(s):

Analysis Requested

Analysis notes (handwritten):
- Boron, Calcium, chloride, Fluoride, Sulfate, TDS

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:

180-104637 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)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)		Total Number of containers
MW-11	4/13/20	1010	G	Water			X	X	
MW-18	4/14/20	0750		Water					
MW-14	4/13/20	1425		Water					
MW-15	4/13/20	1520		Water					
MW-16	4/14/20	0737							
MW-17	4/13/20	1446							
MW-19	4/13/20	1346							
FB-01	4/14/20	0730					→	X	
EB-01	4/14/20	0725					→	X	
Dup-01	4/13/20	1053	G	Water					

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:
Relinquished by:	Date/Time: 4/14/20 1500	Company: SCS
Relinquished by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:

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:	4/15/20 1015	Eurofins
Received by:	Date/Time:	Company:
Received by:	Date/Time:	Company:

Cooler Temperature(s) °C and Other Remarks:

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

Ver: 01/16/2019

8/4/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: Southern Company

Login Number: 104637
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

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

Product Name: Low-Flow System

Date: 2020-04-13 12:09:42

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Daniel CCR NAMU	Tubing Diameter	.17 in
Site Name	Daniel	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	30.5 ft

Well Information:		Pumping Information:	
Well ID	MW-11	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.6585369 L
Well Total Depth	33 ft	Calculated Sample Rate	300 sec
Screen Length	5 ft	Stabilization Drawdown	34.8 in
Depth to Water	13.65 ft	Total Volume Pumped	18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:46:29	1500.02	21.93	4.69	69.29	1.19	16.32	0.71	196.99
Last 5	11:51:34	1805.02	21.97	4.69	68.58	1.17	16.38	0.53	204.34
Last 5	11:56:34	2105.02	21.91	4.70	68.05	1.12	16.44	0.47	212.61
Last 5	12:01:34	2405.02	21.85	4.70	67.72	1.05	16.50	0.41	219.61
Last 5	12:06:36	2707.02	21.75	4.70	67.38	0.82	16.55	0.35	218.96
Variance 0			-0.06	0.01	-0.53			-0.06	8.27
Variance 1			-0.06	-0.01	-0.33			-0.07	7.01
Variance 2			-0.10	-0.00	-0.34			-0.05	-0.65

Notes
        Sample time @ 1210. Sunny 68.

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-13 14:21:48

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Daniel CCR NAMU	Tubing Diameter	.17 in
Site Name	Daniel	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	38.2 ft

Well Information:		Pumping Information:	
Well ID	MW-14	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.680854 L
Well Total Depth	40.7 ft	Calculated Sample Rate	300 sec
Screen Length	5 ft	Stabilization Drawdown	0.96 in
Depth to Water	13.02 ft	Total Volume Pumped	28 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	13:59:19	3004.02	23.50	4.96	54.77	2.10	13.10	2.27	178.72
Last 5	14:04:20	3305.02	22.96	4.98	54.18	1.96	13.10	2.60	173.83
Last 5	14:09:20	3605.02	22.49	4.99	54.70	1.88	13.10	2.60	171.61
Last 5	14:14:20	3905.02	22.54	4.98	54.00	1.70	13.10	2.62	169.16
Last 5	14:19:21	4206.02	22.58	4.96	53.39	1.72	13.10	2.65	168.32
Variance 0			-0.47	0.01	0.51			0.01	-2.22
Variance 1			0.05	-0.02	-0.70			0.02	-2.45
Variance 2			0.04	-0.02	-0.61			0.02	-0.83

Notes
     Sample time @ 1425. Sunny 84.

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-13 15:19:40

Project Information:

Operator Name	Philip Evans
Company Name	RDH Environmental
Project Name	Plant Daniel NAMU CCR
Site Name	Daniel
Latitude	0º 0' 0"
Longitude	0º 0' 0"
Sonde SN	417744
Turbidity Make/Model	HACH 2100Q

Pump Information:

Pump Model/Type	QED
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	42 ft
Pump placement from TOC	37 ft

Well Information:

Well ID	MW-15
Well diameter	2 in
Well Total Depth	39.5 ft
Screen Length	5 ft
Depth to Water	12.38 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.6674637 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	0.84 in
Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	15:01:41	300.02	23.07	4.69	50.58	0.64	12.45	2.48	175.05
Last 5	15:06:41	600.02	22.89	4.71	50.91	0.70	12.45	2.25	173.44
Last 5	15:11:41	900.02	22.80	4.70	50.56	0.70	12.45	2.22	173.26
Last 5	15:16:41	1200.02	22.76	4.71	50.58	0.71	12.45	2.22	172.54
Last 5									
Variance 0			-0.18	0.02	0.33			-0.23	-1.61
Variance 1			-0.09	-0.01	-0.35			-0.03	-0.17
Variance 2			-0.05	0.01	0.03			-0.00	-0.73

Notes
        Sample time @ 1520. Sunny 85.

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-14 07:47:19

Project Information:

Operator Name	Philip Evans
Company Name	RDH Environmental
Project Name	Plant Daniel NAMU CCR
Site Name	Daniel
Latitude	0º 0' 0"
Longitude	0º 0' 0"
Sonde SN	417744
Turbidity Make/Model	HACH 2100Q

Pump Information:

Pump Model/Type	QED
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	45 ft
Pump placement from TOC	41.9 ft

Well Information:

Well ID	MW-18
Well diameter	2 in
Well Total Depth	44.4 ft
Screen Length	5 ft
Depth to Water	17.30 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.680854 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	0.6 in
Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:31:00	316.02	19.99	4.74	43.99	0.30	17.35	0.22	128.77
Last 5	07:36:00	616.02	19.99	4.72	43.82	0.32	17.35	0.21	126.83
Last 5	07:41:00	916.02	20.01	4.75	43.65	0.30	17.35	0.21	125.19
Last 5	07:46:00	1216.02	20.04	4.75	43.60	0.30	17.35	0.21	123.62
Last 5									
Variance 0			-0.00	-0.02	-0.17			-0.01	-1.95
Variance 1			0.02	0.03	-0.17			-0.00	-1.64
Variance 2			0.03	0.00	-0.04			-0.00	-1.56

Notes
    Sample time @ 0750. Sunny 55. EB-01@ 0725.

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-13 13:46:50

Project Information:

Operator Name	Brett Surles	
Company Name	RDH	
Project Name	NAMU	
Site Name	Plant Daniel NAMU Wells	
Latitude	0° 0' 0"	
Longitude	0° 0' 0"	
Sonde SN	632615	
Turbidity Make/Model	HACH	

Pump Information:

Pump Model/Type	WED
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	35 ft
Pump placement from TOC	27.4 ft

Well Information:

Well ID	MW-19
Well diameter	2 in
Well Total Depth	32.4 ft
Screen Length	5 ft
Depth to Water	19.10 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.6412198 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	0.05 in
Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	13:25:27	600.02	23.16	5.03	35.79	5.04	19.15	0.67	134.91
Last 5	13:30:27	900.02	23.10	5.04	36.34	4.22	19.15	0.37	136.05
Last 5	13:35:27	1200.02	23.07	5.05	35.99	3.63	19.15	0.26	137.80
Last 5	13:40:27	1500.02	23.23	5.06	35.98	2.83	19.15	0.22	140.26
Last 5	13:45:27	1800.02	23.20	5.06	35.90	1.73	19.15	0.20	143.43
Variance 0			-0.03	0.01	-0.35			-0.11	1.75
Variance 1			0.16	0.00	-0.01			-0.04	2.46
Variance 2			-0.03	0.00	-0.09			-0.01	3.17

Notes
    Sample@1346, Sunny 85

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-13 14:46:27

Project Information:		Pump Information:	
Operator Name	Brett Surles	Pump Model/Type	WED
Company Name	RDH	Tubing Type	PE
Project Name	NAMU	Tubing Diameter	.17 in
Site Name	Plant Daniel NAMU Wells	Tubing Length	30 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	HACH	Pump placement from TOC	26 ft

Well Information:		Pumping Information:	
Well ID	MW-17	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.6189027 L
Well Total Depth	28.5 ft	Calculated Sample Rate	300 sec
Screen Length	5 ft	Stabilization Drawdown	0.01 in
Depth to Water	7.75 ft	Total Volume Pumped	16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:25:10	1200.02	23.97	5.02	47.24	0.85	7.76	0.19	172.42
Last 5	14:30:10	1500.02	23.03	4.99	46.78	0.98	7.76	0.17	174.62
Last 5	14:35:10	1800.02	22.89	4.99	47.22	1.05	7.76	0.15	174.75
Last 5	14:40:10	2100.02	22.76	4.99	47.11	0.82	7.76	0.13	175.34
Last 5	14:45:10	2400.02	22.76	4.99	47.11	0.65	7.76	0.13	175.39
Variance 0			-0.14	0.00	0.43			-0.02	0.14
Variance 1			-0.13	-0.00	-0.11			-0.01	0.59
Variance 2			0.00	0.00	-0.00			-0.00	0.04

Notes
    Sample@1446, Sunny 87

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-14 07:32:50

Project Information:

Operator Name	Brett Surles
Company Name	RDH
Project Name	NAMU
Site Name	Plant Daniel NAMU Wells
Latitude	0° 0' 0"
Longitude	0° 0' 0"
Sonde SN	632615
Turbidity Make/Model	HACH

Pump Information:

Pump Model/Type	QED
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	60 ft
Pump placement from TOC	51 ft

Well Information:

Well ID	MW-16
Well diameter	2 in
Well Total Depth	56 ft
Screen Length	10 ft
Depth to Water	10.26 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.7528054 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	0.04 in
Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:16:21	300.02	20.50	4.68	53.80	1.25	10.30	0.20	85.83
Last 5	07:21:21	600.02	20.71	4.61	53.92	0.89	10.30	0.17	83.29
Last 5	07:26:21	900.02	20.66	4.61	54.03	0.71	10.30	0.16	82.12
Last 5	07:31:21	1200.02	20.53	4.61	54.12	0.58	10.30	0.15	81.79
Last 5									
Variance 0			0.21	-0.07	0.12			-0.03	-2.53
Variance 1			-0.05	-0.01	0.12			-0.01	-1.17
Variance 2			-0.13	-0.00	0.09			-0.01	-0.33

Notes
      Sample @0732 FB-1@0730, Sunny 55

Grab Samples

2nd
Semi-Annual
Monitoring Event

ANALYTICAL REPORT

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

Laboratory Job ID: 180-112739-1
Client Project/Site: CCR - Plant Daniel NAMU

For:
Southern Company
3535 Colonnade Parkway
Bin S 530 EC
Birmingham, Alabama 35243

Attn: Lauren Parker

Authorized for release by:
11/13/2020 8:54:22 AM

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

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Eurofins TestAmerica, Pittsburgh
11/13/2020

Case Narrative

Client: Southern Company

Project/Site: CCR - Plant Daniel NAMU

Job ID: 180-112739-1

Job ID: 180-112739-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-112739-1

Comments
No additional comments.

Receipt
The samples were received on 10/24/2020 9:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.4º C.

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

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

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

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

Eurofins TestAmerica, Pittsburgh
11/13/2020

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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 TestAmerica, Pittsburgh

Accreditation/Certification Summary

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-20 *
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-21
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-21
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-21
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-21

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

Eurofins TestAmerica, Pittsburgh

Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-112739-1	MW-11	Water	10/22/20 08:30	10/24/20 09:30	
180-112739-2	MW-14	Water	10/22/20 09:40	10/24/20 09:30	
180-112739-3	MW-15	Water	10/22/20 12:45	10/24/20 09:30	
180-112739-4	MW-16	Water	10/21/20 11:50	10/24/20 09:30	
180-112739-5	MW-17	Water	10/22/20 11:40	10/24/20 09:30	
180-112739-6	MW-18	Water	10/22/20 10:35	10/24/20 09:30	
180-112739-7	MW-19	Water	10/21/20 12:50	10/24/20 09:30	
180-112739-8	EB-01	Water	10/22/20 11:42	10/24/20 09:30	
180-112739-9	FB-01	Water	10/22/20 09:42	10/24/20 09:30	
180-112739-10	DUP-01	Water	10/21/20 10:50	10/24/20 09:30	
180-112739-11	DUP-02	Water	10/22/20 07:30	10/24/20 09:30	

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

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

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

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

Client Sample ID: MW-11
Date Collected: 10/22/20 08:30
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-1
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			336290	11/08/20 08:32	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:16	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:16	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334981	10/27/20 16:43	GRB	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			336254	10/22/20 09:30	DLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-14
Date Collected: 10/22/20 09:40
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-2
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			336290	11/08/20 10:16	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:19	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:20	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334981	10/27/20 16:43	GRB	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			336254	10/22/20 10:40	DLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-15
Date Collected: 10/22/20 12:45
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-3
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			336290	11/08/20 10:37	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:23	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:30	RSK	TAL PIT
		Instrument ID: A								

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

Client Sample ID: MW-15 **Lab Sample ID: 180-112739-3**
Date Collected: 10/22/20 12:45 **Matrix: Water**
Date Received: 10/24/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334966	10/27/20 14:41	GRB	TAL PIT
Total/NA	Analysis	Field Sampling		1			336254	10/22/20 13:45	DLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-16 **Lab Sample ID: 180-112739-4**
Date Collected: 10/21/20 11:50 **Matrix: Water**
Date Received: 10/24/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			336290	11/08/20 10:58	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:26	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:34	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334981	10/27/20 16:43	GRB	TAL PIT
Total/NA	Analysis	Field Sampling		1			336254	10/21/20 12:50	DLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-17 **Lab Sample ID: 180-112739-5**
Date Collected: 10/22/20 11:40 **Matrix: Water**
Date Received: 10/24/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			336290	11/08/20 11:19	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:30	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:38	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334966	10/27/20 14:41	GRB	TAL PIT
Total/NA	Analysis	Field Sampling		1			336254	10/22/20 12:40	DLL	TAL PIT
		Instrument ID: NOEQUIP								

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

Client Sample ID: MW-18
Date Collected: 10/22/20 10:35
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-6
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			336290	11/08/20 11:40	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:33	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:41	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334966	10/27/20 14:41	GRB	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			336254	10/22/20 11:35	DLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: MW-19
Date Collected: 10/21/20 12:50
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-7
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			336290	11/08/20 12:00	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:37	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:45	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334981	10/27/20 16:43	GRB	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			336254	10/21/20 13:50	DLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: EB-01
Date Collected: 10/22/20 11:42
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-8
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			336290	11/08/20 12:21	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:48	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:48	RSK	TAL PIT
		Instrument ID: A								

Eurofins TestAmerica, Pittsburgh

Client: Southern Company   Job ID: 180-112739-1
Project/Site: CCR - Plant Daniel NAMU

Client Sample ID: EB-01   Lab Sample ID: 180-112739-8
Date Collected: 10/22/20 11:42   **Matrix: Water**
Date Received: 10/24/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334966	10/27/20 14:41	GRB	TAL PIT

Client Sample ID: FB-01   Lab Sample ID: 180-112739-9
Date Collected: 10/22/20 09:42   **Matrix: Water**
Date Received: 10/24/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			336290	11/08/20 12:42	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:51	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:52	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334966	10/27/20 14:41	GRB	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: DUP-01   Lab Sample ID: 180-112739-10
Date Collected: 10/21/20 10:50   **Matrix: Water**
Date Received: 10/24/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			336290	11/08/20 13:03	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:55	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:55	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334981	10/27/20 16:43	GRB	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: DUP-02   Lab Sample ID: 180-112739-11
Date Collected: 10/22/20 07:30   **Matrix: Water**
Date Received: 10/24/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			336290	11/08/20 05:03	MJH	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335788	11/03/20 17:58	RSK	TAL PIT
		Instrument ID: A								

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

Client Sample ID: DUP-02　　　　　　　　　　　　　　　　　　　　**Lab Sample ID: 180-112739-11**
Date Collected: 10/22/20 07:30　　　　　　　　　　　　　　　　　　　　**Matrix: Water**
Date Received: 10/24/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	335431	10/30/20 14:56	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			335954	11/04/20 11:59	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	334966	10/27/20 14:41	GRB	TAL PIT
		Instrument ID: NOEQUIP								

Laboratory References:

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

Analyst References:

Lab: TAL PIT
　　　Batch Type: Prep
　　　　　TJO = Tyler Oliver
　　　Batch Type: Analysis
　　　　　DLL = Debbie Lowe
　　　　　GRB = Gabriel Berghe
　　　　　MJH = Matthew Hartman
　　　　　RSK = Robert Kurtz

Client Sample Results

Client Sample ID: MW-11
Date Collected: 10/22/20 08:30
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-1
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.4		1.00	0.320	mg/L			11/08/20 08:32	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 08:32	1
Sulfate	2.01		1.00	0.380	mg/L			11/08/20 08:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.103		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:16	1
Calcium	2.02		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	41.0		10.0	10.0	mg/L			10/27/20 16:43	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.66				SU			10/22/20 09:30	1

Client Sample ID: MW-14
Date Collected: 10/22/20 09:40
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-2
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.50		1.00	0.320	mg/L			11/08/20 10:16	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 10:16	1
Sulfate	1.76		1.00	0.380	mg/L			11/08/20 10:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0559	J	0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:19	1
Calcium	2.17		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	25.0		10.0	10.0	mg/L			10/27/20 16:43	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.09				SU			10/22/20 10:40	1

Client Sample ID: MW-15
Date Collected: 10/22/20 12:45
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-3
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.69		1.00	0.320	mg/L			11/08/20 10:37	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 10:37	1
Sulfate	1.04		1.00	0.380	mg/L			11/08/20 10:37	1

Eurofins TestAmerica, Pittsburgh

Client Sample ID: MW-15
Date Collected: 10/22/20 12:45
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0437	J	0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:23	1
Calcium	1.35		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	34.0		10.0	10.0	mg/L			10/27/20 14:41	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.78				SU			10/22/20 13:45	1

Client Sample ID: MW-16
Date Collected: 10/21/20 11:50
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-4
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.36		1.00	0.320	mg/L			11/08/20 10:58	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 10:58	1
Sulfate	2.15		1.00	0.380	mg/L			11/08/20 10:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:26	1
Calcium	0.798		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	33.0		10.0	10.0	mg/L			10/27/20 16:43	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.5				SU			10/21/20 12:50	1

Client Sample ID: MW-17
Date Collected: 10/22/20 11:40
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-5
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.37		1.00	0.320	mg/L			11/08/20 11:19	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 11:19	1
Sulfate	2.98		1.00	0.380	mg/L			11/08/20 11:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:30	1
Calcium	0.969		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	29.0		10.0	10.0	mg/L			10/27/20 14:41	1

Eurofins TestAmerica, Pittsburgh

Client Sample ID: MW-17
Date Collected: 10/22/20 11:40
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-5
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.01				SU			10/22/20 12:40	1

Client Sample ID: MW-18
Date Collected: 10/22/20 10:35
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-6
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.89		1.00	0.320	mg/L			11/08/20 11:40	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 11:40	1
Sulfate	3.37		1.00	0.380	mg/L			11/08/20 11:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0401	J	0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:33	1
Calcium	0.553		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22.0		10.0	10.0	mg/L			10/27/20 14:41	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.7				SU			10/22/20 11:35	1

Client Sample ID: MW-19
Date Collected: 10/21/20 12:50
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-7
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.25		1.00	0.320	mg/L			11/08/20 12:00	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 12:00	1
Sulfate	1.31		1.00	0.380	mg/L			11/08/20 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:37	1
Calcium	0.806		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	19.0		10.0	10.0	mg/L			10/27/20 16:43	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.05				SU			10/21/20 13:50	1

Eurofins TestAmerica, Pittsburgh

Client: Southern Company

Project/Site: CCR - Plant Daniel NAMU

Client Sample ID: EB-01
Date Collected: 10/22/20 11:42
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-8
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.320		1.00	0.320	mg/L			11/08/20 12:21	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 12:21	1
Sulfate	<0.380		1.00	0.380	mg/L			11/08/20 12:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:48	1
Calcium	<0.127		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			10/27/20 14:41	1

Client Sample ID: FB-01
Date Collected: 10/22/20 09:42
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-9
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.320		1.00	0.320	mg/L			11/08/20 12:42	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 12:42	1
Sulfate	<0.380		1.00	0.380	mg/L			11/08/20 12:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:51	1
Calcium	<0.127		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			10/27/20 14:41	1

Client Sample ID: DUP-01
Date Collected: 10/21/20 10:50
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-10
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.32**		1.00	0.320	mg/L			11/08/20 13:03	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 13:03	1
Sulfate	**2.11**		1.00	0.380	mg/L			11/08/20 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:55	1
Calcium	**0.812**		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**37.0**		10.0	10.0	mg/L			10/27/20 16:43	1

Eurofins TestAmerica, Pittsburgh

11/13/2020

Client Sample Results

Client Sample ID: DUP-02
Date Collected: 10/22/20 07:30
Date Received: 10/24/20 09:30

Lab Sample ID: 180-112739-11
Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.3**		1.00	0.320	mg/L			11/08/20 05:03	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 05:03	1
Sulfate	**1.81**		1.00	0.380	mg/L			11/08/20 05:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 17:58	1
Calcium	**2.07**		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**44.0**		10.0	10.0	mg/L			10/27/20 14:41	1

Eurofins TestAmerica, Pittsburgh

QC Sample Results

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-336290/45
Matrix: Water
Analysis Batch: 336290

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.320		1.00	0.320	mg/L			11/08/20 02:58	1
Fluoride	<0.0440		0.100	0.0440	mg/L			11/08/20 02:58	1
Sulfate	<0.380		1.00	0.380	mg/L			11/08/20 02:58	1

