2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

MISSISSIPPI POWER COMPANY
PLANT VICTOR DANIEL
NORTH ASH MANAGEMENT UNIT

January 31, 2025

Prepared for

Mississippi Power Company
Gulfport, Mississippi

By

Southern Company Services
Earth Science and Environmental Engineering

CERTIFICATION STATEMENT

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

Annelyse W. Helms, PG
Mississippi PG No. 1048
Geologist

Gregory F. Budd, PG
Mississippi PG No. 0990
Senior Geologist

EXECUTIVE SUMMARY

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

Statistically significant increases (SSIs) of Appendix III constituents over background were identified in the results of the 2024 semi-annual detection monitoring events. An alternate source demonstration (ASD) was previously prepared to address the detected SSIs and was subsequently submitted in January of 2022. As discussed in the ASD report, the apparent exceedances observed during the monitoring period are not likely the result of a release from the CCR unit. Therefore, in accordance with § 257.94, MPC will continue detection monitoring. The following future actions will be taken or are recommended for the Site:

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

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

Executive Summary Table
Monitoring Period Summary
Plant Daniel - North Ash Management Unit (NAMU)

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

Statistical Analysis Results *	
Appendix III SSIs	
Constituent	**Wells**
Boron	None.
Calcium	None.
Chloride	None.
Fluoride	None.
pH	None.
Sulfate	MW-11 (upgraident) and MW-17
TDS	None.
Appendix IV SSLs	
No Significant Results.	
* See the attached report for further details regarding statistical exceedances and alternate source demonstrations.	
Assessment of Corrective Measures & Groundwater Remedy	
Assessment of Corrective Measures	
Site Remains in 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 Code of Federal Regulations (CFR) § 257 Subpart D), Southern Company Services (SCS) has prepared this *2024 Annual Groundwater Monitoring and Corrective Action Report* document groundwater monitoring activities at Mississippi Power Company (MPC) Plant Daniel North Ash Management Unit (NAMU). Groundwater monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements § 257.90 through § 257.94 of the Federal CCR rule.

2.0 MONITORING PROGRAM STATUS

Statistically significant increases (SSIs) of Appendix III constituents over background were identified in the results of the 2024 semi-annual detection monitoring events . Pursuant to § 257.94(e)(1), an Alternate Source Demonstration (ASD) was previously prepared to address the detected SSIs and was subsequently submitted in January of 2022. MPC has addressed the reported SSIs in accordance with the requirements, and options, of § 257.94(e) (1-3) and (f) by providing an ASD, as described in Section 9.0. Therefore, in accordance with § 257.94, MPC will continue detection monitoring. Analytical data from the semi-annual monitoring events are included as **Appendix A, Laboratory Analytical Data and Field Sampling Records**, in accordance with the requirements of § 257.90(e)(3).

3.0 SITE LOCATION AND DESCRIPTION

Plant Daniel is an electric generating facility consisting of two coal-fired units and two natural gas combined cycle units. The plant is located near the town of Escatawpa, Jackson County, Mississippi immediately northwest of the intersection of Mississippi State Highways 63 and 613. The approximately 30-acre NAMU is located at the far north end of the plant property. It is bordered on the east by Highway 63, on the north by the cellular tower property, on the west by the Vaughn Bayou of the Pascagoula River, and on the south by the central ash management unit. The site address is 13201 Highway 63 N, Escatawpa, Mississippi 39562.

The Site is located within Section 35, Township 5 South, Range 6 West, Sections 37, 10, 15, East half of Section 9, Southwest ¼ of Section 2, Northwest ¼ and south half of Section 11, and the north half and northwest ¼ of the southwest ¼ of Section 14, all of Township 6 South, Range 6 West. NAMU is located in the northernmost portion of the property. **Figure 1, Site Location Map**, depicts the location of Plant Daniel relative to site features and the surrounding area.

3.1 Regional Geology & Hydrogeologic Setting

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

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

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

3.2 Uppermost Aquifer

Two aquifers supply water to the Pascagoula area. These are the Pliocene-age Citronelle and the Miocene Aquifer System, which includes the Graham Ferry Aquifer. Plant Daniel is in the Citronelle aquifer outcrop area. The Citronelle Aquifers are the shallowest aquifers in the Pascagoula area. Although principally a sand and gravel formation, the Citronelle is characterized by occasional lenses and layers of clay which may cause semi-artesian conditions. Sediments become coarse near the irregular contact with the underlying Pascagoula or Graham Ferry Formation. Also, the Citronelle and overlying coastal deposits are considered one hydrogeologic unit. The Citronelle is primarily a water table aquifer with a saturated thickness of about 45 feet. Recharge is primarily by rainfall which moves vertically and down dip to

recharge underlying aquifers and to sustain local streams (Wasson, 1978). For groundwater monitoring purposes, all on-site compliance wells are screened within the uppermost Unit 2 sand aquifer.

4.0 GROUNDWATER MONITORING SYSTEM

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

4.1 Compliance Monitoring Network

Groundwater monitoring wells at the Site are designated as upgradient compliance wells and downgradient compliance wells. Monitoring wells MW-11, MW-14, and MW-18 serve as upgradient locations for the NAMU. Upgradient wells are screened within the same hydrostratigraphic interval(s) as the downgradient locations and represent background groundwater quality at the Site. Upgradient wells are positioned along the eastern portion of the unit as determined by water level monitoring and potentiometric surface maps constructed for the Site. Located along the western and southern portion of the regulated unit, monitoring well locations MW-15, MW-16, MW-17, and MW-19 serve as downgradient locations for NAMU. Additionally, two monitoring wells (MW-12 and MW-13), not included in the facility's compliance groundwater network, are utilized as water level only piezometers to enhance groundwater potentiometric surfaces and flow direction interpretations. The location and designation of Site wells are presented on **Figure 2, Monitoring Well Location Map. Table 1, Monitoring Well Network Details,** summarize the monitoring well construction details, surveyed elevations, and design purpose for the Plant Daniel NAMU.

4.2 Monitoring Well Installation, Abandonment, and Maintenance

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

5.0 GROUNDWATER SAMPLING AND ANALYSIS

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

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

5.1 Groundwater Sample Collection

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

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

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

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

5.2 Sampling Preservation and Handling

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

5.3 Chain of Custody

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

5.4 Laboratory Analysis

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

6.0 GROUNDWATER ELEVATION AND FLOW

Groundwater elevations ranged from 7.50 to 12.74 feet referenced to the North American Datum of 1988 (NAVD88) and 4.44 to 10.68 feet NAVD88 during the first and second 2024 semi-annual monitoring events, respectively. **Figure 3, Potentiometric Surface Contour Map (March 18, 2024)**, and **Figure 4, Potentiometric Surface Contour Map (September 30, 2024**), depict the groundwater elevations and inferred flow directions.

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

6.1 Groundwater Velocity Calculations

A general estimate of groundwater flow velocities at the site were calculated based on hydraulic gradients, hydraulic conductivities derived from previous slug test results, and an estimated effective porosity of the

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

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

Where:

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

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

i = Horizontal hydraulic gradient

n_e= Effective porosity

Groundwater monitoring wells MW-14 and MW-16 were used to calculate Flow Path A and MW-11 and MW-19 were used to calculate Flow Path B. The horizontal hydraulic gradients ranged from 0.0028 feet per foot (ft/ft) to 0.0039 ft/ft. As presented on **Table 4,** groundwater flow velocity at the site ranges from approximately 0.36 feet per day (ft/day) (or approximately 129.91 feet per year) to 0.48 feet/day (or approximately 176.29 feet per year). These calculated groundwater flow velocities across the site are consistent with historical calculations and with expected velocities.