Lab Sample ID: LCS 180-336290/44
Matrix: Water
Analysis Batch: 336290

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	51.19		mg/L		102	80 - 120
Fluoride	2.50	2.444		mg/L		98	80 - 120
Sulfate	50.0	51.02		mg/L		102	80 - 120

Lab Sample ID: 180-112739-1 MS
Matrix: Water
Analysis Batch: 336290

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	17.4		50.0	67.13		mg/L		99	80 - 120
Fluoride	<0.0440		2.50	2.502		mg/L		100	80 - 120
Sulfate	2.01		50.0	53.09		mg/L		102	80 - 120

Lab Sample ID: 180-112739-1 MSD
Matrix: Water
Analysis Batch: 336290

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	17.4		50.0	67.50		mg/L		100	80 - 120	1	15
Fluoride	<0.0440		2.50	2.545		mg/L		102	80 - 120	2	15
Sulfate	2.01		50.0	53.69		mg/L		103	80 - 120	1	15

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

Lab Sample ID: MB 180-335431/1-A
Matrix: Water
Analysis Batch: 335788

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 335431

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		10/30/20 14:56	11/03/20 16:22	1

Lab Sample ID: MB 180-335431/1-A
Matrix: Water
Analysis Batch: 335954

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 335431

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.127		0.500	0.127	mg/L		10/30/20 14:56	11/04/20 10:33	1

Eurofins TestAmerica, Pittsburgh

QC Sample Results

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

Lab Sample ID: LCS 180-335431/2-A
Matrix: Water
Analysis Batch: 335788

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 335431

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron			1.25	1.157		mg/L		93	80 - 120		

Lab Sample ID: LCS 180-335431/2-A
Matrix: Water
Analysis Batch: 335954

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 335431

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			25.0	27.09		mg/L		108	80 - 120		

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

Lab Sample ID: MB 180-334966/2
Matrix: Water
Analysis Batch: 334966

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			10/27/20 14:41	1

Lab Sample ID: LCS 180-334966/1
Matrix: Water
Analysis Batch: 334966

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	714	650.0		mg/L		91	80 - 120

Lab Sample ID: 180-112739-3 DU
Matrix: Water
Analysis Batch: 334966

Client Sample ID: MW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	34.0		34.00		mg/L		0	10

Lab Sample ID: MB 180-334981/2
Matrix: Water
Analysis Batch: 334981

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			10/27/20 16:43	1

Lab Sample ID: LCS 180-334981/1
Matrix: Water
Analysis Batch: 334981

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	714	658.0		mg/L		92	80 - 120

Eurofins TestAmerica, Pittsburgh

QC Association Summary

Project/Site: CCR - Plant Daniel NAMU

HPLC/IC

Analysis Batch: 336290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112739-1	MW-11	Total/NA	Water	EPA 9056A	
180-112739-2	MW-14	Total/NA	Water	EPA 9056A	
180-112739-3	MW-15	Total/NA	Water	EPA 9056A	
180-112739-4	MW-16	Total/NA	Water	EPA 9056A	
180-112739-5	MW-17	Total/NA	Water	EPA 9056A	
180-112739-6	MW-18	Total/NA	Water	EPA 9056A	
180-112739-7	MW-19	Total/NA	Water	EPA 9056A	
180-112739-8	EB-01	Total/NA	Water	EPA 9056A	
180-112739-9	FB-01	Total/NA	Water	EPA 9056A	
180-112739-10	DUP-01	Total/NA	Water	EPA 9056A	
180-112739-11	DUP-02	Total/NA	Water	EPA 9056A	
MB 180-336290/45	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-336290/44	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-112739-1 MS	MW-11	Total/NA	Water	EPA 9056A	
180-112739-1 MSD	MW-11	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 335431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112739-1	MW-11	Total Recoverable	Water	3005A	
180-112739-2	MW-14	Total Recoverable	Water	3005A	
180-112739-3	MW-15	Total Recoverable	Water	3005A	
180-112739-4	MW-16	Total Recoverable	Water	3005A	
180-112739-5	MW-17	Total Recoverable	Water	3005A	
180-112739-6	MW-18	Total Recoverable	Water	3005A	
180-112739-7	MW-19	Total Recoverable	Water	3005A	
180-112739-8	EB-01	Total Recoverable	Water	3005A	
180-112739-9	FB-01	Total Recoverable	Water	3005A	
180-112739-10	DUP-01	Total Recoverable	Water	3005A	
180-112739-11	DUP-02	Total Recoverable	Water	3005A	
MB 180-335431/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-335431/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 335788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112739-1	MW-11	Total Recoverable	Water	EPA 6020B	335431
180-112739-2	MW-14	Total Recoverable	Water	EPA 6020B	335431
180-112739-3	MW-15	Total Recoverable	Water	EPA 6020B	335431
180-112739-4	MW-16	Total Recoverable	Water	EPA 6020B	335431
180-112739-5	MW-17	Total Recoverable	Water	EPA 6020B	335431
180-112739-6	MW-18	Total Recoverable	Water	EPA 6020B	335431
180-112739-7	MW-19	Total Recoverable	Water	EPA 6020B	335431
180-112739-8	EB-01	Total Recoverable	Water	EPA 6020B	335431
180-112739-9	FB-01	Total Recoverable	Water	EPA 6020B	335431
180-112739-10	DUP-01	Total Recoverable	Water	EPA 6020B	335431
180-112739-11	DUP-02	Total Recoverable	Water	EPA 6020B	335431
MB 180-335431/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	335431
LCS 180-335431/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	335431

Metals

Analysis Batch: 335954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112739-1	MW-11	Total Recoverable	Water	EPA 6020B	335431
180-112739-2	MW-14	Total Recoverable	Water	EPA 6020B	335431
180-112739-3	MW-15	Total Recoverable	Water	EPA 6020B	335431
180-112739-4	MW-16	Total Recoverable	Water	EPA 6020B	335431
180-112739-5	MW-17	Total Recoverable	Water	EPA 6020B	335431
180-112739-6	MW-18	Total Recoverable	Water	EPA 6020B	335431
180-112739-7	MW-19	Total Recoverable	Water	EPA 6020B	335431
180-112739-8	EB-01	Total Recoverable	Water	EPA 6020B	335431
180-112739-9	FB-01	Total Recoverable	Water	EPA 6020B	335431
180-112739-10	DUP-01	Total Recoverable	Water	EPA 6020B	335431
180-112739-11	DUP-02	Total Recoverable	Water	EPA 6020B	335431
MB 180-335431/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	335431
LCS 180-335431/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	335431

General Chemistry

Analysis Batch: 334966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112739-3	MW-15	Total/NA	Water	SM 2540C	
180-112739-5	MW-17	Total/NA	Water	SM 2540C	
180-112739-6	MW-18	Total/NA	Water	SM 2540C	
180-112739-8	EB-01	Total/NA	Water	SM 2540C	
180-112739-9	FB-01	Total/NA	Water	SM 2540C	
180-112739-11	DUP-02	Total/NA	Water	SM 2540C	
MB 180-334966/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-334966/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-112739-3 DU	MW-15	Total/NA	Water	SM 2540C	

Analysis Batch: 334981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112739-1	MW-11	Total/NA	Water	SM 2540C	
180-112739-2	MW-14	Total/NA	Water	SM 2540C	
180-112739-4	MW-16	Total/NA	Water	SM 2540C	
180-112739-7	MW-19	Total/NA	Water	SM 2540C	
180-112739-10	DUP-01	Total/NA	Water	SM 2540C	
MB 180-334981/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-334981/1	Lab Control Sample	Total/NA	Water	SM 2540C	
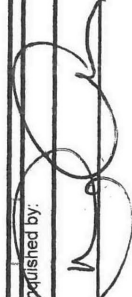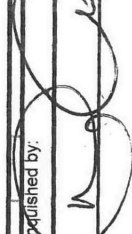
Field Service / Mobile Lab

Analysis Batch: 336254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112739-1	MW-11	Total/NA	Water	Field Sampling	
180-112739-2	MW-14	Total/NA	Water	Field Sampling	
180-112739-3	MW-15	Total/NA	Water	Field Sampling	
180-112739-4	MW-16	Total/NA	Water	Field Sampling	
180-112739-5	MW-17	Total/NA	Water	Field Sampling	
180-112739-6	MW-18	Total/NA	Water	Field Sampling	
180-112739-7	MW-19	Total/NA	Water	Field Sampling	

Eurofins TestAmerica, Pittsburgh

Chain of Custody Record

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

Client Information

Client Contact: SCS Contacts
Company: SCS
Address: 3535 Colonnade Pkwy Bin S 530 EC
City: Birmingham
State, Zip: AL, 35243
Phone: 205-992-6283
Email: SCS Contacts
Project Name: CCR Plant Daniel
Site:

Sampler: Philip Evans
Phone: 850-336-0192

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

COC No.:
Page: Page 1 of 21
Job #:

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

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
M - Hexane
N - None
O - AsNaO2
P - Na2O4S

Analysis Requested

180-112739 Chain of Custody

Special Instructions/Note:
✱ see attached page for analysis

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=Air)	Appendix 3
MW-11	10/22/20	0830	G	W	X
MW-14	10/22/20	0940			
MW-15	10/22/20	1245			
MW-16	10/21/20	1150			
MW-17	10/22/20	1140			
MW-18	10/22/20	1035			
MW-19	10/21/20	1250			
EB-01	10/22/20	1142			
EB-01	10/22/20	0942			
DUP-01	10/21/20	1050			
DUP-02	10/22/20	0730	G	W	X

Preservation Code:

Possible Hazard Identification: Non-Hazard / Flammable / Skin Irritant / Poison B / Unknown / Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal: Return To Client / Disposal By Lab / Archive For ___ Months
Special Instructions/QC Requirements:

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

Relinquished by: Company SCS Date/Time: 10/22/20 1445 Received by: Company ES Date/Time: 10-04-20
Relinquished by: Company Date/Time: Received by: Company Date/Time: 9:30
Relinquished by: Company Date/Time: Received by: Company Date/Time:

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

Ver: 01/16/2019

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State Monitoring

Plant	Site	Sample	Methods	Constituents	Monitoring Wells
Daniel	NAMU	April, October	6020, SM4500-Cl-E, SM4500-SO4-E	Arsenic, Cadmium, Selenium, Chloride, Sulfate	MW-11, MW-12, MW-13, MW-19
Daniel	GSA	April, October	6010B, 7470A, SM4500-SO4-E	Barium, Chromium, Mercury, Selenium, Sulfate, Zinc	MW-1, MW-2, MW-3, MW-4
Ratcliffe	GAMU	December, June	6010C	Arsenic, Barium, Boron, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Vanadium, Zinc	MWA-1, MWA-2, MWA-2Z, MWA-3, MWA-3Z, MWC-4, MWC-5, MWC-6, MWC-7, MWC-8
			SM4500-Cl-E	Chloride	
			SM4500-F C	Fluoride	
			SM4500-SO4-E	Sulfate	
			7470A	Mercury	
			SM2540C	TDS	
			SM2540D	TSS	

CCR Monitoring

Plant	Site	Sample	Methods	Constituents	Monitoring Wells
Daniel	NAMU	April, October	6020, SM4500-Cl-E, SM4500-SO4-E	Appendix III	MW-11, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19
Daniel	Ash Pond B	April, October	6010, SM4500-Cl-E, SM4500-SO4-E	Appendix III, Appendix IV	BAW-1, BAW-2A, BAW-3, BAW-4, BAW-5, BAW-7, PZ-8, PZ-9
Daniel	GSA	April, October	6020, SM4500-Cl-E, SM4500-SO4-E	Appendix III, Appendix IV	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10
Watson	AP	October, March	6020, SM4500-Cl-E, SM4500-SO4-E	Appendix III, Appendix IV	APMW-1R, APMW-2, APMW-3, APMW-4, APMW-5, APMW-6R, APMW-7, APMW-8, APMW-9, APMW-10, APMW-11, APMW-12, APMW-13, APMW-14, APMW-15, APMW-16, APMW-2D, APMW-3D, APMW-4D, APMW-5D, APMW-6D, APMW-8D, APMW-10D

Appendix III	Appendix IV
Boron	Antimony
Calcium	Arsenic
Chloride	Barium
Fluoride	Beryllium
pH (Field)	Cadmium
Sulfate	Chromium
TDS	Cobalt
	Combined Radium 226 + 228
	Fluoride
	Lead
	Lithium
	Mercury
	Molybdenum
	Selenium
	Thallium

11/13/2020

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-112739-1

Login Number: 112739
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

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

Product Name: Low-Flow System

Date: 2020-10-21 11:51:56

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Daniel CCR NAMU	Tubing Diameter	.17 in
Site Name	Daniel	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	25.8 ft

Well Information:		Pumping Information:	
Well ID	MW-16	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.6362198 L
Well Total Depth	28.3 ft	Calculated Sample Rate	300 sec
Screen Length	5 ft	Stabilization Drawdown	0.84 in
Depth to Water	10.55 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:33:17	300.09	21.48	4.52	42.16	1.53	10.62	0.19	277.68
Last 5	11:38:17	600.04	21.64	4.53	41.67	1.39	10.62	0.18	273.30
Last 5	11:43:17	900.04	21.68	4.51	41.19	0.95	10.62	0.17	271.17
Last 5	11:48:17	1200.04	21.76	4.50	40.89	0.76	10.62	0.16	266.01
Last 5									
Variance 0			0.17	0.01	-0.49			-0.02	-4.39
Variance 1			0.04	-0.02	-0.48			-0.01	-2.12
Variance 2			0.07	-0.01	-0.29			-0.01	-5.16

Notes
        Sample time @ 1150. PC 85. DUP-01@ fake time 1050.

Grab Samples

Product Name: Low-Flow System

Date: 2020-10-21 12:50:08

Project Information:

		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Daniel CCR NAMU	Tubing Diameter	.17 in
Site Name	Daniel	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	27.4 ft

Well Information:

		Pumping Information:	
Well ID	MW-19	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.6362198 L
Well Total Depth	32.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.72 in
Depth to Water	19.58 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:26:00	900.04	21.74	5.05	33.89	3.14	19.63	0.20	108.39
Last 5	12:31:00	1200.04	21.75	4.97	33.38	2.45	19.63	0.17	102.63
Last 5	12:36:00	1500.04	21.73	4.95	33.11	1.90	19.63	0.18	101.16
Last 5	12:41:07	1807.04	21.75	5.05	33.15	1.89	19.63	0.17	97.31
Last 5	12:46:07	2107.04	21.78	5.05	33.03	1.85	19.63	0.17	97.24
Variance 0			-0.02	-0.02	-0.27			0.01	-1.47
Variance 1			0.02	0.09	0.03			-0.02	-3.85
Variance 2			0.03	0.00	-0.12			0.00	-0.07

Notes

    Sample time @ 1250. Sunny 85.

Grab Samples

Product Name: Low-Flow System

Date: 2020-10-22 08:31:00

Project Information:

Operator Name	Philip Evans
Company Name	RDH Environmental
Project Name	Plant Daniel CCR NAMU
Site Name	Daniel
Latitude	0º 0' 0"
Longitude	0º 0' 0"
Sonde SN	417744
Turbidity Make/Model	HACH 2100Q

Pump Information:

Pump Model/Type	QED
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	40 ft
Pump placement from TOC	30.5 ft

Well Information:

Well ID	MW-11
Well diameter	2 in
Well Total Depth	33 ft
Screen Length	5 ft
Depth to Water	13.40 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.6585369 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	38.64 in
Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:02:59	600.05	19.23	4.65	84.14	2.09	15.97	0.90	160.45
Last 5	08:07:59	900.05	19.23	4.63	82.76	1.89	16.20	0.58	152.56
Last 5	08:12:59	1200.05	19.23	4.64	81.70	1.56	16.45	0.39	145.83
Last 5	08:17:59	1500.05	19.24	4.65	80.66	1.54	16.54	0.31	140.36
Last 5	08:22:59	1800.04	19.26	4.66	79.64	1.54	16.62	0.28	136.36
Variance 0			0.00	0.01	-1.06			-0.19	-6.73
Variance 1			0.01	0.02	-1.04			-0.08	-5.48
Variance 2			0.02	0.00	-1.02			-0.03	-4.00

Notes
    Sample time @ 0830. Cloudy 85. DUP-02@ fake time 0730.

Grab Samples

Product Name: Low-Flow System

Date: 2020-10-22 09:38:30

Project Information:

Operator Name	Philip Evans
Company Name	RDH Environmental
Project Name	Plant Daniel CCR NAMU
Site Name	Daniel
Latitude	0º 0' 0"
Longitude	0º 0' 0"
Sonde SN	417744
Turbidity Make/Model	HACH 2100Q

Pump Information:

Pump Model/Type	QED
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	45 ft
Pump placement from TOC	38.2 ft

Well Information:

Well ID	MW-14
Well diameter	2 in
Well Total Depth	40.7 ft
Screen Length	5 ft
Depth to Water	12.78 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.680854 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	0.48 in
Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:15:14	600.05	19.71	5.12	44.65	3.05	12.82	3.62	143.25
Last 5	09:20:14	900.05	19.70	5.11	44.27	2.30	12.82	3.63	140.43
Last 5	09:25:14	1200.06	19.68	5.12	44.02	2.05	12.82	3.58	137.57
Last 5	09:30:14	1500.05	19.71	5.09	43.53	1.75	12.82	3.58	137.30
Last 5	09:35:14	1800.05	19.72	5.09	43.37	1.68	12.82	3.58	136.10
Variance 0			-0.02	0.01	-0.25			-0.06	-2.86
Variance 1			0.03	-0.03	-0.49			0.01	-0.28
Variance 2			0.01	0.00	-0.15			-0.01	-1.19

Notes
        Sample time @ 0940. Pc 85. FB-01@ 0942.

Grab Samples

Product Name: Low-Flow System

Date: 2020-10-22 10:32:07

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	QED
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Plant Daniel CCR NAMU	Tubing Diameter	.17 in
Site Name	Daniel	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	41.9 ft

Well Information:		Pumping Information:	
Well ID	MW-18	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.680854 L
Well Total Depth	44.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.24 in
Depth to Water	17.05 ft	Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:09:41	600.06	19.99	4.69	46.05	0.66	17.07	1.11	84.92
Last 5	10:14:41	900.05	20.03	4.70	45.99	0.70	17.07	0.58	72.68
Last 5	10:19:41	1200.05	19.99	4.70	46.01	0.72	17.07	0.47	65.86
Last 5	10:24:41	1500.06	19.99	4.71	45.72	0.74	17.07	0.52	62.29
Last 5	10:29:41	1800.05	20.03	4.70	45.95	0.79	17.07	0.40	59.99
Variance 0			-0.04	0.00	0.02			-0.10	-6.82
Variance 1			-0.00	0.01	-0.29			0.04	-3.57
Variance 2			0.04	-0.02	0.23			-0.11	-2.30

Notes

Sample time @ 1035. Cloudy 85.

Grab Samples

Product Name:	Low-Flow System	
Date:	2020-10-22 11:36:45	

Project Information:

Operator Name	Philip Evans
Company Name	RDH Environmental
Project Name	Plant Daniel CCR NAMU
Site Name	Daniel
Latitude	0º 0' 0"
Longitude	0º 0' 0"
Sonde SN	417744
Turbidity Make/Model	HACH 2100Q

Pump Information:

Pump Model/Type	QED
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	30 ft
Pump placement from TOC	26 ft

Well Information:

Well ID	MW-17
Well diameter	2 in
Well Total Depth	28.5 ft
Screen Length	5 ft
Depth to Water	7.80 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.6139027 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	0.24 in
Total Volume Pumped	18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:12:26	1500.05	20.70	5.00	43.71	0.65	7.82	0.21	26.38
Last 5	11:17:27	1801.06	21.10	5.01	43.73	0.66	7.82	0.19	22.30
Last 5	11:22:27	2101.06	20.62	5.01	43.79	0.68	7.82	0.19	19.75
Last 5	11:27:27	2401.05	20.64	5.02	43.77	0.68	7.82	0.17	17.10
Last 5	11:32:27	2701.06	20.80	5.01	43.83	0.67	7.82	0.16	14.74
Variance 0			-0.48	0.01	0.06			0.00	-2.54
Variance 1			0.02	0.01	-0.02			-0.02	-2.65
Variance 2			0.16	-0.01	0.06			-0.01	-2.35

Notes

Sample time @ 1140. PC 87. EB-01@ 1142.

Grab Samples

Product Name: Low-Flow System

Date: 2020-10-22 12:41:00

Project Information:

Operator Name	Philip Evans
Company Name	RDH Environmental
Project Name	Plant Daniel CCR NAMU
Site Name	Daniel
Latitude	0º 0' 0"
Longitude	0º 0' 0"
Sonde SN	417744
Turbidity Make/Model	HACH 2100Q

Pump Information:

Pump Model/Type	QED
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	42 ft
Pump placement from TOC	37 ft

Well Information:

Well ID	MW-15
Well diameter	2 in
Well Total Depth	39.5 ft
Screen Length	5 ft
Depth to Water	12.25 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.6674637 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	0.12 in
Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:22:45	300.06	20.75	4.77	50.76	0.74	12.26	2.95	151.51
Last 5	12:27:45	600.06	20.56	4.77	50.77	0.62	12.26	2.93	150.17
Last 5	12:32:45	900.06	20.53	4.76	50.75	0.53	12.26	2.98	148.04
Last 5	12:37:45	1200.07	20.44	4.78	50.87	0.50	12.26	2.95	145.66
Last 5									
Variance 0			-0.19	0.00	0.01			-0.02	-1.34
Variance 1			-0.03	-0.01	-0.02			0.05	-2.13
Variance 2			-0.09	0.02	0.12			-0.02	-2.38

Notes

Sample time @ 1245. PC 87.