7.0 EVALUATION OF GROUNDWATER QUALITY DATA

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

7.1 Quality Assurance and Quality Control

Laboratory analytical precision is measured through the calculation of the relative percent difference (RPD) between two data sets generated from a similar source. specifically, between the original compliance and field duplicate samples. For groundwater analytical data, quality control procedures include calculating the

RPD (where field duplicates are collected) between the sample and duplicate sample duplicate concentrations as is calculated as:

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the original or field duplicate sample

Conc2 = Lower concentration of the original or field duplicate sample

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

During the first 2024 semi-annual sampling event, RPD exceeded 20% for Total Dissolved Solids (TDS) for the sample and field duplicate collected at MW-17. The TDS concentrations observed in MW-17 for the parent and duplicate samples were 20.0 mg/L and 17.0 mg/L, respectively, resulting in an RPD of 66.7%. If RPD exceeds 20% for samples with concentrations greater than five times the RL (10.0 mg/L), the parent sample and duplicate sampling are qualified with "(+) J." When the concentrations in the parent sample or duplicate sample are less than five times the RL and the difference between the parent sample concentration and duplicate concentration are greater than the RL, the parent and duplicate samples are qualified with "(+) J, (ND) UJ." A summary of qualified data from the first semi-annual sampling event of 2024 is provided below.

Well ID	Sample Date	Constituent	Original Concentration (mg/L)	Field Duplicate Concentration (mg/L)	RPD (%)	Reporting Limit (mg/L)	Data Qualifier
MW-17	3/19/24	TDS	20.0	10.0 mg/L	66.7%	10.0 mg/L	(+) J, (ND) UJ

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

8.0 STATISTICAL METHODOLOGY AND TESTS

Statistical analysis of Appendix III groundwater monitoring data was performed on samples collected from the certified groundwater monitoring network pursuant to 40 CFR § 257.93 and following the appropriate PE-certified method. Sanitas™ groundwater statistical software was used to perform the statistical analyses. Sanitas™ is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by EPA regulations. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

8.1 Appendix III Evaluation

Intrawell and interwell prediction limits, combined with a 1-of-2 verification (resample) plan, were constructed for the analyzed Appendix III constituents. Intrawell prediction limits compare the most recent compliance sample from a given well to historical data from the same well and provide statistical limits representative of the background data population. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present and to identify potential SSIs. When an initial (or apparent) statistically significant increase or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier. If the second sample exceeds its respective background statistical limit, a statistically significant increase (SSI) is identified. If the second sample is below its respective background limit, there is no SSI. In accordance with the Unified Guidance, the following adjustments were made to the statistical analysis program:

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

8.2 Statistical Exceedances

Laboratory analytical data from the first and second 2024 semi-annual monitoring events were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (October 2017 and revised in October 2022) by Groundwater Stats Consulting, LLC. Statistical analyses were performed to determine if Appendix III constituent concentrations have returned to background levels (updated in May 2024).

The detected concentrations of calcium in compliance well MW-19 constituted an SSI during the first semi-annual monitoring event. In addition, an intra-well statistical exceedance of sulfate was identified in compliance well MW-17 during the second semi-annual monitoring event. As discussed in the following section, an alternate source demonstration (ASD) was prepared and submitted in January 2022 pursuant to 40 CFR § 257.94(e)(2) demonstrating that the SSIs historically detected in M-17 (sulfate) and MW-19 (calcium and pH) are not the result of a release from the regulated unit. The statistical analyses for groundwater samples collected during the 2024 monitoring period are provided in **Appendix B** for reference.

9.0 ALTERNATE SOURCE DEMONSTRATION

In accordance with 40 CFR § 257.95(g)(3)(ii), the owner or operator may demonstrate that a source other than the CCR Unit has caused an SSI or that the SSI resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. An ASD report for SSIs (calcium, pH, and sulfate) identified during the 2021 semi-annual detection monitoring events was submitted on January 31, 2022. As discussed in the ASD report, the apparent exceedances observed were not the result of a release from the CCR unit and are caused by natural variability in groundwater quality. Based on the ASD, the NAMU remains in detection monitoring.

10.0 SUMMARY AND CONCLUSIONS

Based on results reported in the *2024 Annual Groundwater and Corrective Action Monitoring Report*, MPC remained in detection monitoring. Groundwater samples were collected semi-annually from the certified well network and analyzed for constituents listed in Appendix III. Statistical evaluations of the March and September/October 2024 detection monitoring data identified SSIs of Appendix III constituents above the GWPS. However, an ASD report submitted in January 2022 addresses these SSIs. As discussed in the ASD report, the apparent exceedances observed during the monitoring period are likely not the result of a release from the CCR unit. Therefore, in accordance with § 257.94, MPC will continue detection monitoring. The following future actions will be taken or are recommended for the Site:

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

11.0 REFERENCES

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Southern Company

TABLES

Table 1. Monitoring Well Network Details

Plant Daniel North Ash Management Unit (NAMU)

Well ID	Hydraulic Location	Latitude	Longitude	Top of Casing Elevation (ft. MSL)	Ground Elevation (ft. MSL)	Well Depth (ft. BTOC)	Top of Screen Elevation (ft. MSL)	Bottom of Screen Elevation (ft. MSL)	Date of Installation
MW-11	Upgradient	30.55781	-88.56425	25.24	23.22	34.02	-3.78	-8.78	05/02/06
MW-14	Upgradient	30.55575	-88.56435	23.65	20.87	49.78	-21.13	-26.13	07/24/15
MW-18	Upgradient	30.55917	-88.56479	28.86	26.33	49.53	-15.67	-20.67	07/24/15
MW-15	Downgradient	30.55426	-88.56545	21.53	18.69	39.84	-13.31	-18.31	07/24/15
MW-16	Downgradient	30.55451	-88.56775	16.12	13.16	30.96	-9.84	-14.84	07/24/15
MW-17	Downgradient	30.55777	-88.56786	15.41	12.59	29.82	-9.41	-14.41	07/24/15
MW-19	Downgradient	30.55606	-88.56817	24.42	21.56	32.86	-3.44	-8.44	07/26/16
MW-12	Not Designated	30.55627	-88.56854	22.07	19.48	22.59	4.48	-0.52	05/02/06
MW-13	Not Designated	30.55522	-88.56865	26.85	24.19	25.66	6.19	1.19	05/02/06

Notes:

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

2. MSL - Mean Sea Level.

Table 2. Constituents And Reporting Limits

Plant Daniel North Ash Management Unit (NAMU)

03/18/2024 - 10/01/2024

Appendix III Constituents			
Constituent	**Analytical Method**	**Reporting Limit**	**Units of Measure**
Boron	EPA 6020B	0.08	mg/L
Calcium	EPA 6020B	0.5	mg/L
Chloride	EPA 9056A	1	mg/L
Fluoride	EPA 9056A	0.1	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	EPA 9056A	1	mg/L
TDS	SM 2540C-2016	10	mg/L