Grab Samples

Appendix B

GROUNDWATER STATS
CONSULTING
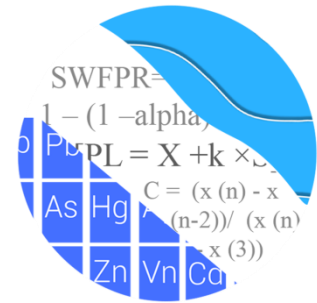
December 22, 2020

Southern Company Services
Attn: Ms. Lauren Parker
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Daniel North Ash Management Unit (NAMU)
        2020 Annual Statistical Analysis

Dear Ms. Parker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the Groundwater Monitoring Annual 2020 sample events 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 Groundwater Statistician of Groundwater Stats Consulting

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

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

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. Summaries of well/constituent pairs with 100% nondetects follow this letter.

For all constituents, a substitution of the most recent reporting limit is used for nondetect data. For calculating prediction limits, the substitution is performed for individual wells and may differ across wells. This generally gives the most conservative limit in each case. In the time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. Note that in the case of boron, the reporting limit increased to 0.08 mg/L from 0.05 mg/L in 2020 due to changing laboratory practices.

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. A summary of these values follows this letter (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 are recommended. Power curves were provided with the screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance recommendations as discussed below.

Summary of Statistical Methods:

Based on the evaluation for federal regulatory requirements, the following methods were selected for Appendix III constituents:

- 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 nondetects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling nondetects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

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.

Summary of Background Screening – Conducted in October 2017

Outlier and Trend Testing

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. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

No true seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

While trends may be visual, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. 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.

Appendix III – Determination of Spatial Variation

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

The ANOVA 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 are recommended for this facility to accommodate the groundwater quality. A summary table of the ANOVA results was included with previous screening.

Appendix III – Intrawell Method Eligibility Screening

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are conservative (i.e. lower) from a regulatory perspective, and that will rapidly identify a change in more recent compliance data from within a given well. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Prior to performing intrawell prediction limits, several steps are required to reasonably demonstrate downgradient water quality does not have existing impacts from the practices of the facility.

Exploratory data analysis was used as a general comparison of concentrations in downgradient wells for all Appendix III parameters recommended for intrawell analyses to concentrations reported in upgradient wells. Upper tolerance limits are used in conjunction with confidence intervals to determine whether the estimated averages in downgradient wells are higher than observed levels upgradient of the facility. The upper tolerance limits were constructed to represent the extreme upper range of possible background levels at the site. Lower tolerance limits are included for pH and represent both the upper and lower ranges of possible measurements in background wells.

In cases where downgradient average concentrations are higher than observed concentrations upgradient for a given constituent, an independent study and hydrogeological investigation would be required to identify local geochemical conditions and expected groundwater quality for the region to justify an intrawell approach. Such an assessment is beyond the scope of services provided by Groundwater Stats Consulting. When there is not an obvious explanation for observed concentration differences in downgradient wells relative to reported concentrations in upgradient wells, interwell prediction limits will initially be selected for the statistical method until further evidence shows that concentrations are due to natural variation rather than a result of the facility.

Parametric tolerance limits were constructed with a target of 99% confidence and 95% coverage using pooled upgradient well data for each of the Appendix III parameters recommended for intrawell analyses. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As more data are collected, the background population is better represented and the confidence and coverage levels increase.

Confidence intervals were constructed on downgradient wells for each of the Appendix III parameters exhibiting spatial variation, using the tolerance limits discussed above, to determine intrawell eligibility. When the entire confidence interval is above a background standard for a given parameter, interwell methods are initially recommended as the statistical method. Note that this screening identifies whether confidence intervals are above a background standard, but does not identify the reason for this occurrence. All confidence intervals were within background levels, making intrawell analyses possible for all Appendix III parameters.

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. An updated summary of Tukey's test results follows this letter (Figure C).

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

Groundwater Stats Consulting   •   www.groundwaterstats.com   •   913.829.1470

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.

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.

Statistical Analysis of Appendix III Parameters – April & October 2020

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 April 2019 for the April and October 2020 sample events (Figures D and E, respectively). Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at that well. The most recent samples for each of the sample events were compared to the prediction limits to determine whether there are statistically significant increases (SSIs). A recent update in the Sanitas statistical software for the calculation of Kaplan-Meier nondetect adjustment resulted in a slight change to the historical prediction limit for sulfate in well MW-11 of 9.791 mg/L to 9.808 mg/L. Additionally, the prediction limits for boron at wells MW-11 and MW-18 increased from 0.05 mg/L to 0.08 mg/L due to the recent change in reporting limits.

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. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter. No exceedances were identified for any wells during the April 2020 sampling event. No exceedances were identified in any downgradient wells during the October 2020 sampling event; therefore, no resampling is required. Exceedances were noted, however, for boron and chloride in upgradient well MW-11. This is an indication that groundwater quality is naturally changing upgradient of the site and those same changes may eventually be observed in downgradient wells.

While this is not the case in this report, 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. 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. Since no exceedances were identified in downgradient wells, no trend tests were constructed.

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
Project Manager

Kristina Rayner
Groundwater Statistician

100% Non-Detects

Analysis Run 12/22/2020 9:39 AM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Boron (mg/L)
MW-16, MW-17, MW-19

Appendix III - Intrawell Prediction Limits - April 2020 All Results (No Significant)

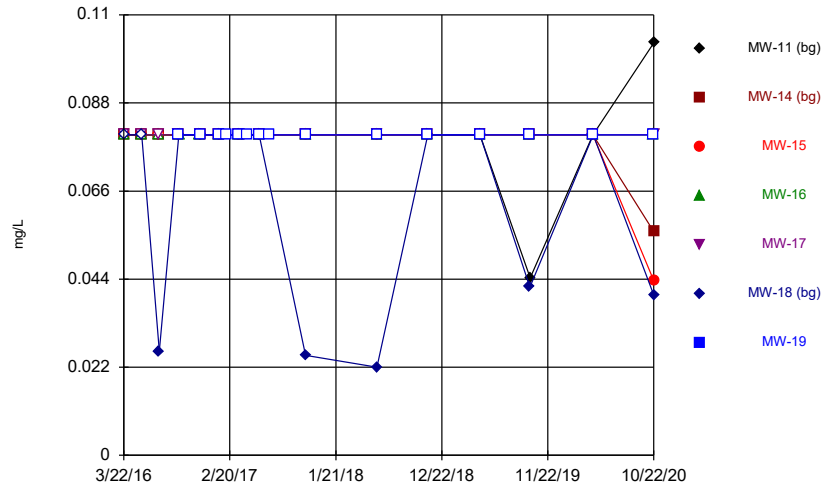| Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.08	n/a	4/13/2020	0.08ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.08	n/a	4/13/2020	0.08ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.08	n/a	4/13/2020	0.08ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.08	n/a	4/14/2020	0.08ND	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.17	n/a	4/13/2020	2.03	No	12	12.03	4.544	8.333	None	x^4	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	6.114	n/a	4/13/2020	2.74	No	12	3.859	1.01	8.333	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.535	n/a	4/13/2020	1.22	No	12	1.207	0.1472	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.234	n/a	4/14/2020	0.92	No	13	0.82	0.1886	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.4	n/a	4/13/2020	1.03	No	12	n/a	n/a	0	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Calcium (mg/L)	MW-18	1.062	n/a	4/14/2020	0.627	No	12	0.7384	0.1448	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-19	0.8608	n/a	4/13/2020	0.687	No	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-11	15.58	n/a	4/13/2020	14.2	No	27	12.12	1.814	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.79	n/a	4/13/2020	7.9	No	12	9.592	1.433	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.08	n/a	4/13/2020	7.74	No	12	7.696	1.067	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	10.64	n/a	4/14/2020	7.03	No	13	7.623	1.377	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.675	n/a	4/13/2020	6.46	No	12	6.845	0.8197	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.62	n/a	4/14/2020	6.15	No	12	8.581	1.361	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.783	n/a	4/13/2020	4.9	No	12	3601	1285	8.333	None	x^5	0.00188	Param Intra 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	4/13/2020	0.0672J	No	12	n/a	n/a	50	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.1	n/a	4/13/2020	0.0411J	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.1	n/a	4/13/2020	0.0484J	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.1	n/a	4/14/2020	0.0496J	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.2	n/a	4/13/2020	0.0511J	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	4/14/2020	0.0764J	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.2	n/a	4/13/2020	0.0382J	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.992	4.437	4/13/2020	4.7	No	13	4.715	0.1267	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.663	4.563	4/13/2020	4.96	No	12	5.113	0.2464	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	5.04	4.32	4/13/2020	4.71	No	12	4.68	0.1615	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.866	4.367	4/14/2020	4.61	No	12	4.617	0.1118	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.411	4.605	4/13/2020	4.99	No	12	5.008	0.1805	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-18	4.829	4.401	4/14/2020	4.75	No	12	4.615	0.09587	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	5.483	4.668	4/13/2020	5.06	No	13	5.075	0.1858	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-11	9.808	n/a	4/13/2020	2.47	No	27	4.944	2.552	18.52	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-14	5	n/a	4/13/2020	1.43	No	12	n/a	n/a	41.67	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-15	5	n/a	4/13/2020	0.992J	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	4/14/2020	2.27	No	12	n/a	n/a	66.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-17	3.046	n/a	4/13/2020	2.75	No	12	1.349	0.1777	16.67	Kaplan-Meier	sqrt(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	5.327	n/a	4/14/2020	3.96	No	12	3.897	0.6408	8.333	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	4/13/2020	1.69	No	12	n/a	n/a	58.33	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	82.24	n/a	4/13/2020	63	No	12	42.67	17.73	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	76.82	n/a	4/13/2020	28	No	12	38	17.39	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	58.47	n/a	4/13/2020	39	No	13	25.23	15.16	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	66.28	n/a	4/14/2020	36	No	12	23.33	19.24	25	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	44.84	n/a	4/13/2020	27	No	12	23.81	9.424	8.333	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	51.36	n/a	4/14/2020	29	No	12	26.33	11.21	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	46.26	n/a	4/13/2020	20	No	12	20.63	11.48	8.333	None	No	0.00188	Param Intra 1 of 2

Appendix III - Intrawell Prediction Limits - October 2020 Significant Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 12/22/2020, 9:43 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.08	n/a	10/22/2020	0.103	Yes	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Chloride (mg/L)	MW-11	15.58	n/a	10/22/2020	17.4	Yes	27	12.12	1.814	0	None	No	0.00188	Param Intra 1 of 2

Appendix III - Intrawell Prediction Limits - October 2020 All Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 12/22/2020, 9:43 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-11**	**0.08**	**n/a**	**10/22/2020**	**0.103**	**Yes**	**12**	**n/a**	**n/a**	**100**	**n/a**	**n/a**	**0.01077**	**NP Intra (NDs) 1 of 2**
Boron (mg/L)	MW-14	0.08	n/a	10/22/2020	0.0559J	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.08	n/a	10/22/2020	0.0437J	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.08	n/a	10/22/2020	0.0401J	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.17	n/a	10/22/2020	2.02	No	12	12.03	4.544	8.333	None	x^4	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	6.114	n/a	10/22/2020	2.17	No	12	3.859	1.01	8.333	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.535	n/a	10/22/2020	1.35	No	12	1.207	0.1472	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.234	n/a	10/21/2020	0.798	No	13	0.82	0.1886	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.4	n/a	10/22/2020	0.969	No	12	n/a	n/a	0	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Calcium (mg/L)	MW-18	1.062	n/a	10/22/2020	0.553	No	12	0.7384	0.1448	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-19	0.8608	n/a	10/21/2020	0.806	No	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
Chloride (mg/L)	**MW-11**	**15.58**	**n/a**	**10/22/2020**	**17.4**	**Yes**	**27**	**12.12**	**1.814**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	MW-14	12.79	n/a	10/22/2020	6.5	No	12	9.592	1.433	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.08	n/a	10/22/2020	8.69	No	12	7.696	1.067	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	10.64	n/a	10/21/2020	7.36	No	13	7.623	1.377	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.675	n/a	10/22/2020	6.37	No	12	6.845	0.8197	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.62	n/a	10/22/2020	6.89	No	12	8.581	1.361	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.783	n/a	10/21/2020	5.25	No	12	3601	1285	8.333	None	x^5	0.00188	Param Intra 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	50	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.1	n/a	10/21/2020	0.1ND	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.1	n/a	10/21/2020	0.1ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.992	4.437	10/22/2020	4.66	No	13	4.715	0.1267	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.663	4.563	10/22/2020	5.09	No	12	5.113	0.2464	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	5.04	4.32	10/22/2020	4.78	No	12	4.68	0.1615	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.866	4.367	10/21/2020	4.5	No	12	4.617	0.1118	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.411	4.605	10/22/2020	5.01	No	12	5.008	0.1805	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-18	4.829	4.401	10/22/2020	4.7	No	12	4.615	0.09587	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	5.483	4.668	10/21/2020	5.05	No	13	5.075	0.1858	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-11	9.808	n/a	10/22/2020	2.01	No	27	4.944	2.552	18.52	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-14	5	n/a	10/22/2020	1.76	No	12	n/a	n/a	41.67	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-15	5	n/a	10/22/2020	1.04	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	10/21/2020	2.15	No	12	n/a	n/a	66.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-17	3.046	n/a	10/22/2020	2.98	No	12	1.349	0.1777	16.67	Kaplan-Meier	sqrt(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	5.327	n/a	10/22/2020	3.37	No	12	3.897	0.6408	8.333	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	10/21/2020	1.31	No	12	n/a	n/a	58.33	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	82.24	n/a	10/22/2020	41	No	12	42.67	17.73	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	76.82	n/a	10/22/2020	25	No	12	38	17.39	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	58.47	n/a	10/22/2020	34	No	13	25.23	15.16	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	66.28	n/a	10/21/2020	33	No	12	23.33	19.24	25	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	44.84	n/a	10/22/2020	29	No	12	23.81	9.424	8.333	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	51.36	n/a	10/22/2020	22	No	12	26.33	11.21	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	46.26	n/a	10/21/2020	19	No	12	20.63	11.48	8.333	None	No	0.00188	Param Intra 1 of 2

FIGURE A.

Time Series

MW-11 (bg)
MW-14 (bg)
MW-15
MW-16
MW-17
MW-18 (bg)
MW-19
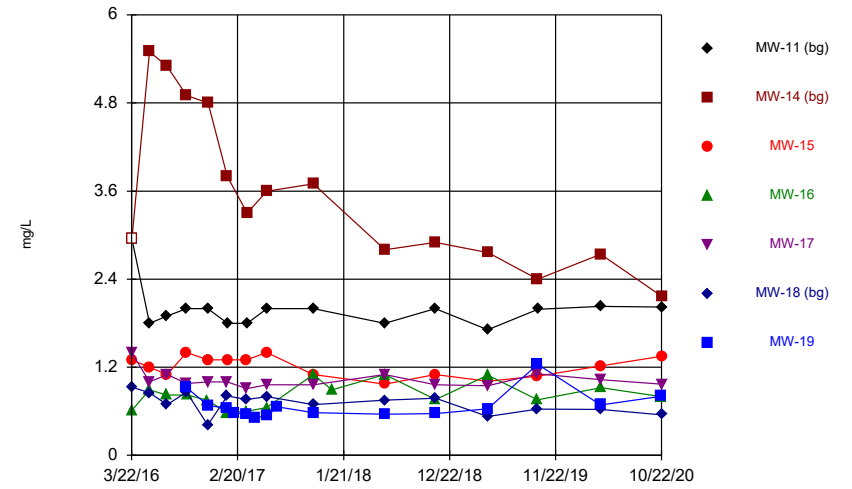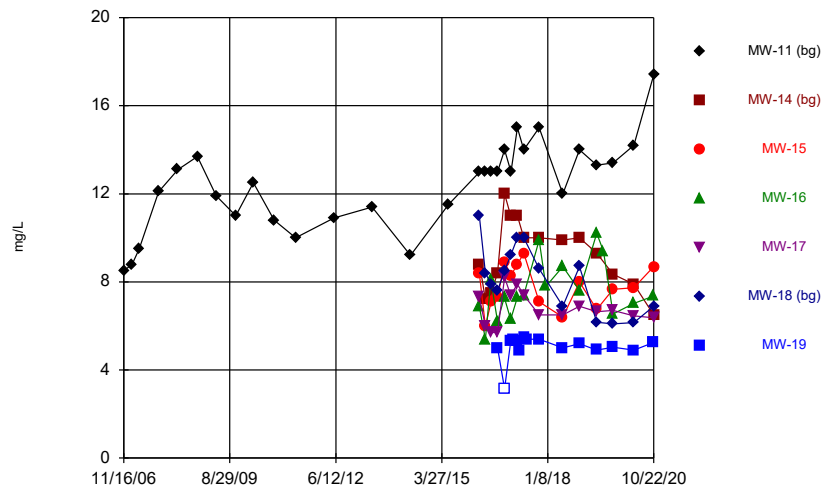
Constituent: Boron   Analysis Run 12/21/2020 4:16 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

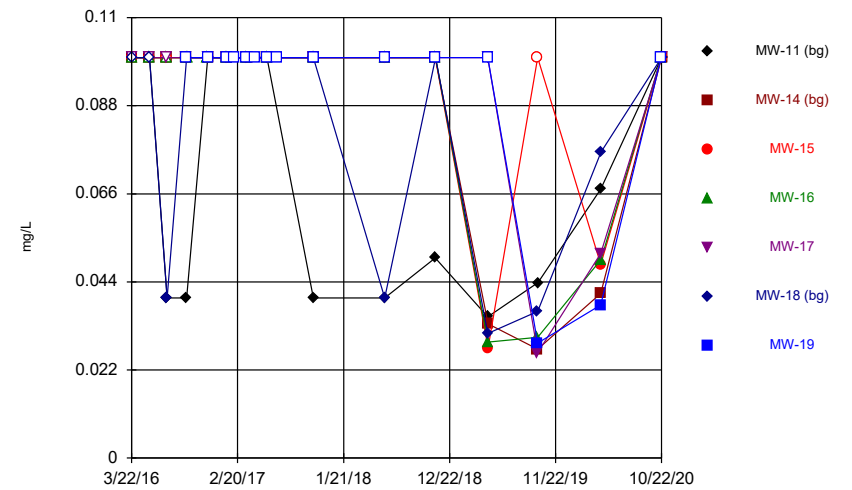## Time Series

MW-11 (bg)
MW-14 (bg)
MW-15
MW-16
MW-17
MW-18 (bg)
MW-19

Constituent: Calcium   Analysis Run 12/21/2020 4:16 PM

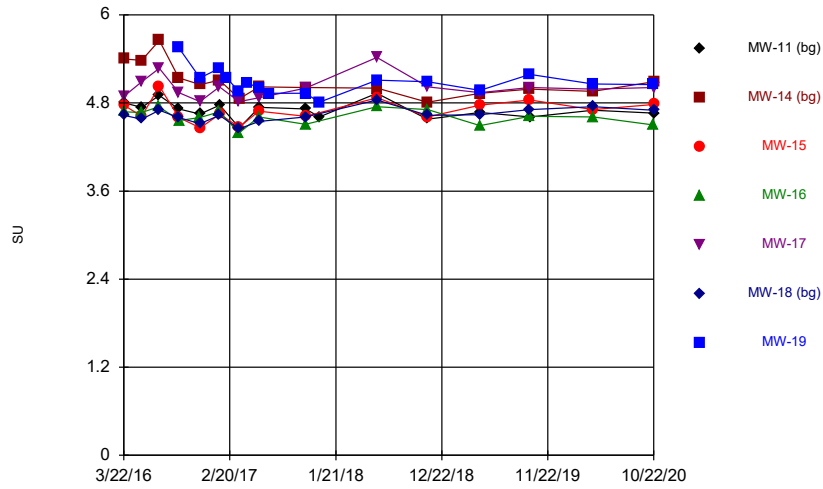Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

MW-11 (bg)
MW-14 (bg)
MW-15
MW-16
MW-17
MW-18 (bg)
MW-19

Constituent: Chloride   Analysis Run 12/21/2020 4:16 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

MW-11 (bg)
MW-14 (bg)
MW-15
MW-16
MW-17
MW-18 (bg)
MW-19

Constituent: Fluoride   Analysis Run 12/21/2020 4:17 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: pH   Analysis Run 12/21/2020 4:17 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Sulfate   Analysis Run 12/21/2020 4:17 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Total Dissolved Solids   Analysis Run 12/21/2020 4:17 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Time Series