Notes:
1. mg/L - milligrams per liter, SU - standard unit, pCi/L - picocuries per liter, TDS - Total Dissolved Solids, NA - not applicable (varies)
2. Reporting limit values can display range depending upon matrix interferences and dilution factors
3. pH is a field acquired parameter and does not have a laboratory method or reporting limit
4. EPA 6020B – EPA methodology for the "Inductively Coupled Plasma - Mass Spectrometry, part of Test Methods for Evaluating Soild Waste, Physical/Chemical Methods"
5. EPA 9056A – EPA methodology for the "Determination of Inorganic Anions by Ion Chromatography, part of Test methods for Evaluating Solid Waste, Physical/Chemical Methods"
6. SM 2540, 4500 – Standard Method(s) for Examination of Water and Wastewater

Table 3. Groundwater Elevation Summary

Plant Daniel North Ash Management Unit (NAMU)

Measurement Date		March 18, 2024		September 30, 2024	
Well ID	**Top of Casing Elevation (ft. MSL)**	**Depth to Water (ft. BTOC)**	**Groundwater Elevation (ft. MSL)**	**Depth to Water (ft. BTOC)**	**Groundwater Elevation (ft. MSL)**
MW-11	25.24	12.50	12.74	14.56	10.68
MW-12	22.07	14.59	7.48	17.61	4.46
MW-13	26.85	19.35	7.50	22.41	4.44
MW-14	23.65	11.80	11.85	13.81	9.84
MW-15	21.53	11.06	10.47	13.04	8.49
MW-16	16.12	8.10	8.02	10.99	5.13
MW-17	15.41	6.23	9.18	8.44	6.97
MW-18	28.86	16.16	12.70	18.22	10.64
MW-19	24.42	16.78	7.64	19.90	4.52

Notes:

1. MSL - Mean Sea Level

2. BTOC - Below Top of Casing

Table 4. Groundwater Velocity Calculations

Plant Daniel North Ash Management Unit (NAMU)

03/18/2024 - 10/01/2024

Flow Path A								
Sample Date	**MW-14** h_1 **(ft)**	**MW-16** h_2 **(ft)**	**Distance** **Δl (ft)**	**Hydraulic Gradient** **Δh/Δl (ft/ft)**	**Hydraulic Conductivity** **K**	**Assumed Effective Porosity** **ne**	**Calculated Groundwater Flow Velocity** **Feet/day**	**Calculated Groundwater Flow Velocity** **Feet/year**
03/18/24	11.85	8.02	1350	0.0028	25.09	0.2	0.36	129.91
09/30/24	9.84	5.13	1350	0.0035	25.09	0.2	0.44	159.75

Flow Path B								
Sample Date	**MW-11** h_1 **(ft)**	**MW-19** h_2 **(ft)**	**Distance** **Δl (ft)**	**Hydraulic Gradient** **Δh/Δl (ft/ft)**	**Hydraulic Conductivity** **K**	**Assumed Effective Porosity** **ne**	**Calculated Groundwater Flow Velocity** **Feet/day**	**Calculated Groundwater Flow Velocity** **Feet/year**
03/18/24	12.74	7.64	1600	0.0032	25.09	0.2	0.40	145.95
09/30/24	10.68	4.52	1600	0.0039	25.09	0.2	0.48	176.29

Notes:

ft=feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year

Table 5. Relatative Percent Defference (RPD) Calculations

Plant Daniel North Ash Management Unit (NAMU)

03/18/2024 -10/01/2024

First Semi-Annual Monitoring Event					
Well ID	**Constituent**	**Units**	**Original Result**	**Duplicate Result**	**RPD %**
MW-11	Calcium	mg/L	1.19	1.24	4.12
	Chloride	mg/L	8.82	8.76	0.68
	Sulfate	mg/L	2.81	2.72	3.25
	TDS	mg/L	33	32	3.08
MW-17	Calcium	mg/L	1.03	1.04	0.97
	Chloride	mg/L	7.06	6.92	2.00
	Sulfate	mg/L	3.53	3.41	3.46
	TDS	mg/L	20	10	66.67
MW-18	Chloride	mg/L	5.44	5.08	6.84
	Sulfate	mg/L	6.1	5.76	5.73
	TDS	mg/L	25	29	14.81

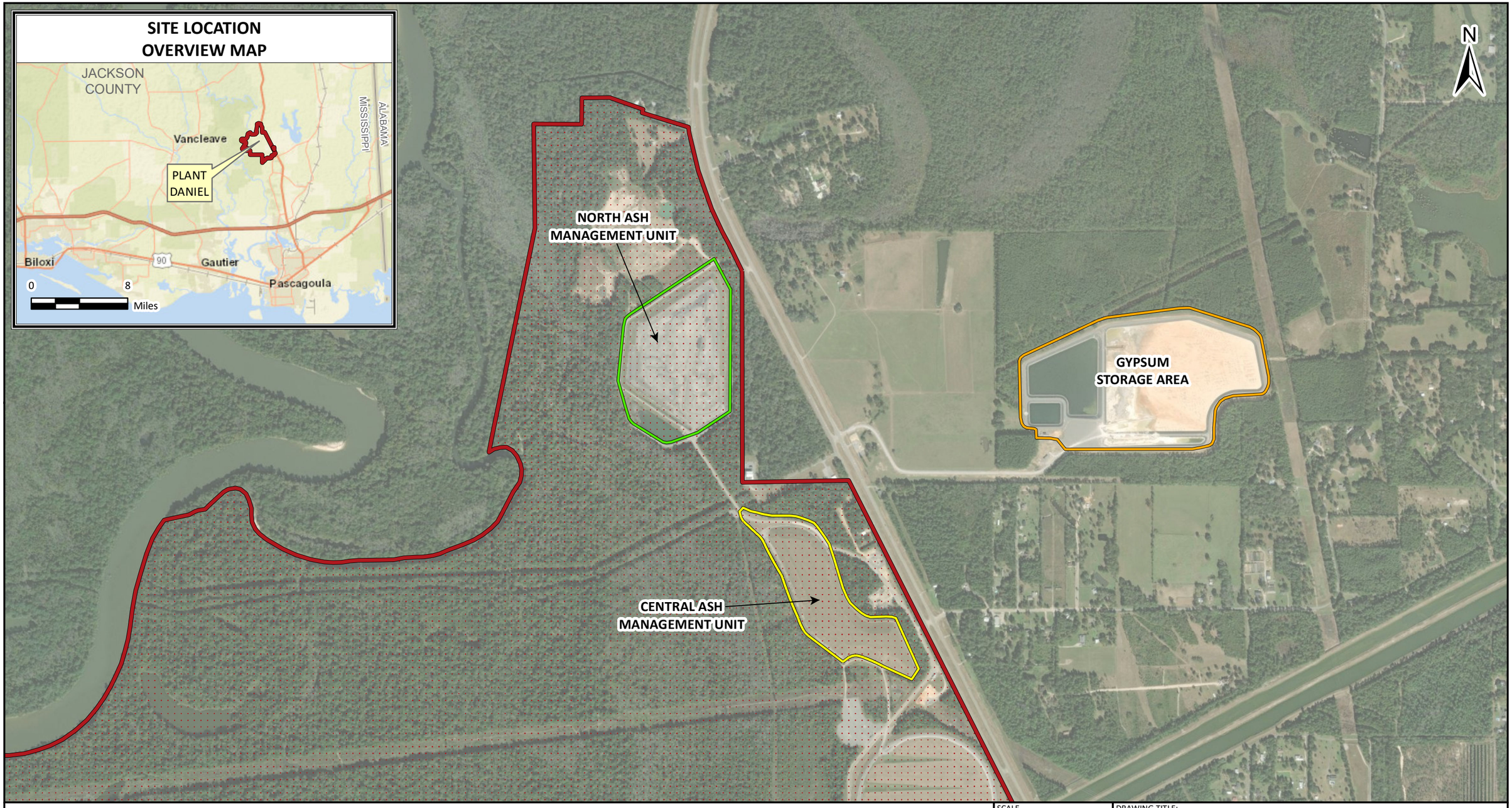
Second Semi-Annual Monitoring Event					
Well ID	**Constituent**	**Units**	**Original Result**	**Duplicate Result**	**RPD %**
MW-11	Calcium	mg/L	1.58	1.57	0.63
	Chloride	mg/L	12.3	12.3	0.00
	Sulfate	mg/L	2.69	2.79	3.65
	TDS	mg/L	33	39	16.67
MW-18	Calcium	mg/L	0.647	0.665	2.74
	Chloride	mg/L	7.15	7.14	0.14
	Sulfate	mg/L	5.43	5.38	0.93
	TDS	mg/L	35	37	5.56

Notes:

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

Southern Company

FIGURES



LEGEND

- Gypsum Storage Area (GSA) Boundary
- Central Ash Management Unit (CAMU) Boundary
- North Ash Management Unit (NAMU) Boundary
- Property Boundary (Approximate)

0 1,000 Feet

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

SCALE	1:12000
DATE	1/28/2025
DRAWN BY	KAR
CHECKED BY	AWH
DRAWING TITLE:	SITE LOCATION MAP PLANT DANIEL NORTH ASH MANAGEMENT UNIT
FIGURE NO.	FIGURE 1

Southern Company

LEGEND

- Downgradient Compliance Well
- Upgradient Compliance Well
- Monitoring Well
- North Ash Management Unit

0 500 Feet

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

SCALE	1:6000
DATE	1/28/2025
DRAWN BY	KAR
CHECKED BY	RFS

DRAWING TITLE:
MONITORING WELL LOCATION MAP
PLANT DANIEL
NORTH ASH MANAGEMENT UNIT

FIGURE NO.
FIGURE 2

Southern Company

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

LEGEND

- Downgradient Compliance Well
- Upgradient Compliance Well
- Monitoring Well
- **MW-11** Well Name
- 12.74 Groundwater Elevation (ft NAVD88)
- Estimated Potentiometric Surface Contour (ft
- Approximate Groundwater Flow Direction
- North Ash Management Unit

0 500 Feet

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

SCALE	1:6000
DATE	1/28/2025
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE: **POTENTIOMETRIC SURFACE CONTOUR MAP MARCH 18, 2024 PLANT DANIEL NORTH ASH MANAGEMENT UNIT**

FIGURE NO. FIGURE 3

Southern Company

LEGEND

- Downgradient Compliance Well
- Upgradient Compliance Well
- Monitoring Well
- **MW-11** Well Name
- 10.68 Groundwater Elevation (ft NAVD88)
- Estimated Potentiometric Surface Contour (ft
- Approximate Groundwater Flow Direction
- North Ash Management Unit

0 500 Feet

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

SCALE	1:6000
DATE	11/06/2024
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE: **POTENTIOMETRIC SURFACE CONTOUR MAP SEPTEMBER 30, 2024 PLANT DANIEL NORTH ASH MANAGEMENT UNIT**

FIGURE NO. FIGURE 4

Southern Company

Southern Company

APPENDIX A

Laboratory and Field Records

Low-Flow Test Report:

Test Date / Time: 3/18/2024 12:53:25 PM
Project: Daniel NAMU CCR MW-11
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-11 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 30.5 ft** **Total Depth: 33 ft** **Initial Depth to Water: 12.51 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 30.5 ft** **Estimated Total Volume Pumped: 72000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 3.38 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Sunny, 68 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/18/2024 12:53 PM	00:00	4.99 pH	20.18 °C	53.05 µS/cm	4.86 mg/L		65.2 mV	12.51 ft	400.00 ml/min
3/18/2024 12:58 PM	05:00	4.78 pH	20.18 °C	48.98 µS/cm	2.11 mg/L	38.50 NTU	59.7 mV	14.72 ft	400.00 ml/min
3/18/2024 1:03 PM	10:00	4.70 pH	20.20 °C	46.92 µS/cm	1.09 mg/L	69.50 NTU	58.1 mV	14.95 ft	400.00 ml/min
3/18/2024 1:08 PM	15:00	4.67 pH	20.24 °C	46.90 µS/cm	0.69 mg/L	54.60 NTU	50.8 mV	15.15 ft	400.00 ml/min
3/18/2024 1:13 PM	20:00	4.67 pH	20.25 °C	47.07 µS/cm	0.50 mg/L	50.20 NTU	46.7 mV	15.25 ft	400.00 ml/min
3/18/2024 1:18 PM	25:00	4.66 pH	20.37 °C	47.54 µS/cm	0.43 mg/L	45.50 NTU	44.5 mV	15.31 ft	400.00 ml/min
3/18/2024 1:23 PM	30:00	4.67 pH	20.29 °C	47.82 µS/cm	0.38 mg/L	39.80 NTU	43.3 mV	15.37 ft	400.00 ml/min
3/18/2024 1:28 PM	35:00	4.67 pH	20.28 °C	48.19 µS/cm	0.34 mg/L	35.20 NTU	41.4 mV	15.41 ft	400.00 ml/min
3/18/2024 1:33 PM	40:00	4.67 pH	20.24 °C	48.40 µS/cm	0.30 mg/L	28.90 NTU	40.4 mV	15.45 ft	400.00 ml/min
3/18/2024 1:38 PM	45:00	4.68 pH	20.24 °C	48.70 µS/cm	0.30 mg/L	26.60 NTU	40.2 mV	15.45 ft	400.00 ml/min
3/18/2024 1:43 PM	50:00	4.68 pH	20.31 °C	48.76 µS/cm	0.29 mg/L	25.30 NTU	39.6 mV	15.50 ft	400.00 ml/min
3/18/2024 1:48 PM	55:00	4.69 pH	20.30 °C	48.87 µS/cm	0.27 mg/L	25.00 NTU	37.5 mV	15.55 ft	400.00 ml/min
3/18/2024 1:53 PM	01:00:00	4.69 pH	20.34 °C	49.22 µS/cm	0.26 mg/L	21.00 NTU	37.2 mV	15.57 ft	400.00 ml/min