Constituent: Boron (mg/L)   Analysis Run 12/21/2020 4:19 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			<0.08 (B1)	<0.08 (B1)	<0.08 (B1)	<0.08 (B1)	
3/23/2016	<0.08 (B1)	<0.08 (B1)					
5/18/2016	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	
7/11/2016				<0.08			
7/12/2016	<0.08	<0.08	<0.08		<0.08	0.026 (J)	
9/12/2016	<0.08	<0.08	<0.08		<0.08	<0.08	<0.08
9/13/2016				<0.08			
11/17/2016				<0.08			
11/18/2016	<0.08				<0.08	<0.08	<0.08
11/19/2016		<0.08	<0.08				
1/18/2017		<0.08		<0.08	<0.08	<0.08	<0.08
1/19/2017	<0.08		<0.08				
2/10/2017							<0.08
3/21/2017			<0.08	<0.08	<0.08	<0.08	<0.08
3/22/2017	<0.08	<0.08					
4/14/2017							<0.08
5/23/2017			<0.08	<0.08			<0.08
5/24/2017	<0.08	<0.08			<0.08	<0.08	
6/26/2017							<0.08
10/17/2017	<0.08	<0.08	<0.08	<0.08	<0.08	0.025 (J)	<0.08
5/31/2018	<0.08			<0.08	<0.08	0.022 (J)	<0.08
6/1/2018		<0.08	<0.08				
11/7/2018	<0.08	<0.08	<0.08				
11/8/2018				<0.08	<0.08	<0.08	<0.08
4/22/2019	<0.08			<0.08	<0.08	<0.08	<0.08
4/23/2019		<0.08	<0.08				
9/26/2019		<0.08	<0.08	<0.08	<0.08	0.042 (J)	<0.08
9/27/2019	0.0443 (J)						
4/13/2020	<0.08	<0.08	<0.08		<0.08		<0.08
4/14/2020				<0.08		<0.08	
10/21/2020				<0.08			<0.08
10/22/2020	0.103	0.0559 (J)	0.0437 (J)		<0.08	0.0401 (J)	

Time Series

Constituent: Calcium (mg/L)   Analysis Run 12/21/2020 4:19 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	<5.9 (*)	<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	

Time Series

Constituent: Chloride (mg/L)   Analysis Run 12/21/2020 4:19 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	

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 12/21/2020 4:19 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)	<0.1 (B1)	
3/23/2016	<0.1	<0.1 (B1)					
5/18/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
7/11/2016				<0.1			
7/12/2016	0.04 (J)	<0.1	<0.1		<0.1	0.04 (J)	
9/12/2016	0.04 (J)	<0.1	<0.1		<0.1	<0.1	<0.1
9/13/2016				<0.1			
11/17/2016				<0.1			
11/18/2016	<0.1				<0.1	<0.1	<0.1
11/19/2016		<0.1	<0.1				
1/18/2017		<0.1		<0.1	<0.1	<0.1	<0.1
1/19/2017	<0.1		<0.1				
2/10/2017							<0.1
3/21/2017			<0.1	<0.1	<0.1	<0.1	<0.1
3/22/2017	<0.1	<0.1					
4/14/2017							<0.1
5/23/2017			<0.1	<0.1			<0.1
5/24/2017	<0.1	<0.1			<0.1	<0.1	
6/26/2017							<0.1
10/17/2017	0.04 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
5/31/2018	0.04 (J)			<0.1	<0.1	0.04 (J)	<0.1
6/1/2018		<0.1	<0.1				
11/7/2018	0.05 (J)	<0.1	<0.1				
11/8/2018				<0.1	<0.1	<0.1	<0.1
4/22/2019	0.0353 (J)			0.029 (J)	<0.1	0.0311 (J)	<0.1
4/23/2019		0.0335 (J)	0.0275 (J)				
9/26/2019		0.0272 (J)	<0.1	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				<0.1			<0.1
10/22/2020	<0.1	<0.1	<0.1		<0.1	<0.1	

Time Series

	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	

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 12/21/2020 4:19 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			<5	<5	<5	3 (J)	
3/23/2016	1.8 (J)	<5					
5/18/2016	4.1	1.9	<5	<5	1.4	3.9 (J)	
7/11/2016				<5			
7/12/2016	3.8 (J)	2 (J)	<5		1.8 (J)	3.9 (J)	
9/12/2016	3.9 (J)	2 (J)	<5		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)	<5				
1/18/2017		<5		<5	1.5 (J)	3.8 (J)	<5
1/19/2017	<5		<5				
2/10/2017							<5
3/21/2017			<5	<5	<5	<5 (*)	<5
3/22/2017	<5	<5					
4/14/2017							1.5 (J)
5/23/2017			<5	<5			<5
5/24/2017	2 (J)	<5			1.7 (J)	3 (J)	
6/26/2017							1.5 (J)
10/17/2017	<5	<5	<5	<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	

Time Series

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/21/2020 4:19 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	<3.4	26	20	
7/11/2016				<3.4			
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	<3.4			<3.4
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	

FIGURE B.

Box & Whiskers Plot
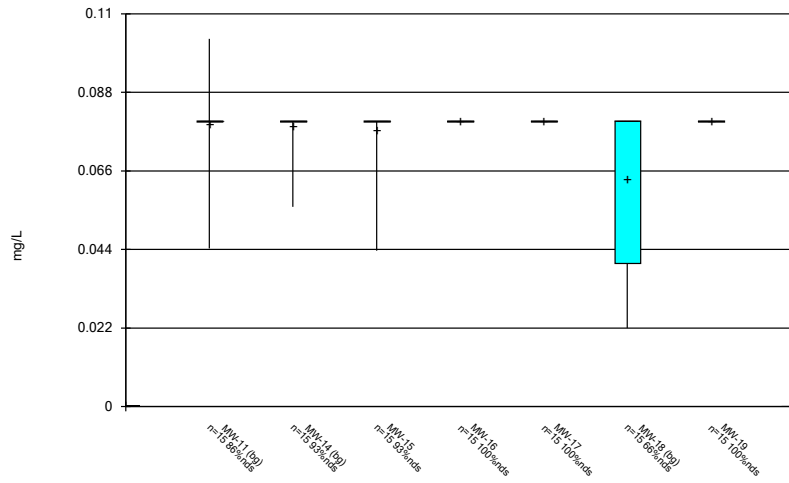
Constituent: Boron   Analysis Run 12/21/2020 4:19 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR
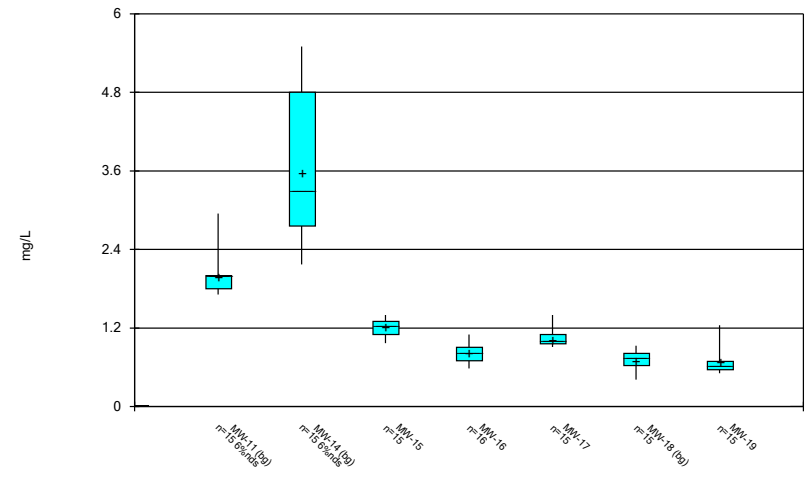
Box & Whiskers Plot

Constituent: Calcium   Analysis Run 12/21/2020 4:19 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR
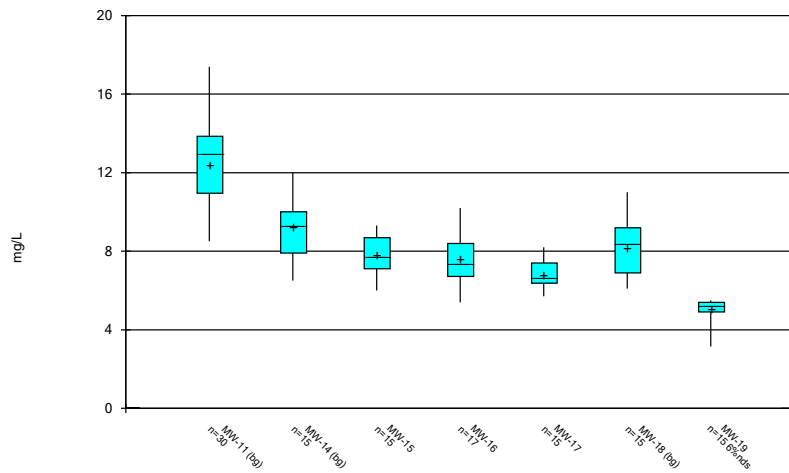
Box & Whiskers Plot

Constituent: Chloride   Analysis Run 12/21/2020 4:19 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR
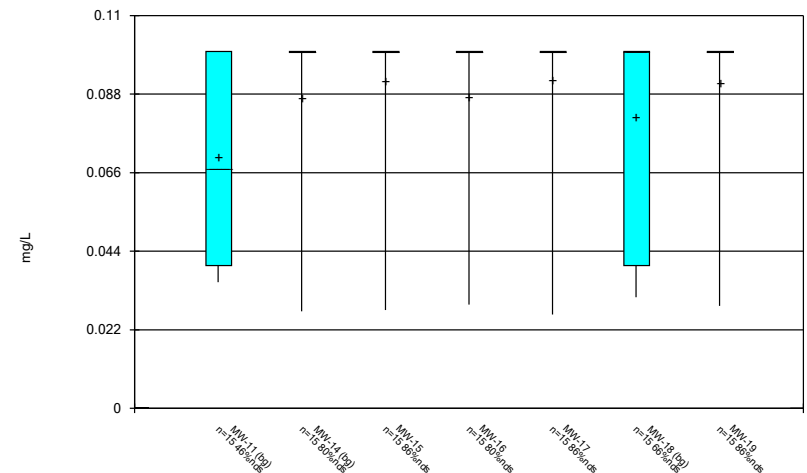
Box & Whiskers Plot

Constituent: Fluoride   Analysis Run 12/21/2020 4:19 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR
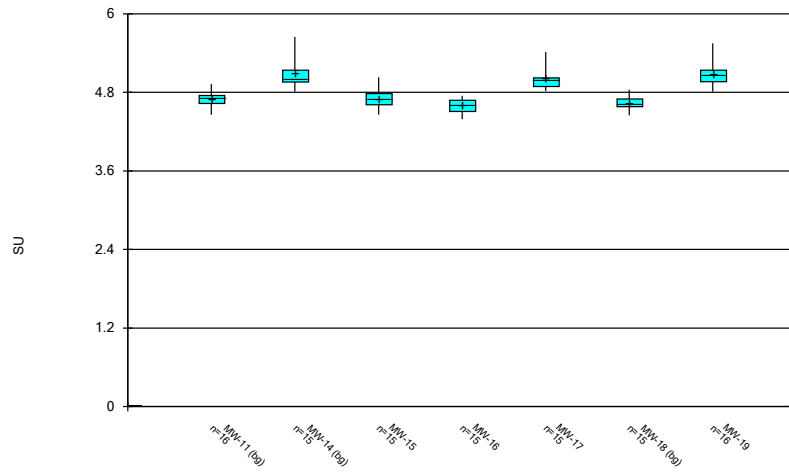
Box & Whiskers Plot

Constituent: pH   Analysis Run 12/21/2020 4:19 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR
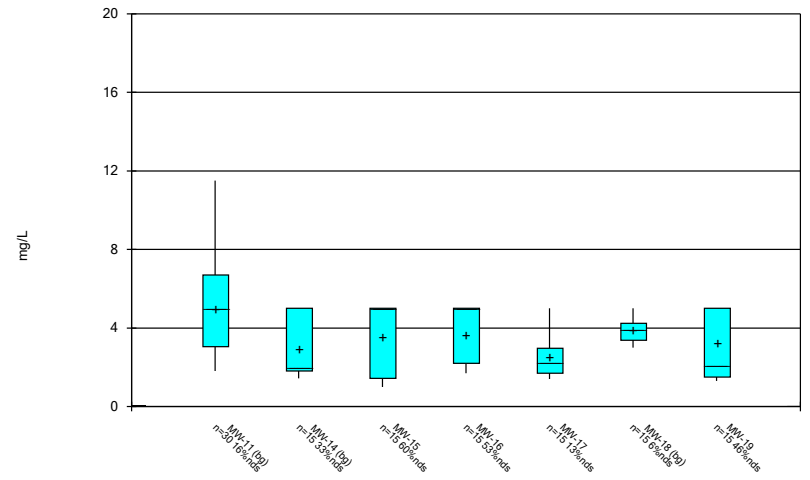
Box & Whiskers Plot

Constituent: Sulfate   Analysis Run 12/21/2020 4:19 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Box & Whiskers Plot
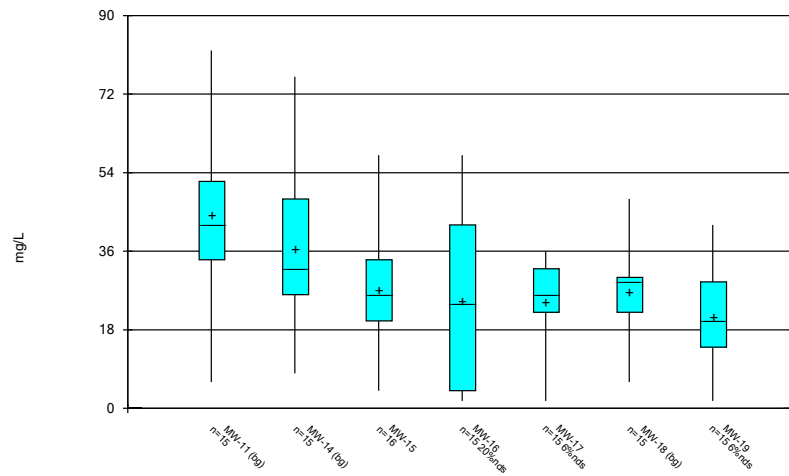
Constituent: Total Dissolved Solids   Analysis Run 12/21/2020 4:20 PM

Plant Daniel   Client: Southern Company   Data: NAMU CCR

FIGURE C.

Outlier Summary

No outliers were flagged.

FIGURE D.

Appendix III - Intrawell Prediction Limits - April 2020 All Results (No Significant)

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 12/22/2020, 9:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.08	n/a	4/13/2020	0.08ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.08	n/a	4/13/2020	0.08ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.08	n/a	4/13/2020	0.08ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.08	n/a	4/14/2020	0.08ND	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.17	n/a	4/13/2020	2.03	No	12	12.03	4.544	8.333	None	x^4	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	6.114	n/a	4/13/2020	2.74	No	12	3.859	1.01	8.333	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.535	n/a	4/13/2020	1.22	No	12	1.207	0.1472	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.234	n/a	4/14/2020	0.92	No	13	0.82	0.1886	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.4	n/a	4/13/2020	1.03	No	12	n/a	n/a	0	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Calcium (mg/L)	MW-18	1.062	n/a	4/14/2020	0.627	No	12	0.7384	0.1448	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-19	0.8608	n/a	4/13/2020	0.687	No	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-11	15.58	n/a	4/13/2020	14.2	No	27	12.12	1.814	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.79	n/a	4/13/2020	7.9	No	12	9.592	1.433	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.08	n/a	4/13/2020	7.74	No	12	7.696	1.067	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	10.64	n/a	4/14/2020	7.03	No	13	7.623	1.377	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.675	n/a	4/13/2020	6.46	No	12	6.845	0.8197	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.62	n/a	4/14/2020	6.15	No	12	8.581	1.361	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.783	n/a	4/13/2020	4.9	No	12	3601	1285	8.333	None	x^5	0.00188	Param Intra 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	4/13/2020	0.0672J	No	12	n/a	n/a	50	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.1	n/a	4/13/2020	0.0411J	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.1	n/a	4/13/2020	0.0484J	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.1	n/a	4/14/2020	0.0496J	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.2	n/a	4/13/2020	0.0511J	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	4/14/2020	0.0764J	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.2	n/a	4/13/2020	0.0382J	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.992	4.437	4/13/2020	4.7	No	13	4.715	0.1267	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.663	4.563	4/13/2020	4.96	No	12	5.113	0.2464	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	5.04	4.32	4/13/2020	4.71	No	12	4.68	0.1615	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.866	4.367	4/14/2020	4.61	No	12	4.617	0.1118	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.411	4.605	4/13/2020	4.99	No	12	5.008	0.1805	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-18	4.829	4.401	4/14/2020	4.75	No	12	4.615	0.09587	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	5.483	4.668	4/13/2020	5.06	No	13	5.075	0.1858	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-11	9.808	n/a	4/13/2020	2.47	No	27	4.944	2.552	18.52	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-14	5	n/a	4/13/2020	1.43	No	12	n/a	n/a	41.67	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-15	5	n/a	4/13/2020	0.992J	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	4/14/2020	2.27	No	12	n/a	n/a	66.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-17	3.046	n/a	4/13/2020	2.75	No	12	1.349	0.1777	16.67	Kaplan-Meier	sqrt(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	5.327	n/a	4/14/2020	3.96	No	12	3.897	0.6408	8.333	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	4/13/2020	1.69	No	12	n/a	n/a	58.33	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	82.24	n/a	4/13/2020	63	No	12	42.67	17.73	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	76.82	n/a	4/13/2020	28	No	12	38	17.39	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	58.47	n/a	4/13/2020	39	No	13	25.23	15.16	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	66.28	n/a	4/14/2020	36	No	12	23.33	19.24	25	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	44.84	n/a	4/13/2020	27	No	12	23.81	9.424	8.333	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	51.36	n/a	4/14/2020	29	No	12	26.33	11.21	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	46.26	n/a	4/13/2020	20	No	12	20.63	11.48	8.333	None	No	0.00188	Param Intra 1 of 2

Within Limit

Prediction Limit

Intrawell Non-parametric

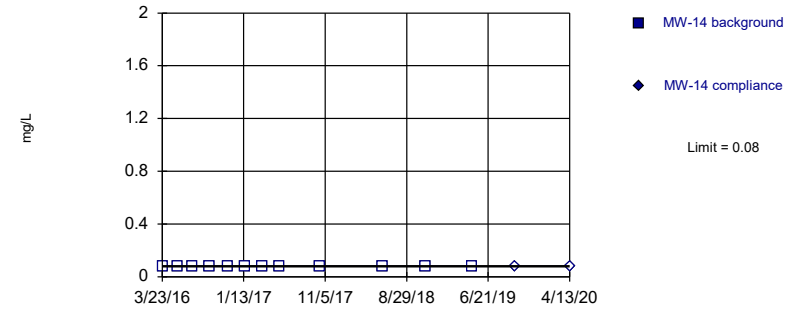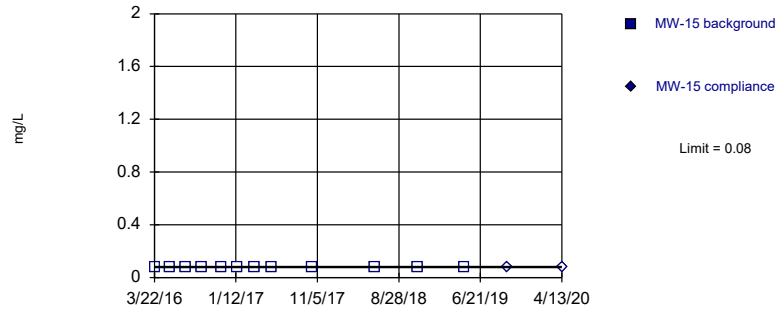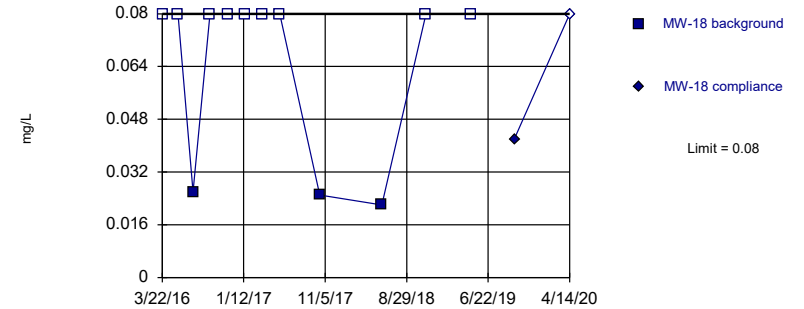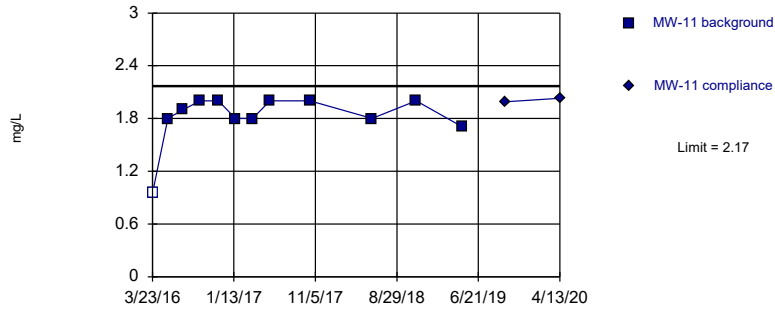■ MW-11 background

◆ MW-11 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
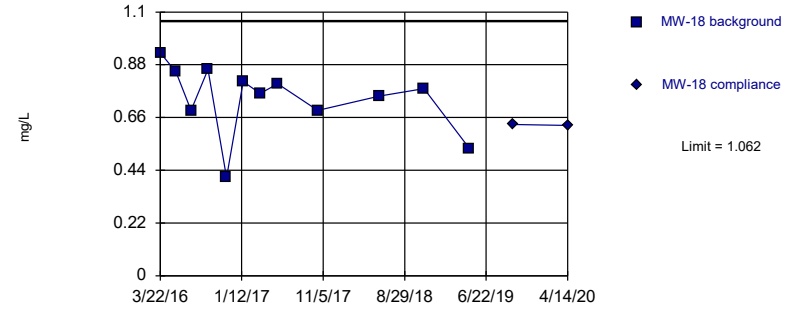
Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