3/18/2024 1:58 PM	01:05:00	4.69 pH	20.30 °C	49.09 µS/cm	0.25 mg/L	20.20 NTU	37.5 mV	15.59 ft	400.00 ml/min
3/18/2024 2:03 PM	01:10:00	4.70 pH	20.30 °C	49.11 µS/cm	0.24 mg/L	18.70 NTU	35.8 mV	15.61 ft	400.00 ml/min
3/18/2024 2:08 PM	01:15:00	4.71 pH	20.39 °C	49.33 µS/cm	0.23 mg/L	18.70 NTU	35.3 mV	15.64 ft	400.00 ml/min
3/18/2024 2:13 PM	01:20:00	4.70 pH	20.42 °C	49.23 µS/cm	0.23 mg/L	18.30 NTU	35.7 mV	15.65 ft	400.00 ml/min
3/18/2024 2:18 PM	01:25:00	4.72 pH	20.57 °C	49.28 µS/cm	0.22 mg/L	15.50 NTU	34.7 mV	15.67 ft	400.00 ml/min
3/18/2024 2:23 PM	01:30:00	4.71 pH	20.57 °C	49.71 µS/cm	0.22 mg/L	15.60 NTU	35.1 mV	15.68 ft	400.00 ml/min
3/18/2024 2:28 PM	01:35:00	4.72 pH	20.57 °C	49.45 µS/cm	0.21 mg/L	14.20 NTU	34.1 mV	15.70 ft	400.00 ml/min
3/18/2024 2:33 PM	01:40:00	4.72 pH	20.57 °C	49.55 µS/cm	0.21 mg/L	13.20 NTU	34.5 mV	15.71 ft	400.00 ml/min
3/18/2024 2:38 PM	01:45:00	4.71 pH	20.54 °C	49.59 µS/cm	0.21 mg/L	12.80 NTU	34.3 mV	15.73 ft	400.00 ml/min
3/18/2024 2:43 PM	01:50:00	4.70 pH	20.61 °C	49.50 µS/cm	0.20 mg/L	12.10 NTU	35.2 mV	15.75 ft	400.00 ml/min
3/18/2024 2:48 PM	01:55:00	4.70 pH	20.66 °C	49.60 µS/cm	0.20 mg/L	12.10 NTU	35.2 mV	15.76 ft	400.00 ml/min
3/18/2024 2:53 PM	02:00:00	4.71 pH	20.66 °C	49.67 µS/cm	0.20 mg/L	10.50 NTU	35.0 mV	15.78 ft	400.00 ml/min
3/18/2024 2:58 PM	02:05:00	4.70 pH	20.75 °C	49.89 µS/cm	0.20 mg/L	10.00 NTU	34.7 mV	15.79 ft	400.00 ml/min
3/18/2024 3:03 PM	02:10:00	4.71 pH	20.75 °C	49.81 µS/cm	0.21 mg/L	9.88 NTU	34.1 mV	15.80 ft	400.00 ml/min
3/18/2024 3:08 PM	02:15:00	4.70 pH	20.69 °C	49.84 µS/cm	0.20 mg/L	9.52 NTU	35.4 mV	15.82 ft	400.00 ml/min
3/18/2024 3:13 PM	02:20:00	4.72 pH	20.75 °C	49.93 µS/cm	0.20 mg/L	9.64 NTU	34.4 mV	15.82 ft	400.00 ml/min
3/18/2024 3:18 PM	02:25:00	4.70 pH	20.81 °C	49.80 µS/cm	0.20 mg/L	9.60 NTU	35.6 mV	15.83 ft	400.00 ml/min
3/18/2024 3:23 PM	02:30:00	4.71 pH	20.73 °C	49.80 µS/cm	0.19 mg/L	8.97 NTU	35.1 mV	15.84 ft	400.00 ml/min
3/18/2024 3:28 PM	02:35:00	4.70 pH	20.75 °C	49.97 µS/cm	0.19 mg/L	8.69 NTU	35.8 mV	15.84 ft	400.00 ml/min
3/18/2024 3:33 PM	02:40:00	4.71 pH	20.71 °C	49.88 µS/cm	0.19 mg/L	8.68 NTU	35.0 mV	15.84 ft	400.00 ml/min
3/18/2024 3:38 PM	02:45:00	4.72 pH	20.75 °C	50.06 µS/cm	0.19 mg/L	8.38 NTU	35.0 mV	15.85 ft	400.00 ml/min
3/18/2024 3:43 PM	02:50:00	4.73 pH	20.71 °C	50.01 µS/cm	0.20 mg/L	8.42 NTU	35.2 mV	15.86 ft	400.00 ml/min
3/18/2024 3:48 PM	02:55:00	4.72 pH	20.79 °C	50.19 µS/cm	0.20 mg/L	8.48 NTU	35.1 mV	15.87 ft	400.00 ml/min
3/18/2024 3:53 PM	03:00:00	4.72 pH	20.76 °C	50.01 µS/cm	0.20 mg/L	8.09 NTU	35.5 mV	15.89 ft	400.00 ml/min

Samples

Sample ID:	Description:
Mw-11	Sample time 1600

Dup-02	Fake sample time 1500

Low-Flow Test Report:

Test Date / Time: 3/18/2024 4:47:50 PM
Project: Daniel NAMU MW-12
Operator Name: Todd Voreis

Location Name: Daniel NAMU MW-12 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 17.9 ft** **Total Depth: 22.9 ft** **Initial Depth to Water: 14.54 ft**	**Pump Type:** PP **Tubing Type: PE** **Pump Intake From TOC: 20.4 ft** **Estimated Total Volume Pumped: 14000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Sunny, 67 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/18/2024 4:47 PM	00:00	4.15 pH	20.61 °C	103.32 µS/cm	2.07 mg/L		95.8 mV	14.54 ft	400.00 ml/min
3/18/2024 4:52 PM	05:00	4.10 pH	19.17 °C	109.48 µS/cm	1.31 mg/L	2.67 NTU	115.8 mV	14.57 ft	400.00 ml/min
3/18/2024 4:57 PM	10:00	4.10 pH	19.09 °C	108.21 µS/cm	1.28 mg/L	2.16 NTU	129.5 mV	14.57 ft	400.00 ml/min
3/18/2024 5:02 PM	15:00	4.11 pH	19.02 °C	108.88 µS/cm	1.30 mg/L	1.01 NTU	139.1 mV	14.57 ft	400.00 ml/min
3/18/2024 5:07 PM	20:00	4.11 pH	18.97 °C	109.00 µS/cm	1.38 mg/L	0.89 NTU	143.9 mV	14.57 ft	400.00 ml/min
3/18/2024 5:12 PM	25:00	4.11 pH	18.92 °C	110.22 µS/cm	1.41 mg/L	0.69 NTU	144.2 mV	14.57 ft	400.00 ml/min
3/18/2024 5:17 PM	30:00	4.13 pH	18.90 °C	109.60 µS/cm	1.41 mg/L	0.57 NTU	146.7 mV	14.57 ft	400.00 ml/min
3/18/2024 5:22 PM	35:00	4.11 pH	18.88 °C	108.54 µS/cm	1.27 mg/L	0.61 NTU	146.3 mV	14.57 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-12	Sample time 1727

Low-Flow Test Report:

Test Date / Time: 3/18/2024 6:00:47 PM
Project: Daniel NAMU MW-13
Operator Name: Todd Voreis

Location Name: Daniel NAMU MW-13 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 21.5 ft** **Total Depth: 26.5 ft** **Initial Depth to Water: 19.27 ft**	**Pump Type:** PP **Tubing Type: PE** **Pump Intake From TOC: 24.5 ft** **Estimated Total Volume Pumped: 24000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.11 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Partly cloudy, 64 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/18/2024 6:00 PM	00:00	5.79 pH	18.46 °C	158.21 µS/cm	5.50 mg/L		140.4 mV	19.27 ft	400.00 ml/min
3/18/2024 6:05 PM	05:00	5.65 pH	19.55 °C	123.17 µS/cm	4.47 mg/L	1.65 NTU	117.4 mV	19.38 ft	400.00 ml/min
3/18/2024 6:10 PM	10:00	5.59 pH	19.62 °C	114.47 µS/cm	4.34 mg/L	1.07 NTU	109.0 mV	19.38 ft	400.00 ml/min
3/18/2024 6:15 PM	15:00	5.56 pH	19.57 °C	112.07 µS/cm	4.00 mg/L	1.02 NTU	104.5 mV	19.38 ft	400.00 ml/min
3/18/2024 6:20 PM	20:00	5.54 pH	19.59 °C	110.15 µS/cm	4.25 mg/L	0.71 NTU	101.7 mV	19.38 ft	400.00 ml/min
3/18/2024 6:25 PM	25:00	5.57 pH	19.55 °C	110.22 µS/cm	4.99 mg/L	0.79 NTU	100.0 mV	19.38 ft	400.00 ml/min
3/18/2024 6:30 PM	30:00	5.58 pH	19.50 °C	113.44 µS/cm	5.11 mg/L	0.67 NTU	98.3 mV	19.38 ft	400.00 ml/min
3/18/2024 6:35 PM	35:00	5.56 pH	19.59 °C	112.77 µS/cm	4.85 mg/L	0.76 NTU	97.1 mV	19.38 ft	400.00 ml/min
3/18/2024 6:40 PM	40:00	5.50 pH	19.58 °C	104.33 µS/cm	3.91 mg/L	0.60 NTU	96.9 mV	19.38 ft	400.00 ml/min
3/18/2024 6:45 PM	45:00	5.62 pH	19.46 °C	119.02 µS/cm	4.33 mg/L	0.50 NTU	95.7 mV	19.38 ft	400.00 ml/min
3/18/2024 6:50 PM	50:00	5.51 pH	19.50 °C	108.33 µS/cm	4.22 mg/L	0.54 NTU	94.7 mV	19.38 ft	400.00 ml/min
3/18/2024 6:55 PM	55:00	5.59 pH	19.50 °C	113.24 µS/cm	4.29 mg/L	0.65 NTU	94.3 mV	19.38 ft	400.00 ml/min
3/18/2024 7:00 PM	01:00:00	5.55 pH	19.40 °C	112.68 µS/cm	4.19 mg/L	0.48 NTU	94.3 mV	19.38 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-13	Sample time 1905

Low-Flow Test Report:

Test Date / Time: 3/20/2024 8:40:13 AM
Project: Daniel NAMU CCR MW-14
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-14 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 35.7 ft** **Total Depth: 40.7 ft** **Initial Depth to Water: 11.8 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 38.2 ft** **Estimated Total Volume Pumped: 80000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Sunny, 51 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/20/2024 8:40 AM	00:00	5.40 pH	14.12 °C	49.64 µS/cm	7.72 mg/L		118.0 mV	11.80 ft	400.00 ml/min
3/20/2024 8:45 AM	05:00	4.87 pH	19.23 °C	44.42 µS/cm	4.28 mg/L	51.70 NTU	131.4 mV	11.88 ft	400.00 ml/min
3/20/2024 8:50 AM	10:00	4.89 pH	19.50 °C	44.88 µS/cm	4.07 mg/L	49.80 NTU	187.8 mV	11.88 ft	400.00 ml/min
3/20/2024 8:55 AM	15:00	4.89 pH	19.46 °C	44.74 µS/cm	4.07 mg/L	45.30 NTU	194.8 mV	11.88 ft	400.00 ml/min
3/20/2024 9:00 AM	20:00	4.88 pH	19.58 °C	44.46 µS/cm	4.06 mg/L	37.20 NTU	198.6 mV	11.88 ft	400.00 ml/min
3/20/2024 9:05 AM	25:00	4.88 pH	19.72 °C	44.32 µS/cm	4.07 mg/L	29.40 NTU	199.8 mV	11.88 ft	400.00 ml/min
3/20/2024 9:10 AM	30:00	4.87 pH	19.65 °C	44.02 µS/cm	4.05 mg/L	24.80 NTU	201.1 mV	11.88 ft	400.00 ml/min
3/20/2024 9:15 AM	35:00	4.88 pH	19.69 °C	43.89 µS/cm	4.06 mg/L	22.70 NTU	201.4 mV	11.88 ft	400.00 ml/min
3/20/2024 9:20 AM	40:00	4.87 pH	19.72 °C	43.81 µS/cm	4.05 mg/L	20.10 NTU	202.1 mV	11.88 ft	400.00 ml/min
3/20/2024 9:25 AM	45:00	4.88 pH	19.74 °C	43.74 µS/cm	4.05 mg/L	19.70 NTU	201.9 mV	11.88 ft	400.00 ml/min
3/20/2024 9:30 AM	50:00	4.86 pH	19.81 °C	43.65 µS/cm	4.05 mg/L	18.20 NTU	202.5 mV	11.88 ft	400.00 ml/min
3/20/2024 9:35 AM	55:00	4.85 pH	19.86 °C	43.48 µS/cm	4.05 mg/L	16.60 NTU	203.6 mV	11.88 ft	400.00 ml/min
3/20/2024 9:40 AM	01:00:00	4.85 pH	19.86 °C	43.45 µS/cm	4.05 mg/L	16.50 NTU	203.7 mV	11.88 ft	400.00 ml/min