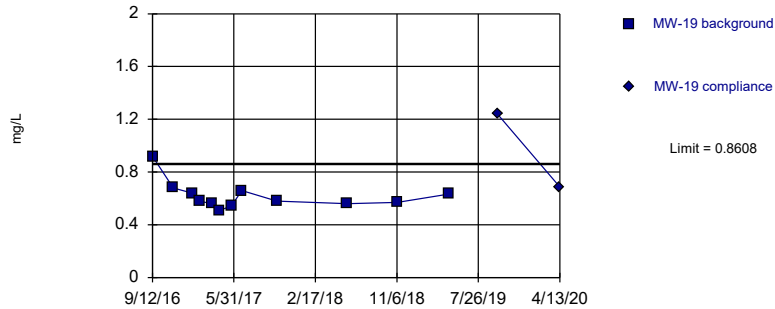### Intrawell Non-parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

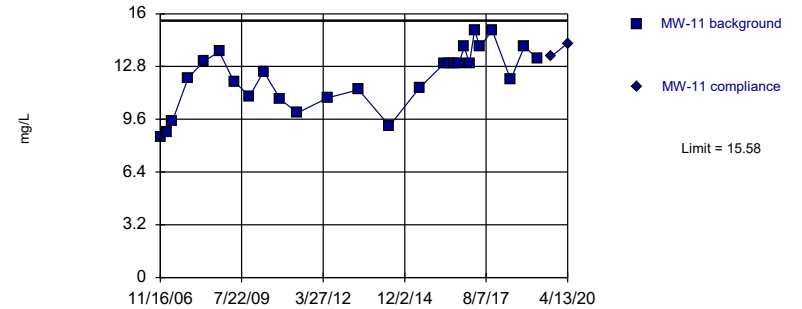**Prediction Limit**

Intrawell Parametric

■ MW-11 background

◆ MW-11 compliance

Limit = 2.17

mg/L

(x-axis: 3/23/16, 1/13/17, 11/5/17, 8/29/18, 6/21/19, 4/13/20)

Background Data Summary (based on x^4 transformation): Mean=12.03, Std. Dev.=4.544, n=12, 8.333% NDs.
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8072, 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 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

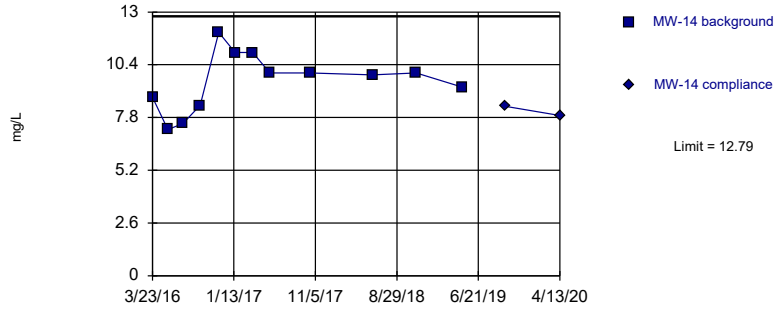Within Limit

Prediction Limit

Intrawell Parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 6.114

mg/L

(x-axis: 3/23/16, 1/13/17, 11/5/17, 8/29/18, 6/21/19, 4/13/20)

Background Data Summary: Mean=3.859, Std. Dev.=1.01, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8805, 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 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

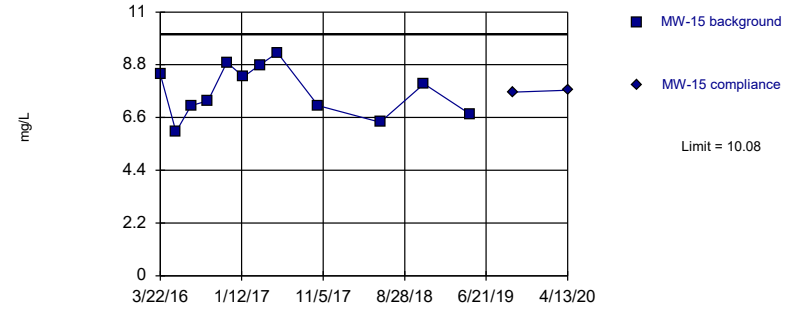Within Limit

Prediction Limit

Intrawell Parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 1.535

mg/L

(x-axis: 3/22/16, 1/12/17, 11/5/17, 8/28/18, 6/21/19, 4/13/20)

Background Data Summary: Mean=1.207, Std. Dev.=0.1472, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9076, 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 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

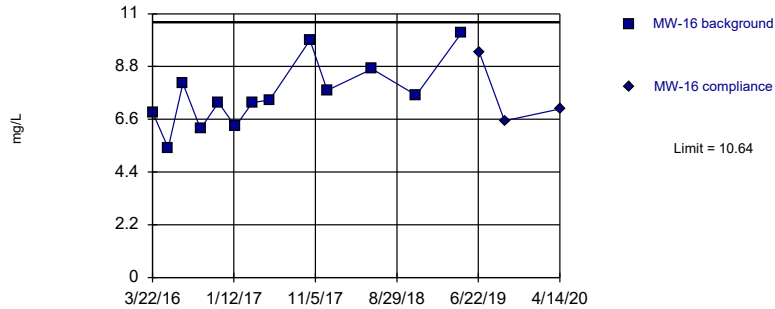**Prediction Limit**

Intrawell Parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 1.234

mg/L

(x-axis: 3/22/16, 1/12/17, 11/5/17, 8/29/18, 6/22/19, 4/14/20)

Background Data Summary: Mean=0.82, Std. Dev.=0.1886, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9011, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
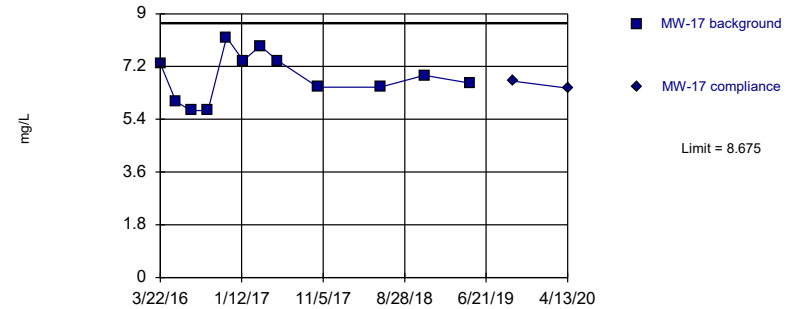
Within Limit

Prediction Limit
Intrawell Non-parametric

MW-17 background

MW-17 compliance

Limit = 1.4

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 12 background values. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Calcium   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

MW-18 background

MW-18 compliance

Limit = 1.062

Background Data Summary: Mean=0.7384, Std. Dev.=0.1448, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9007, 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 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit
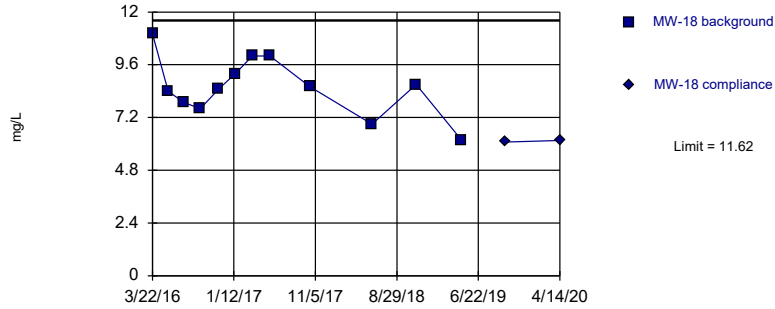
Prediction Limit
Intrawell Parametric

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 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
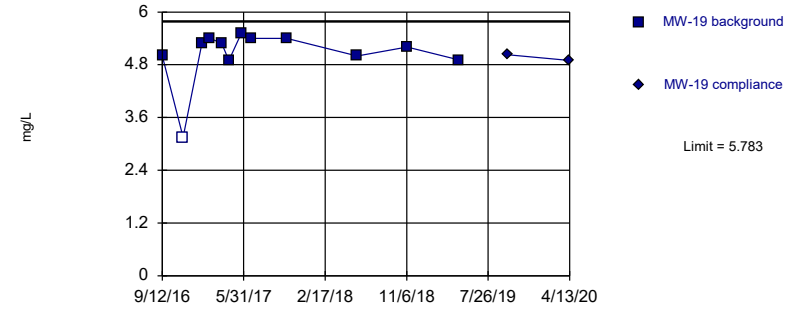
Within Limit

Prediction Limit
Intrawell Parametric

MW-11 background

MW-11 compliance

Limit = 15.58

Background Data Summary: Mean=12.12, Std. Dev.=1.814, n=27.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9502, critical = 0.894.   Kappa = 1.906 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

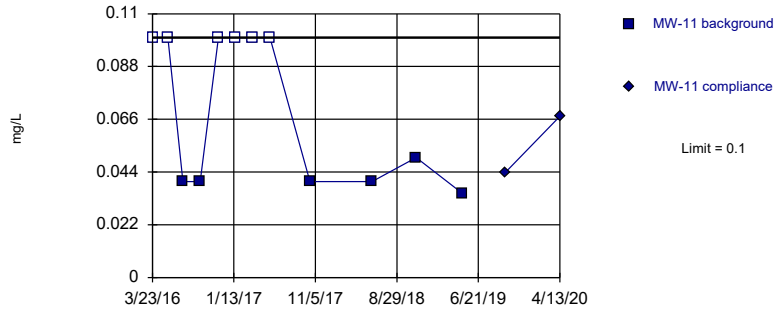## Prediction Limit
Intrawell Parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 12.79

mg/L

Background Data Summary: Mean=9.592, Std. Dev.=1.433, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9613, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 10.08

mg/L

Background Data Summary: Mean=7.696, Std. Dev.=1.067, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9552, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 10.64

mg/L

Background Data Summary: Mean=7.623, Std. Dev.=1.377, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9538, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-17 background

◆ MW-17 compliance

Limit = 8.675

mg/L

Background Data Summary: Mean=6.845, Std. Dev.=0.8197, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9524, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 11.62

mg/L

3/22/16   1/12/17   11/5/17   8/29/18   6/22/19   4/14/20

Background Data Summary: Mean=8.581, Std. Dev.=1.361, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9827, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 5.783

mg/L

9/12/16   5/31/17   2/17/18   11/6/18   7/26/19   4/13/20

Background Data Summary (based on x^5 transformation): Mean=3601, Std. Dev.=1285, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8476, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:44 AM   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

mg/L

3/23/16   1/13/17   11/5/17   8/29/18   6/21/19   4/13/20

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 12 background values. 50% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 0.1

mg/L

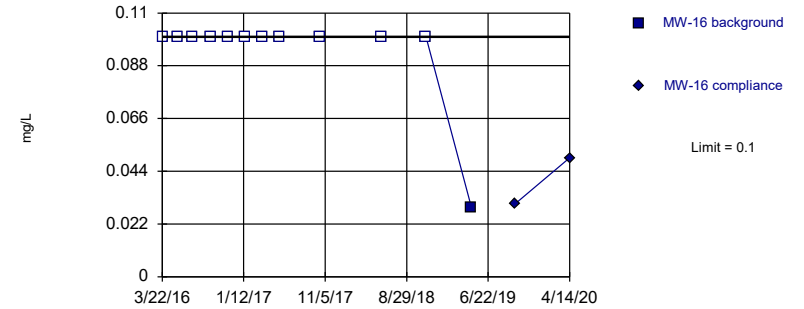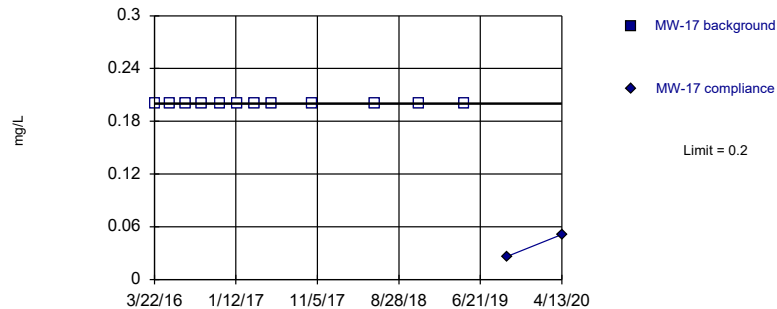3/23/16   1/13/17   11/5/17   8/29/18   6/21/19   4/13/20

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit
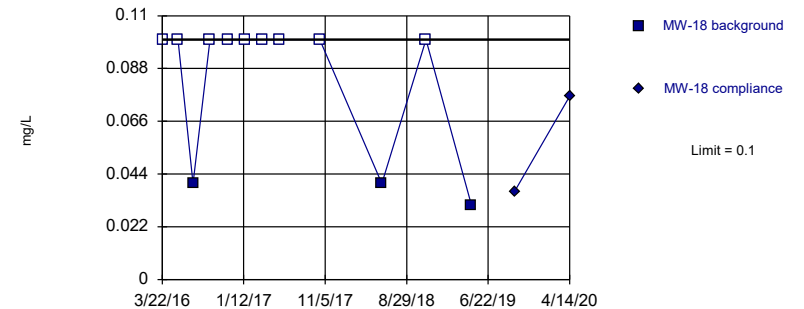
Prediction Limit

Intrawell Non-parametric

MW-15 background

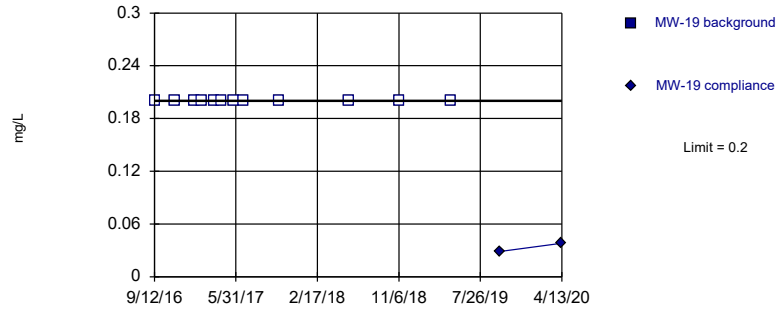MW-15 compliance

Limit = 0.1

mg/L

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

MW-16 background

MW-16 compliance

Limit = 0.1

mg/L

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

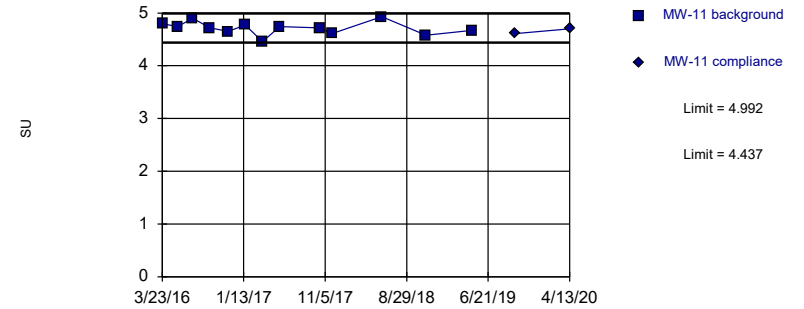MW-17 background

MW-17 compliance

Limit = 0.2

mg/L

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

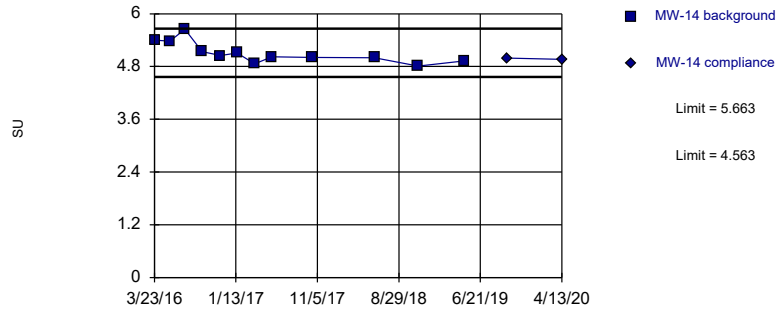Intrawell Non-parametric

MW-18 background

MW-18 compliance

Limit = 0.1

mg/L

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Hollow symbols indicate censored values.

Prediction Limit

Within Limit

Intrawell Non-parametric

mg/L

- ■ MW-19 background
- ◆ MW-19 compliance

Limit = 0.2

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Within Limits

Intrawell Parametric

SU

- ■ MW-11 background
- ◆ MW-11 compliance

Limit = 4.992

Limit = 4.437

Background Data Summary: Mean=4.715, Std. Dev.=0.1267, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9755, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Within Limits

Intrawell Parametric

SU

- ■ MW-14 background
- ◆ MW-14 compliance
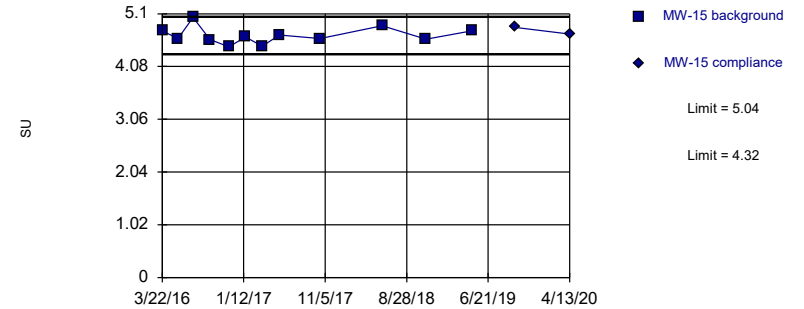
Limit = 5.663

Limit = 4.563

Background Data Summary: Mean=5.113, Std. Dev.=0.2464, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9046, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Within Limits

Intrawell Parametric

SU

- ■ MW-15 background
- ◆ MW-15 compliance
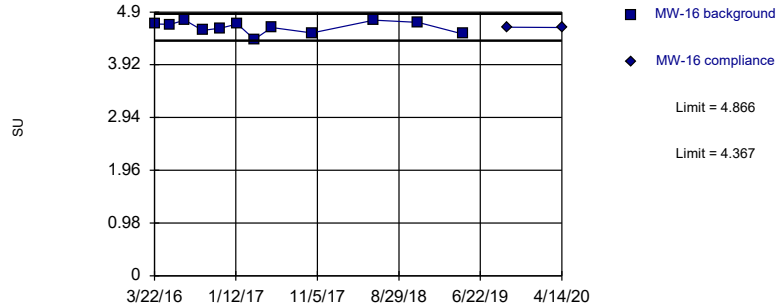
Limit = 5.04

Limit = 4.32

Background Data Summary: Mean=4.68, Std. Dev.=0.1615, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9345, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

SU

■ MW-16 background

◆ MW-16 compliance

Limit = 4.866

Limit = 4.367

4.9
3.92
2.94
1.96
0.98
0

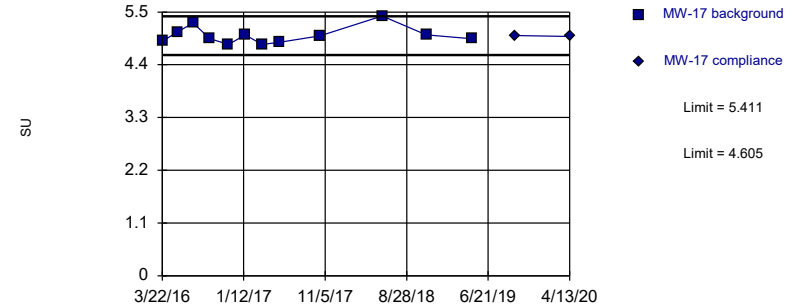3/22/16 1/12/17 11/5/17 8/29/18 6/22/19 4/14/20

Background Data Summary: Mean=4.617, Std. Dev.=0.1118, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9361, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

SU

■ MW-17 background

◆ MW-17 compliance

Limit = 5.411

Limit = 4.605

5.5
4.4
3.3
2.2
1.1
0

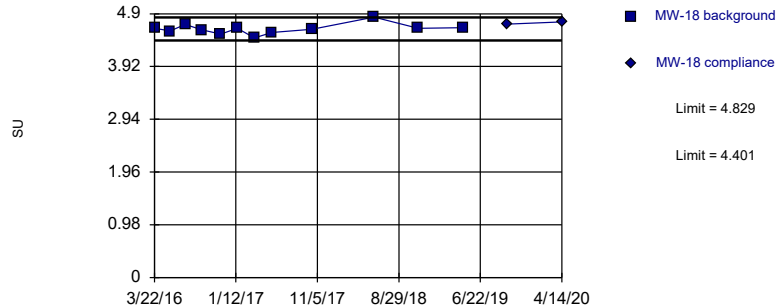3/22/16 1/12/17 11/5/17 8/28/18 6/21/19 4/13/20

Background Data Summary: Mean=5.008, Std. Dev.=0.1805, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8737, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

SU

■ MW-18 background

◆ MW-18 compliance

Limit = 4.829

Limit = 4.401

4.9
3.92
2.94
1.96
0.98
0

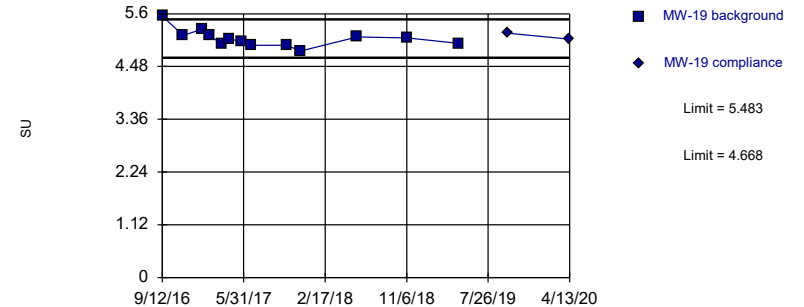3/22/16 1/12/17 11/5/17 8/29/18 6/22/19 4/14/20

Background Data Summary: Mean=4.615, Std. Dev.=0.09587, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.925, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

SU

■ MW-19 background

◆ MW-19 compliance

Limit = 5.483

Limit = 4.668

5.6
4.48
3.36
2.24
1.12
0

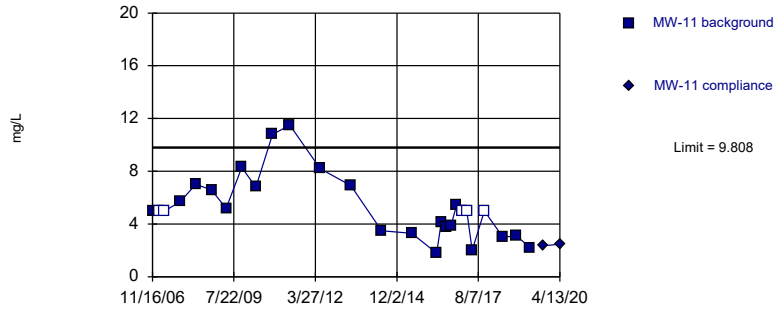9/12/16 5/31/17 2/17/18 11/6/18 7/26/19 4/13/20

Background Data Summary: Mean=5.075, Std. Dev.=0.1858, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9001, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:44 AM   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 = 9.808

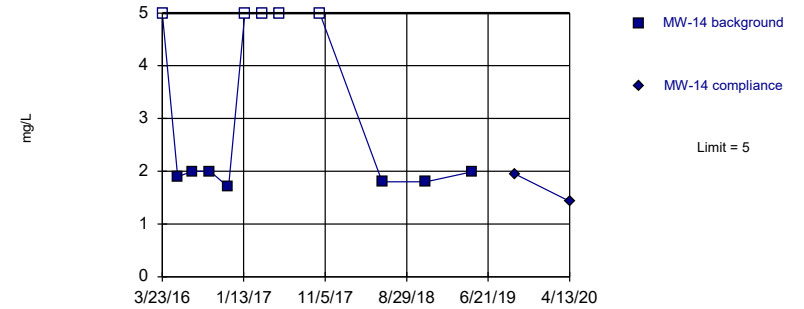x-axis: 11/16/06, 7/22/09, 3/27/12, 12/2/14, 8/7/17, 4/13/20

Background Data Summary (after Kaplan-Meier Adjustment): Mean=4.944, Std. Dev.=2.552, n=27, 18.52% NDs.
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9272, critical = 0.894.   Kappa = 1.906 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

mg/L

- ■ MW-14 background
- ◆ MW-14 compliance

Limit = 5

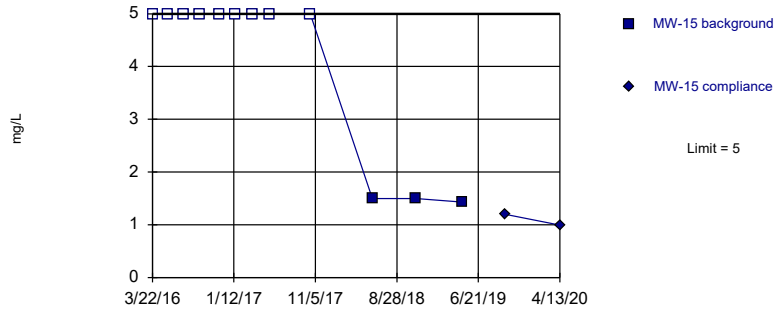x-axis: 3/23/16, 1/13/17, 11/5/17, 8/29/18, 6/21/19, 4/13/20

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 12 background values. 41.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate   Analysis Run 12/22/2020 9:44 AM   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 = 5

x-axis: 3/22/16, 1/12/17, 11/5/17, 8/28/18, 6/21/19, 4/13/20
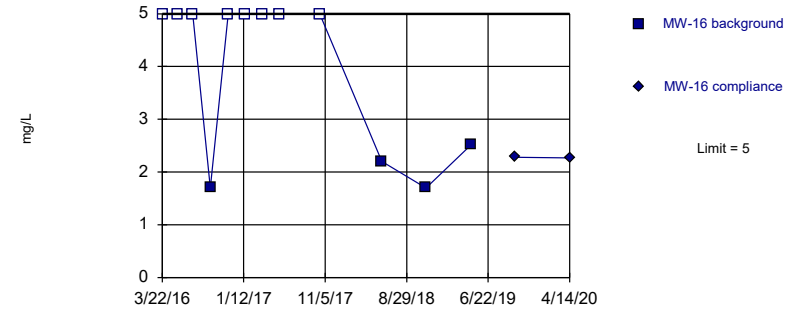
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate   Analysis Run 12/22/2020 9:44 AM   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

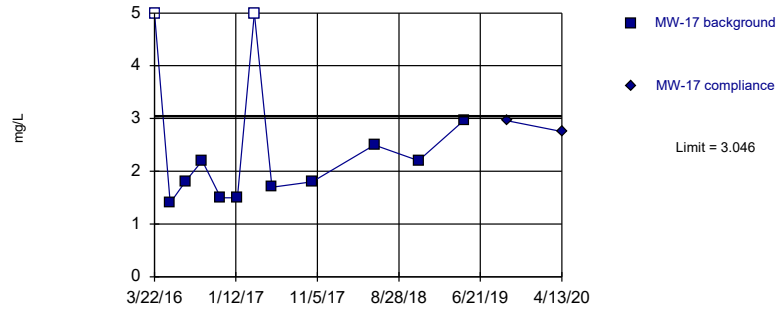x-axis: 3/22/16, 1/12/17, 11/5/17, 8/29/18, 6/22/19, 4/14/20

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Chart 1 (top left):

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric

- ■ MW-17 background
- ◆ MW-17 compliance

Limit = 3.046

mg/L

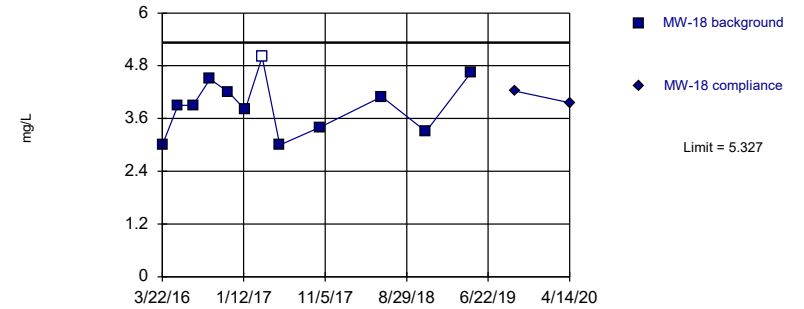x-axis: 3/22/16 1/12/17 11/5/17 8/28/18 6/21/19 4/13/20

Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=1.349, Std. Dev.=0.1777, n=12, 16.67% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8093, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Chart 2 (top right):

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric

- ■ MW-18 background
- ◆ MW-18 compliance

Limit = 5.327

mg/L

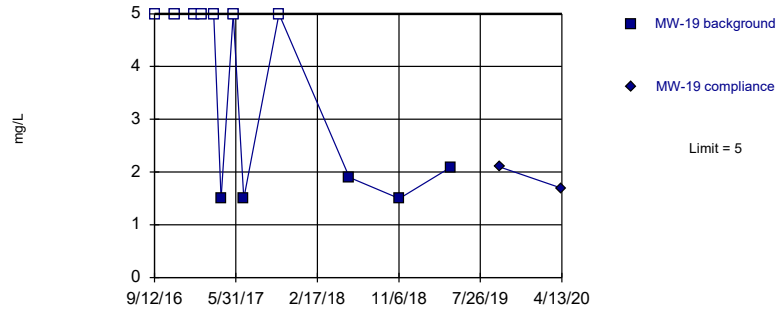x-axis: 3/22/16 1/12/17 11/5/17 8/29/18 6/22/19 4/14/20

Background Data Summary: Mean=3.897, Std. Dev.=0.6408, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9606, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/22/2020 9:44 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Chart 3 (bottom left):

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ MW-19 background
- ◆ MW-19 compliance

Limit = 5

mg/L

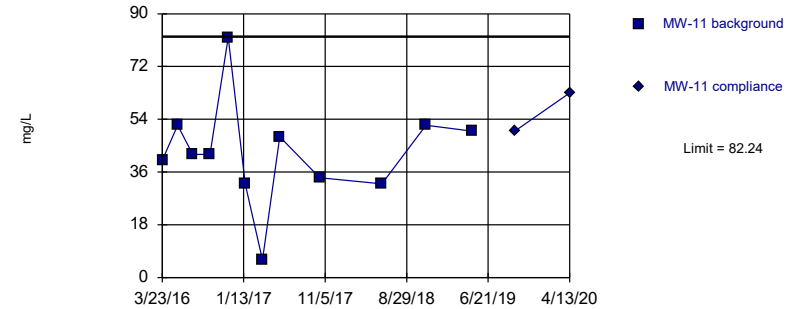x-axis: 9/12/16 5/31/17 2/17/18 11/6/18 7/26/19 4/13/20

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 58.33% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate   Analysis Run 12/22/2020 9:45 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Chart 4 (bottom right):

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric

- ■ MW-11 background
- ◆ MW-11 compliance

Limit = 82.24

mg/L

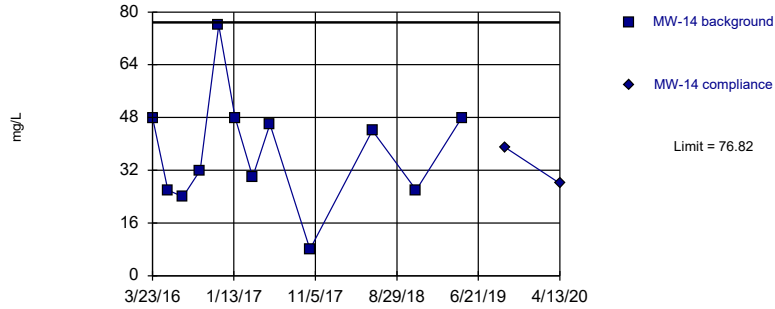x-axis: 3/23/16 1/13/17 11/5/17 8/29/18 6/21/19 4/13/20

Background Data Summary: Mean=42.67, Std. Dev.=17.73, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9141, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:45 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-14 background

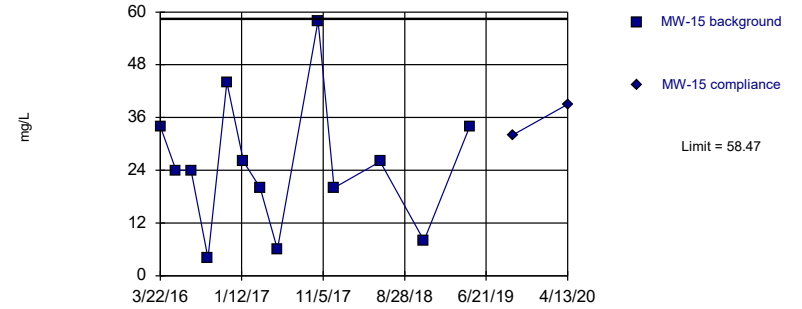◆ MW-14 compliance

Limit = 76.82

Background Data Summary: Mean=38, Std. Dev.=17.39, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9323, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:45 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

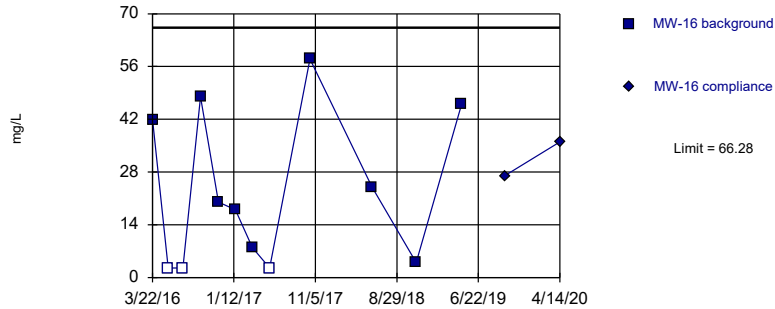■ MW-15 background

◆ MW-15 compliance

Limit = 58.47

Background Data Summary: Mean=25.23, Std. Dev.=15.16, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9437, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:45 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-16 background
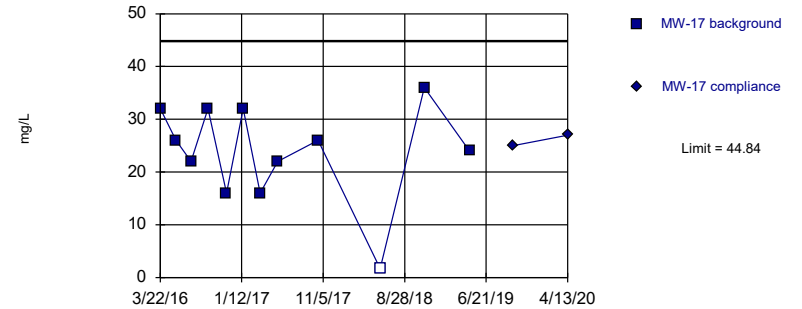
◆ MW-16 compliance

Limit = 66.28

Background Data Summary (after Kaplan-Meier Adjustment): Mean=23.33, Std. Dev.=19.24, n=12, 25% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8666, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:45 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-17 background

◆ MW-17 compliance

Limit = 44.84
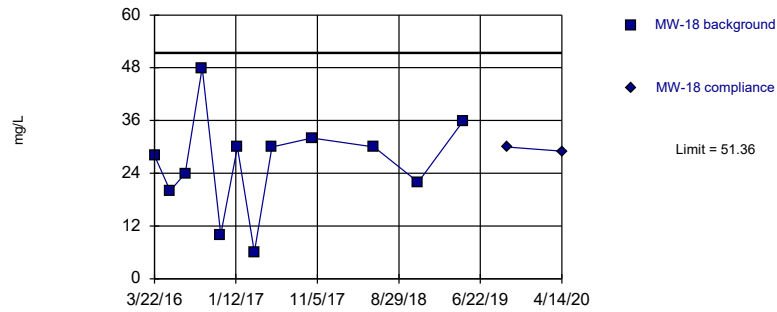
Background Data Summary: Mean=23.81, Std. Dev.=9.424, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9134, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:45 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 51.36

Background Data Summary: Mean=26.33, Std. Dev.=11.21, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9551, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:45 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 46.26

Background Data Summary: Mean=20.63, Std. Dev.=11.48, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9792, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:45 AM   View: Intrawell

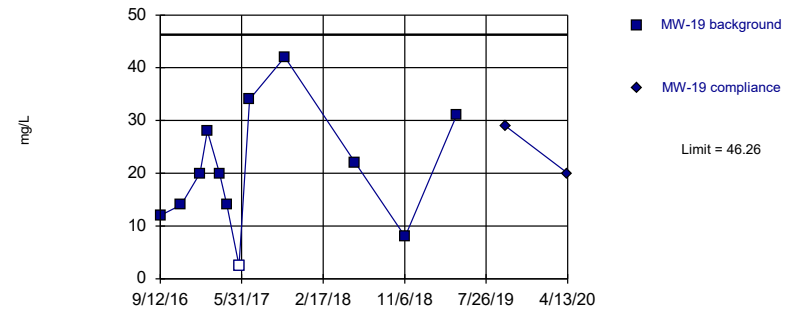Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/22/2020 9:50 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	<0.08	
9/12/2016	<0.08	
11/18/2016	<0.08	
1/19/2017	<0.08	
3/22/2017	<0.08	
5/24/2017	<0.08	
10/17/2017	<0.08	
5/31/2018	<0.08	
11/7/2018	<0.08	
4/22/2019	<0.08	
9/27/2019		0.0443 (J)
4/13/2020		<0.08

Prediction Limit

	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

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/22/2020 9:50 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	<0.08	
9/12/2016	<0.08	
11/19/2016	<0.08	
1/19/2017	<0.08	
3/21/2017	<0.08	
5/23/2017	<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

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/22/2020 9:50 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	0.026 (J)	
9/12/2016	<0.08	
11/18/2016	<0.08	
1/18/2017	<0.08	
3/21/2017	<0.08	
5/24/2017	<0.08	
10/17/2017	0.025 (J)	
5/31/2018	0.022 (J)	
11/8/2018	<0.08	
4/22/2019	<0.08	
9/26/2019		0.042 (J)
4/14/2020		<0.08

Prediction Limit

	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

Prediction Limit

	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

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:50 AM   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

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:50 AM   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

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:50 AM   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

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:50 AM   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

Prediction Limit

	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

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/22/2020 9:50 AM   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

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/22/2020 9:50 AM   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

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

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/22/2020 9:50 AM   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

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/22/2020 9:50 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	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

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

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

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)

Prediction Limit

	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	0.0335 (J)	
9/26/2019		0.0272 (J)
4/13/2020		0.0411 (J)

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	0.0275 (J)	
9/26/2019		<0.1
4/13/2020		0.0484 (J)

Prediction Limit

	MW-16	MW-16
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/11/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/18/2017	<0.1	
3/21/2017	<0.1	
5/23/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	<0.1	
11/8/2018	<0.1	
4/22/2019	0.029 (J)	
9/26/2019		0.0302 (J)
4/14/2020		0.0496 (J)

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/22/2020 9:51 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-17	MW-17
3/22/2016	<0.2 (B1)	
5/18/2016	<0.2	
7/12/2016	<0.2	
9/12/2016	<0.2	
11/18/2016	<0.2	
1/18/2017	<0.2	
3/21/2017	<0.2	
5/24/2017	<0.2	
10/17/2017	<0.2	
5/31/2018	<0.2	
11/8/2018	<0.2	
4/22/2019	<0.2	
9/26/2019		0.0263 (J)
4/13/2020		0.0511 (J)

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/22/2020 9:51 AM   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)

Prediction Limit

	MW-19	MW-19
9/12/2016	<0.2	
11/18/2016	<0.2	
1/18/2017	<0.2	
2/10/2017	<0.2	
3/21/2017	<0.2	
4/14/2017	<0.2	
5/23/2017	<0.2	
6/26/2017	<0.2	
10/17/2017	<0.2	
5/31/2018	<0.2	
11/8/2018	<0.2	
4/22/2019	<0.2	
9/26/2019		0.0287 (J)
4/13/2020		0.0382 (J)

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

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

Prediction Limit

Constituent: pH (SU)   Analysis Run 12/22/2020 9:51 AM   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

Prediction Limit

Constituent: pH (SU)   Analysis Run 12/22/2020 9:51 AM   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

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

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

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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:51 AM   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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:51 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<5	
5/18/2016	1.9	
7/12/2016	2 (J)	
9/12/2016	2 (J)	
11/19/2016	1.7 (J)	
1/18/2017	<5	
3/22/2017	<5	
5/24/2017	<5	
10/17/2017	<5	
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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:51 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<5	
5/18/2016	<5	
7/12/2016	<5	
9/12/2016	<5	
11/19/2016	<5	
1/19/2017	<5	
3/21/2017	<5	
5/23/2017	<5	
10/17/2017	<5	
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)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/22/2020 9:51 AM 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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:51 AM   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

Prediction Limit

	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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:51 AM   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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:51 AM   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

Prediction Limit

	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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:51 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:51 AM   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

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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:51 AM   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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:51 AM   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

FIGURE E.