3/20/2024 9:45 AM	01:05:00	4.86 pH	19.87 °C	43.40 µS/cm	4.04 mg/L	16.30 NTU	202.9 mV	11.88 ft	400.00 ml/min
3/20/2024 9:50 AM	01:10:00	4.84 pH	19.90 °C	43.35 µS/cm	4.05 mg/L	15.80 NTU	203.4 mV	11.88 ft	400.00 ml/min
3/20/2024 9:55 AM	01:15:00	4.85 pH	19.72 °C	43.27 µS/cm	4.05 mg/L	14.80 NTU	203.1 mV	11.88 ft	400.00 ml/min
3/20/2024 10:00 AM	01:20:00	4.85 pH	19.81 °C	43.29 µS/cm	4.04 mg/L	13.80 NTU	203.1 mV	11.88 ft	400.00 ml/min
3/20/2024 10:05 AM	01:25:00	4.83 pH	19.95 °C	43.22 µS/cm	4.06 mg/L	13.30 NTU	203.7 mV	11.88 ft	400.00 ml/min
3/20/2024 10:10 AM	01:30:00	4.85 pH	19.86 °C	43.18 µS/cm	4.04 mg/L	12.90 NTU	202.3 mV	11.88 ft	400.00 ml/min
3/20/2024 10:15 AM	01:35:00	4.86 pH	19.97 °C	43.08 µS/cm	4.04 mg/L	12.60 NTU	202.0 mV	11.88 ft	400.00 ml/min
3/20/2024 10:20 AM	01:40:00	4.87 pH	19.98 °C	43.08 µS/cm	4.04 mg/L	12.20 NTU	200.8 mV	11.88 ft	400.00 ml/min
3/20/2024 10:25 AM	01:45:00	4.85 pH	19.96 °C	43.08 µS/cm	4.04 mg/L	12.00 NTU	202.0 mV	11.88 ft	400.00 ml/min
3/20/2024 10:30 AM	01:50:00	4.87 pH	19.79 °C	43.02 µS/cm	4.05 mg/L	12.00 NTU	200.6 mV	11.88 ft	400.00 ml/min
3/20/2024 10:35 AM	01:55:00	4.85 pH	19.97 °C	43.05 µS/cm	4.05 mg/L	12.20 NTU	201.5 mV	11.88 ft	400.00 ml/min
3/20/2024 10:40 AM	02:00:00	4.85 pH	19.95 °C	42.98 µS/cm	4.04 mg/L	11.20 NTU	201.2 mV	11.88 ft	400.00 ml/min
3/20/2024 10:45 AM	02:05:00	4.85 pH	19.95 °C	42.99 µS/cm	4.04 mg/L	11.30 NTU	200.7 mV	11.88 ft	400.00 ml/min
3/20/2024 10:50 AM	02:10:00	4.86 pH	20.11 °C	42.93 µS/cm	4.04 mg/L	11.20 NTU	200.0 mV	11.88 ft	400.00 ml/min
3/20/2024 10:55 AM	02:15:00	4.85 pH	20.08 °C	42.87 µS/cm	4.02 mg/L	10.50 NTU	200.3 mV	11.88 ft	400.00 ml/min
3/20/2024 11:00 AM	02:20:00	4.86 pH	20.12 °C	42.89 µS/cm	4.03 mg/L	10.70 NTU	199.3 mV	11.88 ft	400.00 ml/min
3/20/2024 11:05 AM	02:25:00	4.87 pH	20.12 °C	42.82 µS/cm	4.02 mg/L	10.60 NTU	198.8 mV	11.88 ft	400.00 ml/min
3/20/2024 11:10 AM	02:30:00	4.87 pH	20.08 °C	42.85 µS/cm	4.03 mg/L	10.60 NTU	198.3 mV	11.88 ft	400.00 ml/min
3/20/2024 11:15 AM	02:35:00	4.86 pH	20.19 °C	42.85 µS/cm	4.03 mg/L	10.80 NTU	198.4 mV	11.88 ft	400.00 ml/min
3/20/2024 11:20 AM	02:40:00	4.87 pH	20.26 °C	42.84 µS/cm	4.03 mg/L	11.00 NTU	198.1 mV	11.88 ft	400.00 ml/min
3/20/2024 11:25 AM	02:45:00	4.87 pH	20.30 °C	42.82 µS/cm	4.01 mg/L	10.80 NTU	197.4 mV	11.88 ft	400.00 ml/min
3/20/2024 11:30 AM	02:50:00	4.88 pH	20.26 °C	42.72 µS/cm	4.01 mg/L	10.40 NTU	197.0 mV	11.88 ft	400.00 ml/min
3/20/2024 11:35 AM	02:55:00	4.87 pH	20.23 °C	42.70 µS/cm	4.02 mg/L	10.50 NTU	197.0 mV	11.88 ft	400.00 ml/min
3/20/2024 11:40 AM	03:00:00	4.88 pH	20.27 °C	42.69 µS/cm	4.03 mg/L	10.60 NTU	196.4 mV	11.88 ft	400.00 ml/min
3/20/2024 11:45 AM	03:05:00	4.88 pH	20.35 °C	42.68 µS/cm	4.04 mg/L	10.70 NTU	195.8 mV	11.88 ft	400.00 ml/min
3/20/2024 11:50 AM	03:10:00	4.89 pH	20.43 °C	42.68 µS/cm	4.04 mg/L	10.30 NTU	195.3 mV	11.88 ft	400.00 ml/min
3/20/2024 11:55 AM	03:15:00	4.88 pH	20.52 °C	42.63 µS/cm	4.04 mg/L	10.00 NTU	196.2 mV	11.88 ft	400.00 ml/min
3/20/2024 12:00 PM	03:20:00	4.88 pH	20.57 °C	42.59 µS/cm	4.03 mg/L	9.90 NTU	195.5 mV	11.88 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-14	Sample time 1205

Low-Flow Test Report:

Test Date / Time: 3/19/2024 4:26:38 PM
Project: Daniel NAMU CCR MW-15
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-15 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 34.5 ft** **Total Depth: 39.5 ft** **Initial Depth to Water: 11.08 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 34.5 ft** **Estimated Total Volume Pumped: 28000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Sunny, 61 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/19/2024 4:26 PM	00:00	4.71 pH	19.77 °C	51.09 µS/cm	4.99 mg/L		172.7 mV	11.08 ft	400.00 ml/min
3/19/2024 4:31 PM	05:00	4.68 pH	20.48 °C	51.45 µS/cm	3.42 mg/L	9.55 NTU	135.1 mV	11.15 ft	400.00 ml/min
3/19/2024 4:36 PM	10:00	4.67 pH	20.52 °C	51.47 µS/cm	3.15 mg/L	8.97 NTU	122.9 mV	11.15 ft	400.00 ml/min
3/19/2024 4:41 PM	15:00	4.67 pH	20.52 °C	51.30 µS/cm	3.16 mg/L	7.34 NTU	117.0 mV	11.15 ft	400.00 ml/min
3/19/2024 4:46 PM	20:00	4.68 pH	20.59 °C	51.03 µS/cm	3.18 mg/L	5.62 NTU	148.4 mV	11.15 ft	400.00 ml/min
3/19/2024 4:51 PM	25:00	4.69 pH	20.57 °C	50.95 µS/cm	3.20 mg/L	4.95 NTU	147.9 mV	11.15 ft	400.00 ml/min
3/19/2024 4:56 PM	30:00	4.69 pH	20.47 °C	50.84 µS/cm	3.19 mg/L	4.35 NTU	147.2 mV	11.15 ft	400.00 ml/min
3/19/2024 5:01 PM	35:00	4.71 pH	20.61 °C	50.82 µS/cm	3.20 mg/L	4.09 NTU	145.6 mV	11.15 ft	400.00 ml/min
3/19/2024 5:06 PM	40:00	4.70 pH	20.57 °C	50.73 µS/cm	3.21 mg/L	3.06 NTU	145.3 mV	11.15 ft	400.00 ml/min
3/19/2024 5:11 PM	45:00	4.70 pH	20.57 °C	50.63 µS/cm	3.21 mg/L	2.51 NTU	110.8 mV	11.15 ft	400.00 ml/min
3/19/2024 5:16 PM	50:00	4.70 pH	20.51 °C	50.62 µS/cm	3.22 mg/L	2.30 NTU	108.1 mV	11.15 ft	400.00 ml/min
3/19/2024 5:21 PM	55:00	4.71 pH	20.57 °C	50.50 µS/cm	3.21 mg/L	1.98 NTU	138.1 mV	11.15 ft	400.00 ml/min
3/19/2024 5:26 PM	01:00:00	4.71 pH	20.47 °C	50.43 µS/cm	3.22 mg/L	1.60 NTU	139.8 mV	11.15 ft	400.00 ml/min

3/19/2024 5:31 PM	01:05:00	4.72 pH	20.60 °C	50.39 µS/cm	3.23 mg/L	1.48 NTU	140.0 mV	11.15 ft	400.00 ml/min
3/19/2024 5:36 PM	01:10:00	4.72 pH	20.57 °C	50.26 µS/cm	3.22 mg/L	1.40 NTU	140.3 mV	11.15 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-15	Sample time 1741