Appendix III - Intrawell Prediction Limits - October 2020 Significant Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 12/22/2020, 9:43 AM

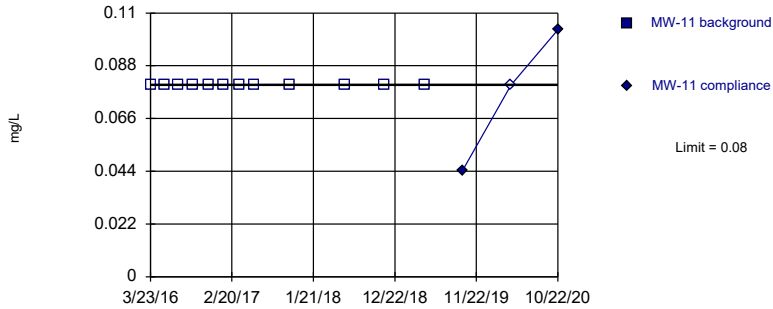| Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.08	n/a	10/22/2020	0.103	Yes	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Chloride (mg/L)	MW-11	15.58	n/a	10/22/2020	17.4	Yes	27	12.12	1.814	0	None	No	0.00188	Param Intra 1 of 2

Appendix III - Intrawell Prediction Limits - October 2020 All Results

Plant Daniel   Client: Southern Company   Data: NAMU CCR   Printed 12/22/2020, 9:43 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-11**	**0.08**	**n/a**	**10/22/2020**	**0.103**	**Yes**	**12**	**n/a**	**n/a**	**100**	**n/a**	**n/a**	**0.01077**	**NP Intra (NDs) 1 of 2**
Boron (mg/L)	MW-14	0.08	n/a	10/22/2020	0.0559J	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.08	n/a	10/22/2020	0.0437J	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.08	n/a	10/22/2020	0.0401J	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.17	n/a	10/22/2020	2.02	No	12	12.03	4.544	8.333	None	x^4	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	6.114	n/a	10/22/2020	2.17	No	12	3.859	1.01	8.333	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.535	n/a	10/22/2020	1.35	No	12	1.207	0.1472	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.234	n/a	10/21/2020	0.798	No	13	0.82	0.1886	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.4	n/a	10/22/2020	0.969	No	12	n/a	n/a	0	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Calcium (mg/L)	MW-18	1.062	n/a	10/22/2020	0.553	No	12	0.7384	0.1448	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-19	0.8608	n/a	10/21/2020	0.806	No	12	0.7847	0.06412	0	None	sqrt(x)	0.00188	Param Intra 1 of 2
Chloride (mg/L)	**MW-11**	**15.58**	**n/a**	**10/22/2020**	**17.4**	**Yes**	**27**	**12.12**	**1.814**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Chloride (mg/L)	MW-14	12.79	n/a	10/22/2020	6.5	No	12	9.592	1.433	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.08	n/a	10/22/2020	8.69	No	12	7.696	1.067	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	10.64	n/a	10/21/2020	7.36	No	13	7.623	1.377	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.675	n/a	10/22/2020	6.37	No	12	6.845	0.8197	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.62	n/a	10/22/2020	6.89	No	12	8.581	1.361	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	5.783	n/a	10/21/2020	5.25	No	12	3601	1285	8.333	None	x^5	0.00188	Param Intra 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	50	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.1	n/a	10/21/2020	0.1ND	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	10/22/2020	0.1ND	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.1	n/a	10/21/2020	0.1ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.992	4.437	10/22/2020	4.66	No	13	4.715	0.1267	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.663	4.563	10/22/2020	5.09	No	12	5.113	0.2464	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	5.04	4.32	10/22/2020	4.78	No	12	4.68	0.1615	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.866	4.367	10/21/2020	4.5	No	12	4.617	0.1118	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.411	4.605	10/22/2020	5.01	No	12	5.008	0.1805	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-18	4.829	4.401	10/22/2020	4.7	No	12	4.615	0.09587	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	5.483	4.668	10/21/2020	5.05	No	13	5.075	0.1858	0	None	No	0.0009398	Param Intra 1 of 2
Sulfate (mg/L)	MW-11	9.808	n/a	10/22/2020	2.01	No	27	4.944	2.552	18.52	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-14	5	n/a	10/22/2020	1.76	No	12	n/a	n/a	41.67	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-15	5	n/a	10/22/2020	1.04	No	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	10/21/2020	2.15	No	12	n/a	n/a	66.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-17	3.046	n/a	10/22/2020	2.98	No	12	1.349	0.1777	16.67	Kaplan-Meier	sqrt(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	5.327	n/a	10/22/2020	3.37	No	12	3.897	0.6408	8.333	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	10/21/2020	1.31	No	12	n/a	n/a	58.33	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	82.24	n/a	10/22/2020	41	No	12	42.67	17.73	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	76.82	n/a	10/22/2020	25	No	12	38	17.39	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	58.47	n/a	10/22/2020	34	No	13	25.23	15.16	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	66.28	n/a	10/21/2020	33	No	12	23.33	19.24	25	Kaplan-Meier	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	44.84	n/a	10/22/2020	29	No	12	23.81	9.424	8.333	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	51.36	n/a	10/22/2020	22	No	12	26.33	11.21	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	46.26	n/a	10/21/2020	19	No	12	20.63	11.48	8.333	None	No	0.00188	Param Intra 1 of 2

Exceeds Limit

Prediction Limit
Intrawell Non-parametric

■ MW-11 background
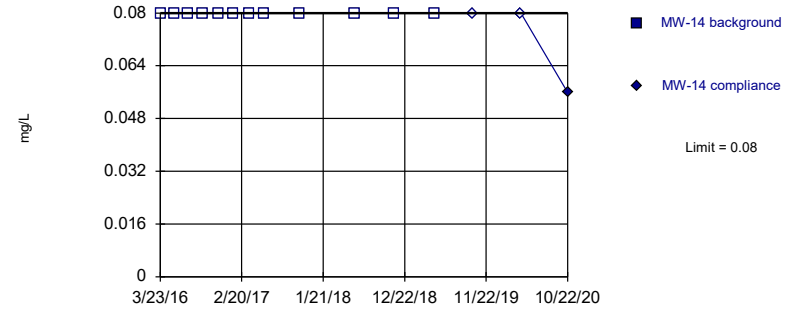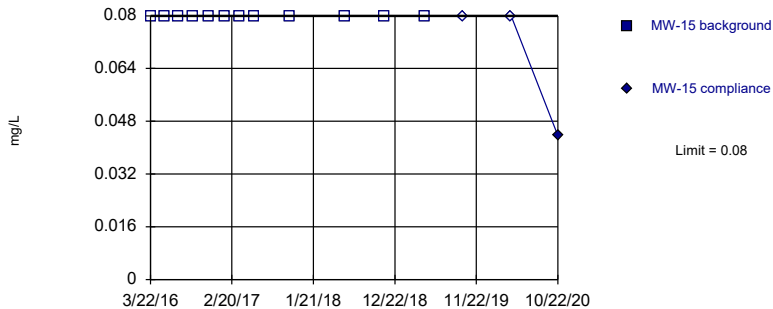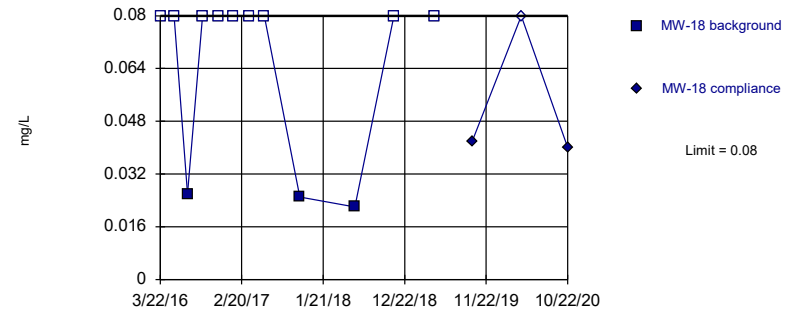
◆ MW-11 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron   Analysis Run 12/22/2020 9:40 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

■ MW-14 background

◆ MW-14 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron   Analysis Run 12/22/2020 9:40 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron   Analysis Run 12/22/2020 9:40 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

■ MW-18 background
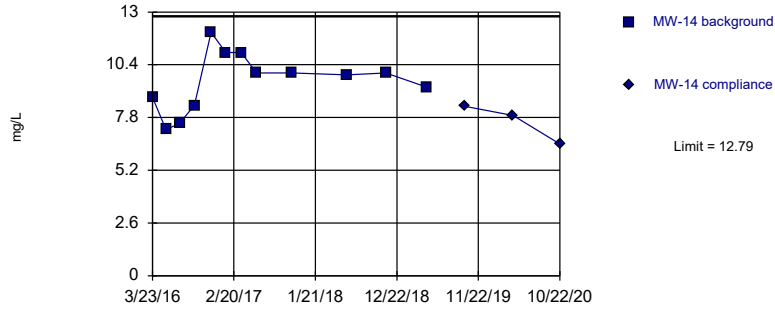
◆ MW-18 compliance

Limit = 0.08

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron   Analysis Run 12/22/2020 9:40 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Intrawell Parametric
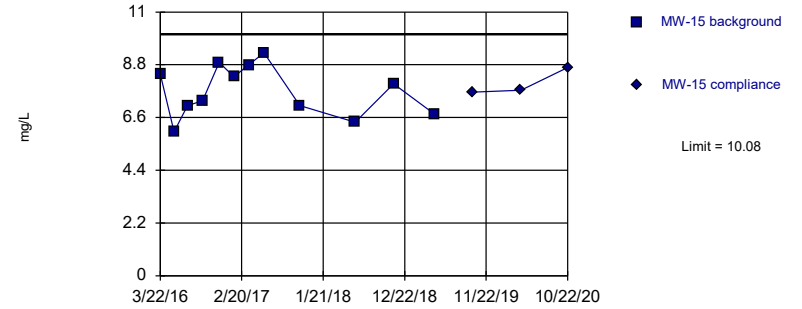
Within Limit

MW-11 background

MW-11 compliance

Limit = 2.17

Background Data Summary (based on x^4 transformation): Mean=12.03, Std. Dev.=4.544, n=12, 8.333% NDs.
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8072, 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 12/22/2020 9:40 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
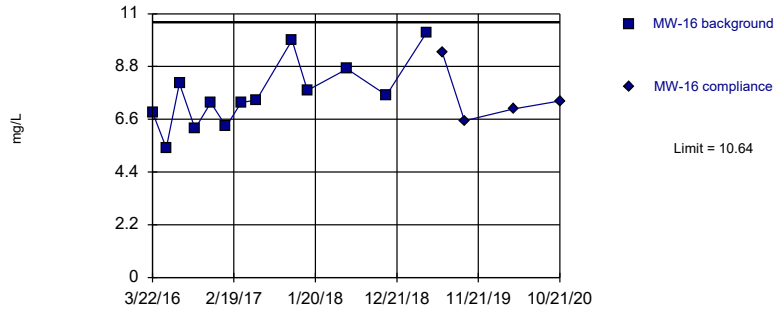
Prediction Limit

Intrawell Parametric

Within Limit

MW-14 background

MW-14 compliance

Limit = 6.114

Background Data Summary: Mean=3.859, Std. Dev.=1.01, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha
= 0.01, calculated = 0.8805, 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 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Intrawell Parametric
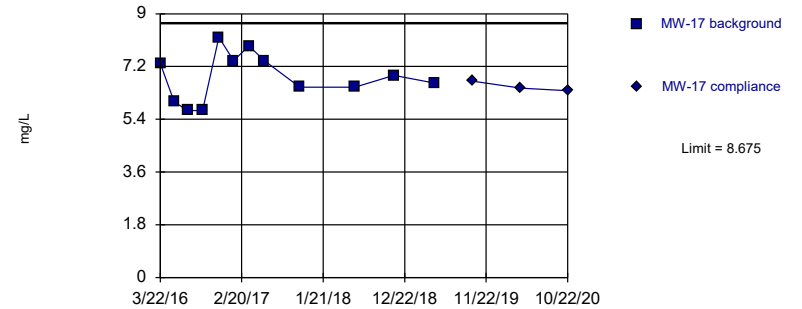
Within Limit

MW-15 background

MW-15 compliance

Limit = 1.535

Background Data Summary: Mean=1.207, Std. Dev.=0.1472, n=12.   Normality test: Shapiro Wilk @alpha = 0.01,
calculated = 0.9076, 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 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

Intrawell Parametric

Within Limit

MW-16 background

MW-16 compliance

Limit = 1.234

Background Data Summary: Mean=0.82, Std. Dev.=0.1886, n=13.   Normality test: Shapiro Wilk @alpha = 0.01,
calculated = 0.9011, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha =
0.00188.

Constituent: Calcium   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

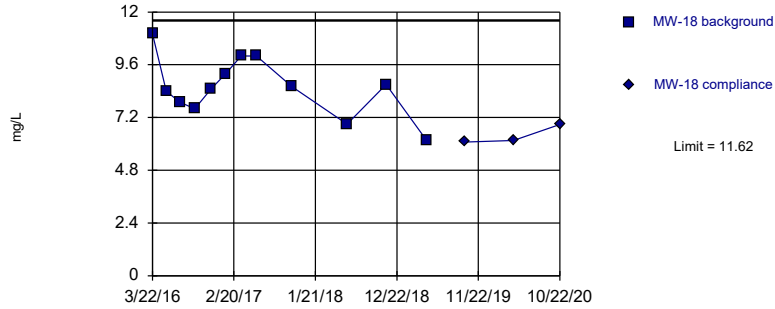**Within Limit**

Prediction Limit
Intrawell Non-parametric

- ■ MW-17 background
- ◆ MW-17 compliance

Limit = 1.4

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 12 background values. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Calcium   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

- ■ MW-18 background
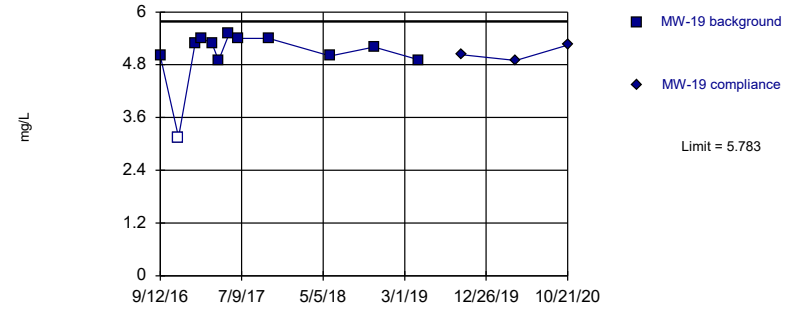- ◆ MW-18 compliance

Limit = 1.062

Background Data Summary: Mean=0.7384, Std. Dev.=0.1448, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9007, 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 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR
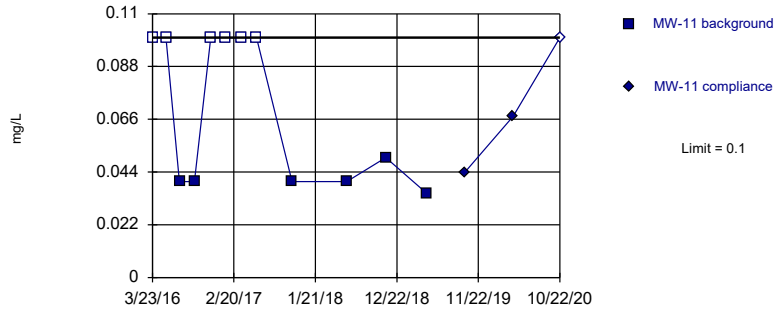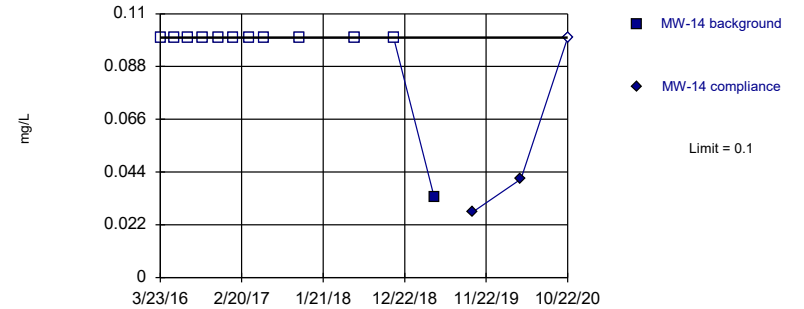
Within Limit

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 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

- ■ MW-11 background
- ◆ MW-11 compliance

Limit = 15.58

Background Data Summary: Mean=12.12, Std. Dev.=1.814, n=27.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9502, critical = 0.894.   Kappa = 1.906 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

- ■ MW-14 background
- ◆ MW-14 compliance

Limit = 12.79

Background Data Summary: Mean=9.592, Std. Dev.=1.433, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9613, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

- ■ MW-15 background
- ◆ MW-15 compliance

Limit = 10.08

Background Data Summary: Mean=7.696, Std. Dev.=1.067, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9552, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

- ■ MW-16 background
- ◆ MW-16 compliance

Limit = 10.64

Background Data Summary: Mean=7.623, Std. Dev.=1.377, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9538, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
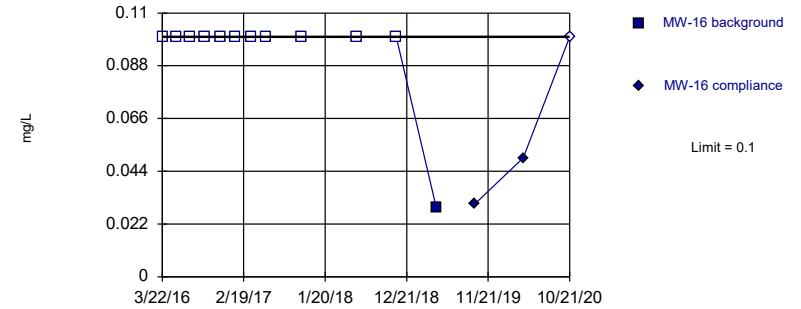### Intrawell Parametric

- ■ MW-17 background
- ◆ MW-17 compliance

Limit = 8.675

Background Data Summary: Mean=6.845, Std. Dev.=0.8197, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9524, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

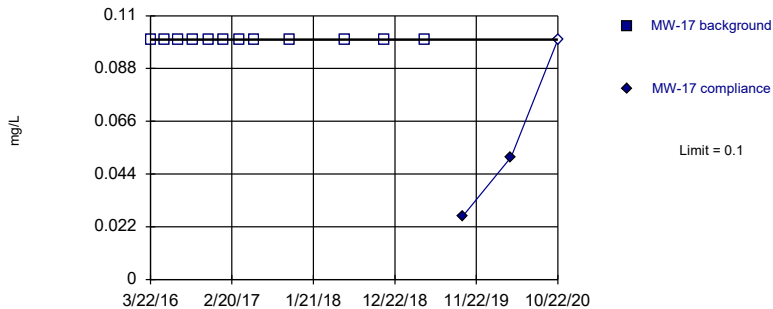## Prediction Limit
Intrawell Parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 11.62

Background Data Summary: Mean=8.581, Std. Dev.=1.361, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9827, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 5.783

Background Data Summary (based on x^5 transformation): Mean=3601, Std. Dev.=1285, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8476, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit
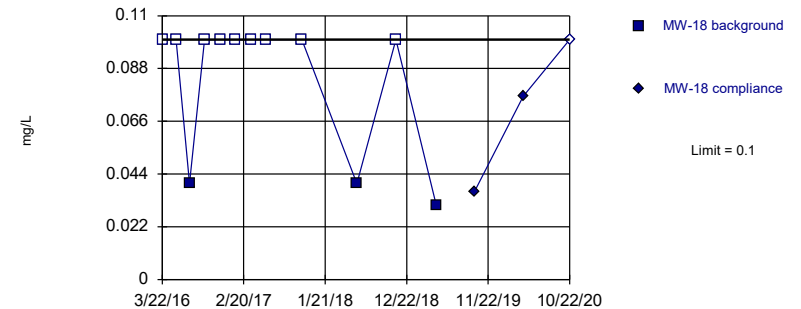
Prediction Limit
Intrawell Non-parametric

■ 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 12 background values. 50% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

■ MW-14 background
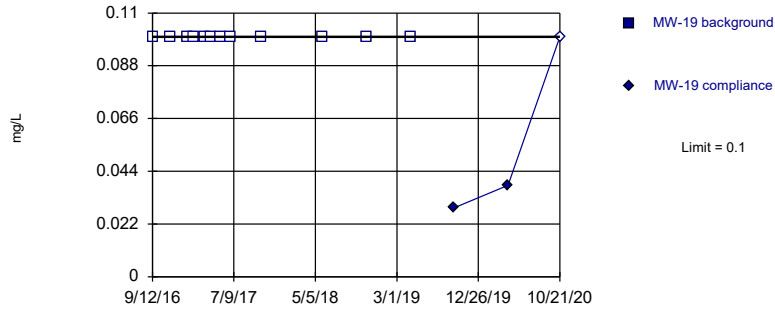
◆ MW-14 compliance

Limit = 0.1

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-15 background

◆ MW-15 compliance

Limit = 0.1

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 0.1

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-17 background

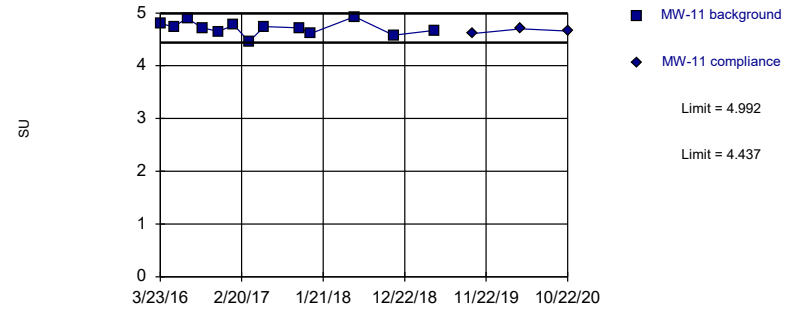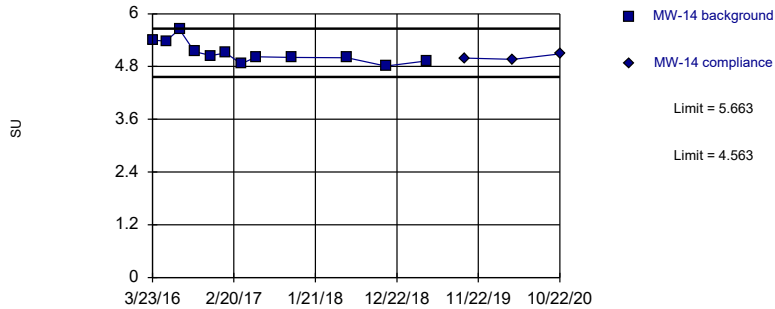◆ MW-17 compliance

Limit = 0.1

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

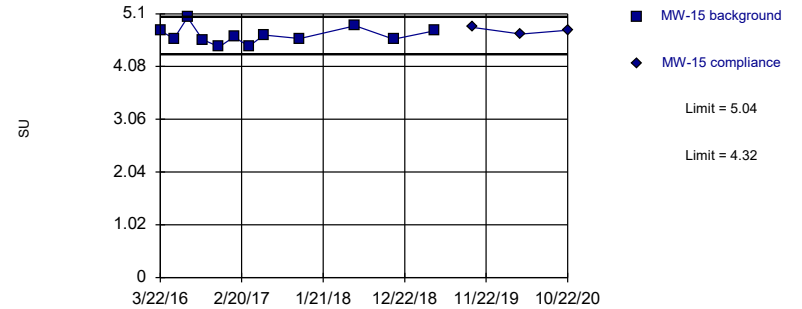Within Limit

Prediction Limit

Intrawell Non-parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 0.1

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:41 AM   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 = 0.1

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- ■ MW-11 background
- ◆ MW-11 compliance

Limit = 4.992

Limit = 4.437

Background Data Summary: Mean=4.715, Std. Dev.=0.1267, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9755, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

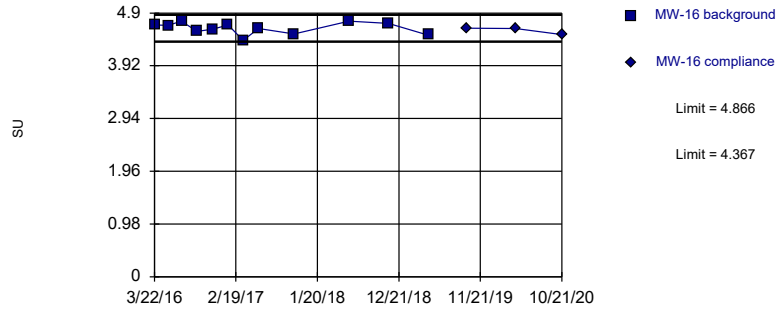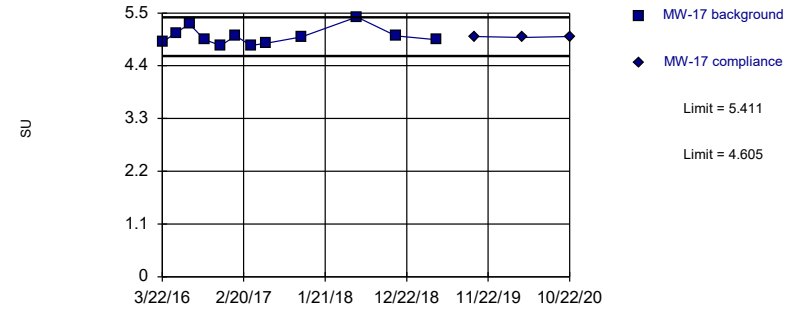Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- ■ MW-14 background
- ◆ MW-14 compliance

Limit = 5.663

Limit = 4.563

Background Data Summary: Mean=5.113, Std. Dev.=0.2464, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9046, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

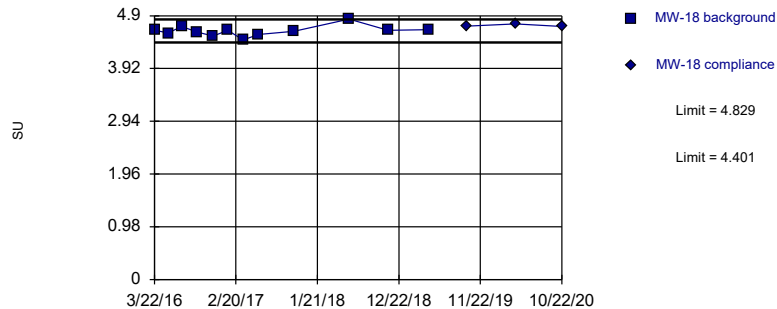Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit
Intrawell Parametric

- ■ MW-15 background
- ◆ MW-15 compliance

Limit = 5.04

Limit = 4.32

Background Data Summary: Mean=4.68, Std. Dev.=0.1615, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9345, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

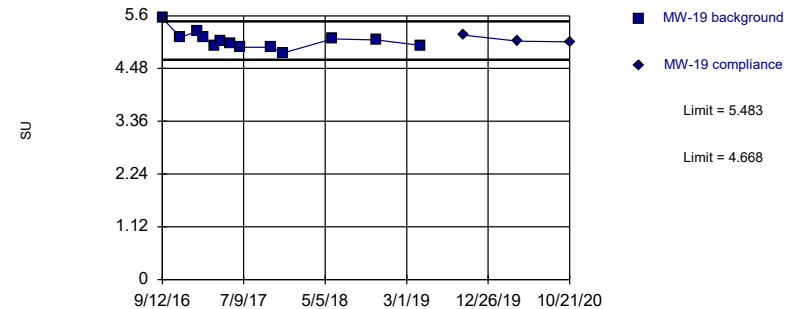Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

SU

■ MW-16 background

◆ MW-16 compliance

Limit = 4.866

Limit = 4.367

Background Data Summary: Mean=4.617, Std. Dev.=0.1118, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9361, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

SU

■ MW-17 background

◆ MW-17 compliance

Limit = 5.411

Limit = 4.605

Background Data Summary: Mean=5.008, Std. Dev.=0.1805, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8737, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

SU

■ MW-18 background

◆ MW-18 compliance

Limit = 4.829

Limit = 4.401

Background Data Summary: Mean=4.615, Std. Dev.=0.09587, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.925, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limits

Prediction Limit

Intrawell Parametric

SU

■ MW-19 background

◆ MW-19 compliance

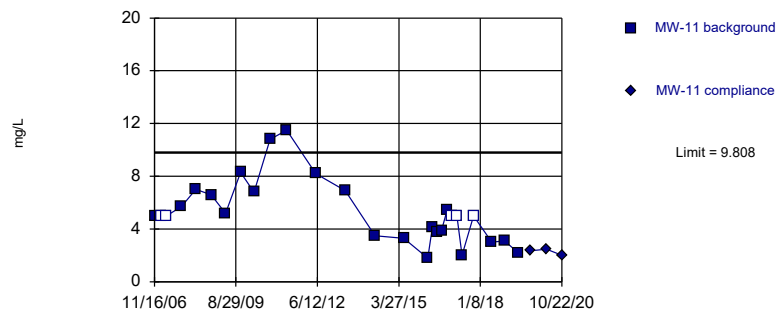Limit = 5.483

Limit = 4.668

Background Data Summary: Mean=5.075, Std. Dev.=0.1858, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9001, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: pH   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

mg/L

■ MW-11 background

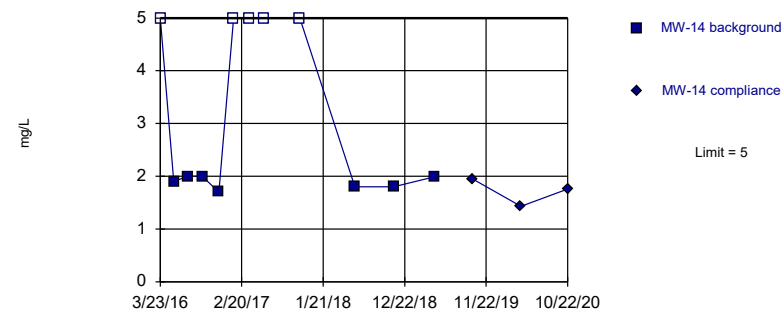◆ MW-11 compliance

Limit = 9.808

Background Data Summary (after Kaplan-Meier Adjustment): Mean=4.944, Std. Dev.=2.552, n=27, 18.52% NDs.
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9272, critical = 0.894.   Kappa = 1.906 (c=7, w=4, 1 of 2,
event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

mg/L

■ MW-14 background

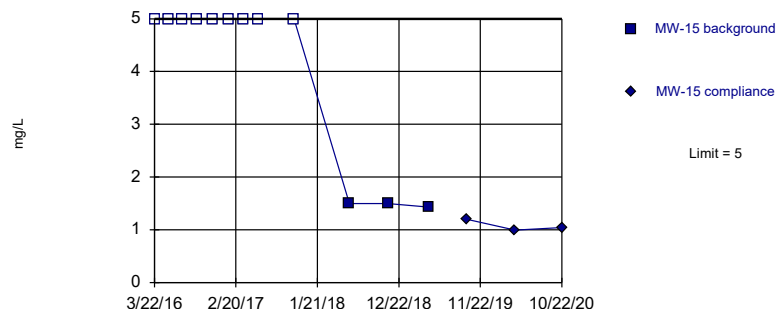◆ MW-14 compliance

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 12 background values. 41.67% NDs. Well-constituent
pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

mg/L

■ MW-15 background
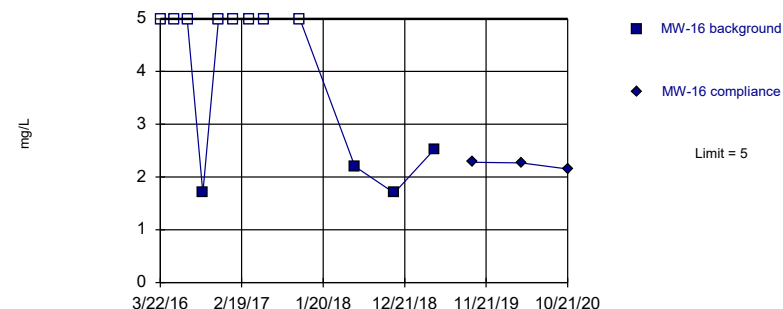
◆ MW-15 compliance

Limit = 5

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest
of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha =
0.01077 (1 of 2).

Constituent: Sulfate   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

mg/L

■ MW-16 background

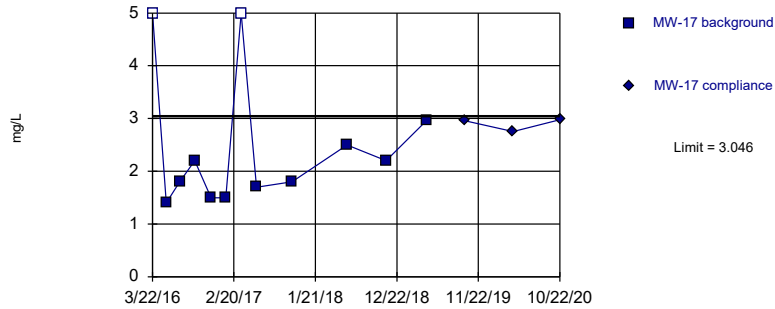◆ MW-16 compliance

Limit = 5

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest
of 12 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha =
0.01077 (1 of 2).

Constituent: Sulfate   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-17 background

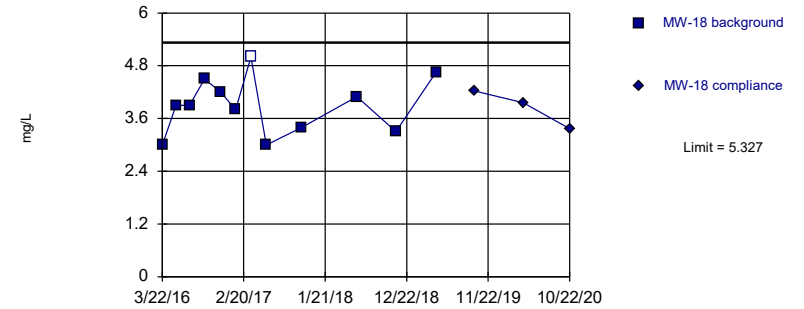♦ MW-17 compliance

Limit = 3.046

Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=1.349, Std. Dev.=0.1777, n=12, 16.67% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8093, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-18 background

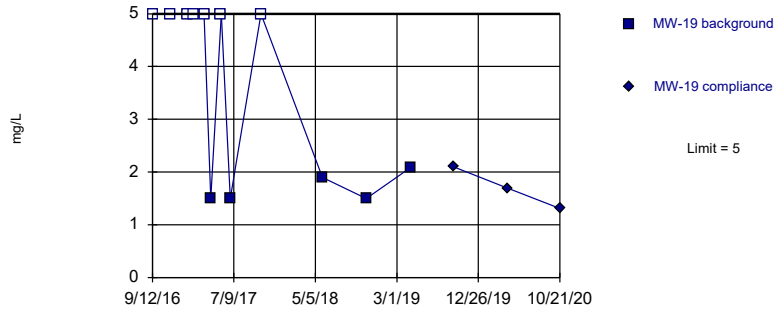♦ MW-18 compliance

Limit = 5.327

Background Data Summary: Mean=3.897, Std. Dev.=0.6408, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9606, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Non-parametric

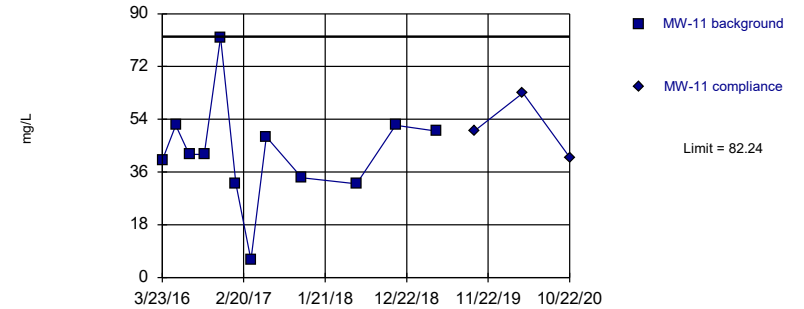■ MW-19 background

♦ MW-19 compliance

Limit = 5

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 58.33% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-11 background

♦ MW-11 compliance
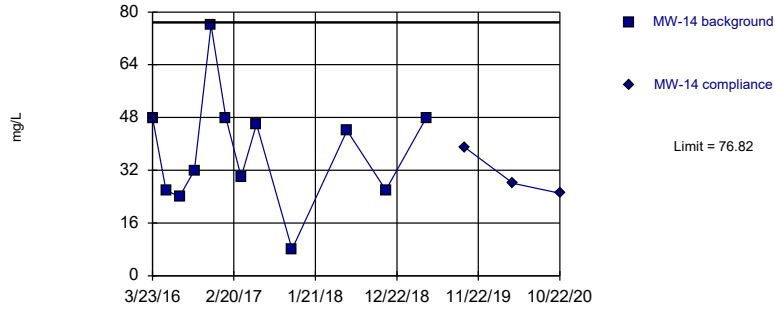
Limit = 82.24

Background Data Summary: Mean=42.67, Std. Dev.=17.73, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9141, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-14 background
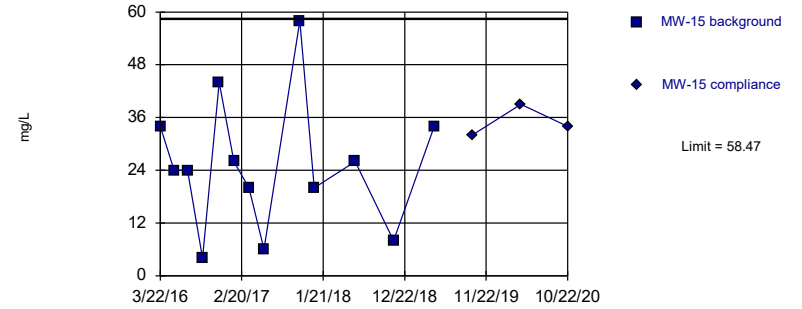
◆ MW-14 compliance

Limit = 76.82

Background Data Summary: Mean=38, Std. Dev.=17.39, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9323, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

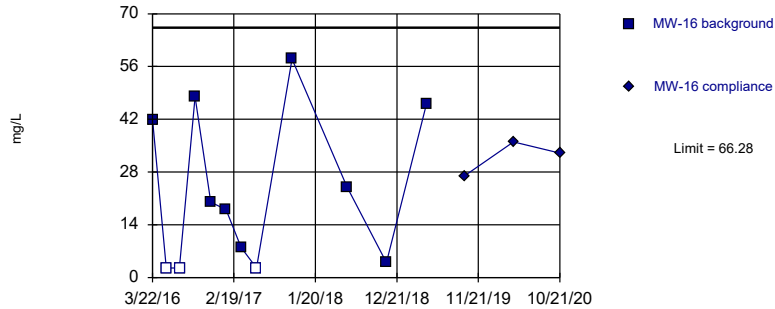■ MW-15 background

◆ MW-15 compliance

Limit = 58.47

Background Data Summary: Mean=25.23, Std. Dev.=15.16, n=13.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9437, critical = 0.814.   Kappa = 2.193 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-16 background

◆ MW-16 compliance

Limit = 66.28

Background Data Summary (after Kaplan-Meier Adjustment): Mean=23.33, Std. Dev.=19.24, n=12, 25% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8666, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit
Intrawell Parametric

■ MW-17 background

◆ MW-17 compliance

Limit = 44.84

Background Data Summary: Mean=23.81, Std. Dev.=9.424, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9134, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132).   Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Within Limit

Prediction Limit

Intrawell Parametric

■ MW-18 background

◆ MW-18 compliance

Limit = 51.36

Background Data Summary: Mean=26.33, Std. Dev.=11.21, n=12.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9551, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

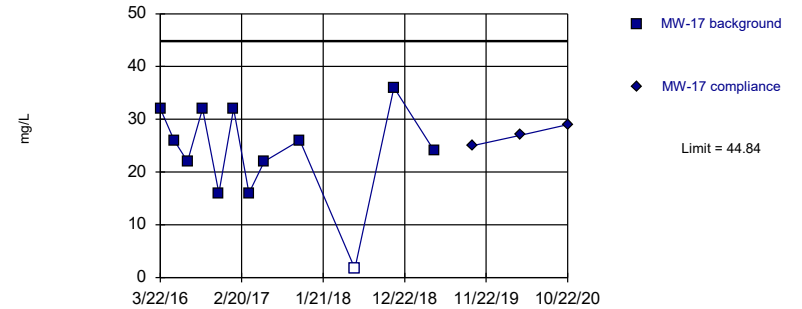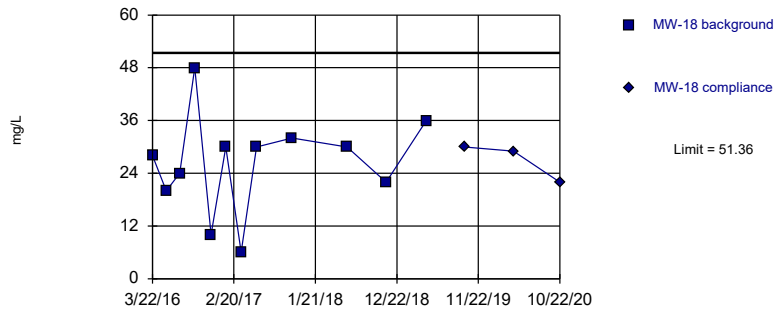
Within Limit

Prediction Limit

Intrawell Parametric

■ MW-19 background

◆ MW-19 compliance

Limit = 46.26

Background Data Summary: Mean=20.63, Std. Dev.=11.48, n=12, 8.333% NDs.   Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9792, critical = 0.805.   Kappa = 2.232 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids   Analysis Run 12/22/2020 9:41 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

Prediction Limit

	MW-11	MW-11
3/23/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	<0.08	
9/12/2016	<0.08	
11/18/2016	<0.08	
1/19/2017	<0.08	
3/22/2017	<0.08	
5/24/2017	<0.08	
10/17/2017	<0.08	
5/31/2018	<0.08	
11/7/2018	<0.08	
4/22/2019	<0.08	
9/27/2019		0.0443 (J)
4/13/2020		<0.08
10/22/2020		0.103

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/22/2020 9:43 AM   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)

Prediction Limit

	MW-15	MW-15
3/22/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	<0.08	
9/12/2016	<0.08	
11/19/2016	<0.08	
1/19/2017	<0.08	
3/21/2017	<0.08	
5/23/2017	<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		0.0437 (J)

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 12/22/2020 9:43 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	0.026 (J)	
9/12/2016	<0.08	
11/18/2016	<0.08	
1/18/2017	<0.08	
3/21/2017	<0.08	
5/24/2017	<0.08	
10/17/2017	0.025 (J)	
5/31/2018	0.022 (J)	
11/8/2018	<0.08	
4/22/2019	<0.08	
9/26/2019		0.042 (J)
4/14/2020		<0.08
10/22/2020		0.0401 (J)

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

	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

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

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

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

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

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/22/2020 9:43 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	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

Prediction Limit

	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

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

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

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

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/22/2020 9:43 AM   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	0.0335 (J)	
9/26/2019		0.0272 (J)
4/13/2020		0.0411 (J)
10/22/2020		<0.1

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	0.0275 (J)	
9/26/2019		<0.1
4/13/2020		0.0484 (J)
10/22/2020		<0.1

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/22/2020 9:43 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-16	MW-16
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/11/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/18/2017	<0.1	
3/21/2017	<0.1	
5/23/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	<0.1	
11/8/2018	<0.1	
4/22/2019	0.029 (J)	
9/26/2019		0.0302 (J)
4/14/2020		0.0496 (J)
10/21/2020		<0.1

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/22/2020 9:43 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-17	MW-17
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/18/2016	<0.1	
1/18/2017	<0.1	
3/21/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	<0.1	
11/8/2018	<0.1	
4/22/2019	<0.1	
9/26/2019		0.0263 (J)
4/13/2020		0.0511 (J)
10/22/2020		<0.1

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

	MW-19	MW-19
9/12/2016	<0.1	
11/18/2016	<0.1	
1/18/2017	<0.1	
2/10/2017	<0.1	
3/21/2017	<0.1	
4/14/2017	<0.1	
5/23/2017	<0.1	
6/26/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	<0.1	
11/8/2018	<0.1	
4/22/2019	<0.1	
9/26/2019		0.0287 (J)
4/13/2020		0.0382 (J)
10/21/2020		<0.1

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

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

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

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

Prediction Limit

Constituent: pH (SU)   Analysis Run 12/22/2020 9:43 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	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

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

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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:43 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<5	
5/18/2016	1.9	
7/12/2016	2 (J)	
9/12/2016	2 (J)	
11/19/2016	1.7 (J)	
1/18/2017	<5	
3/22/2017	<5	
5/24/2017	<5	
10/17/2017	<5	
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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:43 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<5	
5/18/2016	<5	
7/12/2016	<5	
9/12/2016	<5	
11/19/2016	<5	
1/19/2017	<5	
3/21/2017	<5	
5/23/2017	<5	
10/17/2017	<5	
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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:43 AM   View: Intrawell

Plant Daniel   Client: Southern Company   Data: NAMU CCR

	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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:43 AM   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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L)   Analysis Run 12/22/2020 9:43 AM   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