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 3/19/2024 3:05:40 PM
Project: Daniel NAMU CCR MW-16
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-16 **Well Diameter: 2 cm** **Casing Type: PVC** **Screen Length: 5 m** **Top of Screen: 23.3 m** **Total Depth: 28.3 m** **Initial Depth to Water: 8.05 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 25.8 ft** **Estimated Total Volume Pumped: 14000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Sunny, 61 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/19/2024 3:05 PM	00:00	4.64 pH	19.68 °C	50.84 µS/cm	2.66 mg/L		128.5 mV	8.05 ft	400.00 ml/min
3/19/2024 3:10 PM	05:00	4.57 pH	19.96 °C	48.82 µS/cm	0.34 mg/L	4.22 NTU	143.3 mV	8.11 ft	400.00 ml/min
3/19/2024 3:15 PM	10:00	4.56 pH	20.17 °C	48.58 µS/cm	0.22 mg/L	2.22 NTU	142.2 mV	8.11 ft	400.00 ml/min
3/19/2024 3:20 PM	15:00	4.54 pH	20.25 °C	48.60 µS/cm	0.20 mg/L	2.01 NTU	140.1 mV	8.11 ft	400.00 ml/min
3/19/2024 3:25 PM	20:00	4.56 pH	20.12 °C	48.49 µS/cm	0.18 mg/L	1.47 NTU	183.5 mV	8.11 ft	400.00 ml/min
3/19/2024 3:30 PM	25:00	4.55 pH	20.22 °C	48.71 µS/cm	0.17 mg/L	0.89 NTU	188.0 mV	8.11 ft	400.00 ml/min
3/19/2024 3:35 PM	30:00	4.56 pH	20.15 °C	48.62 µS/cm	0.16 mg/L	0.92 NTU	188.2 mV	8.11 ft	400.00 ml/min
3/19/2024 3:40 PM	35:00	4.55 pH	20.04 °C	48.80 µS/cm	0.16 mg/L	0.82 NTU	188.0 mV	8.11 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-16	Sample time 1545

Low-Flow Test Report:

Test Date / Time: 3/19/2024 1:42:06 PM
Project: Daniel NAMU CCR MW-17
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-17 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 23.5 ft** **Total Depth: 28.5 ft** **Initial Depth to Water: 6.15 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 14000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Sunny, 60 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/19/2024 1:42 PM	00:00	4.55 pH	20.21 °C	45.89 µS/cm	1.93 mg/L		101.9 mV	6.15 ft	400.00 ml/min
3/19/2024 1:47 PM	05:00	4.66 pH	20.40 °C	46.62 µS/cm	0.61 mg/L	1.88 NTU	87.3 mV	6.20 ft	400.00 ml/min
3/19/2024 1:52 PM	10:00	4.75 pH	20.44 °C	46.48 µS/cm	0.36 mg/L	1.25 NTU	79.9 mV	6.23 ft	400.00 ml/min
3/19/2024 1:57 PM	15:00	4.79 pH	20.46 °C	46.33 µS/cm	0.30 mg/L	1.15 NTU	88.8 mV	6.23 ft	400.00 ml/min
3/19/2024 2:02 PM	20:00	4.81 pH	20.49 °C	46.30 µS/cm	0.27 mg/L	0.97 NTU	86.2 mV	6.23 ft	400.00 ml/min
3/19/2024 2:07 PM	25:00	4.83 pH	20.42 °C	46.24 µS/cm	0.26 mg/L	0.82 NTU	83.2 mV	6.23 ft	400.00 ml/min
3/19/2024 2:12 PM	30:00	4.84 pH	20.43 °C	46.25 µS/cm	0.24 mg/L	0.77 NTU	80.6 mV	6.23 ft	400.00 ml/min
3/19/2024 2:17 PM	35:00	4.87 pH	20.44 °C	46.17 µS/cm	0.24 mg/L	0.74 NTU	66.4 mV	6.23 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-17	Sample time 1425
DUP-03	Fake sample time 1325

Low-Flow Test Report:

Test Date / Time: 3/20/2024 12:28:47 PM
Project: Daniel NAMU CCR MW-18
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-18 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 39.4 ft** **Total Depth: 44.4 ft** **Initial Depth to Water: 16.14 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 41.9 ft** **Estimated Total Volume Pumped: 12000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Sunny, 69 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/20/2024 12:28 PM	00:00	4.55 pH	20.79 °C	43.48 µS/cm	4.94 mg/L		166.7 mV	16.14 ft	400.00 ml/min
3/20/2024 12:33 PM	05:00	4.67 pH	20.77 °C	42.85 µS/cm	0.84 mg/L	1.99 NTU	120.9 mV	16.20 ft	400.00 ml/min
3/20/2024 12:38 PM	10:00	4.71 pH	20.57 °C	43.05 µS/cm	0.32 mg/L	1.28 NTU	100.8 mV	16.20 ft	400.00 ml/min
3/20/2024 12:43 PM	15:00	4.70 pH	20.79 °C	43.30 µS/cm	0.26 mg/L	1.05 NTU	90.8 mV	16.20 ft	400.00 ml/min
3/20/2024 12:48 PM	20:00	4.71 pH	20.88 °C	43.25 µS/cm	0.24 mg/L	0.78 NTU	84.1 mV	16.20 ft	400.00 ml/min
3/20/2024 12:53 PM	25:00	4.71 pH	20.97 °C	43.35 µS/cm	0.23 mg/L	0.80 NTU	95.8 mV	16.20 ft	400.00 ml/min
3/20/2024 12:58 PM	30:00	4.71 pH	21.06 °C	43.33 µS/cm	0.23 mg/L	0.74 NTU	92.9 mV	16.20 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-18	Sample time 1305
DUP-06	Fake sample time 1205

Low-Flow Test Report:

Test Date / Time: 3/19/2024 9:43:07 AM
Project: Daniel NAMU CCR MW-19
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-19 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.4 ft** **Total Depth: 32.4 ft** **Initial Depth to Water: 16.74 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 27.4 ft** **Estimated Total Volume Pumped: 62000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Sunny, 48 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
3/19/2024 9:43 AM	00:00	5.93 pH	16.20 °C	108.72 µS/cm	8.86 mg/L		62.0 mV	16.74 ft	400.00 ml/min
3/19/2024 9:48 AM	05:00	6.62 pH	20.29 °C	246.52 µS/cm	4.69 mg/L	69.00 NTU	42.4 mV	16.74 ft	400.00 ml/min
3/19/2024 9:53 AM	10:00	6.48 pH	20.40 °C	204.20 µS/cm	3.30 mg/L	62.60 NTU	46.0 mV	16.74 ft	400.00 ml/min
3/19/2024 9:58 AM	15:00	6.34 pH	20.64 °C	171.38 µS/cm	2.51 mg/L	38.20 NTU	40.5 mV	16.74 ft	400.00 ml/min
3/19/2024 10:03 AM	20:00	6.25 pH	20.70 °C	153.33 µS/cm	2.03 mg/L	27.70 NTU	36.8 mV	16.74 ft	400.00 ml/min
3/19/2024 10:08 AM	25:00	6.18 pH	20.56 °C	137.88 µS/cm	1.75 mg/L	19.10 NTU	31.8 mV	16.74 ft	400.00 ml/min
3/19/2024 10:13 AM	30:00	6.10 pH	20.78 °C	124.46 µS/cm	1.48 mg/L	18.40 NTU	31.0 mV	16.74 ft	400.00 ml/min
3/19/2024 10:18 AM	35:00	6.01 pH	20.75 °C	109.58 µS/cm	1.17 mg/L	13.20 NTU	30.0 mV	16.74 ft	400.00 ml/min
3/19/2024 10:23 AM	40:00	5.98 pH	20.84 °C	104.31 µS/cm	1.09 mg/L	12.30 NTU	28.9 mV	16.74 ft	400.00 ml/min
3/19/2024 10:28 AM	45:00	5.94 pH	20.77 °C	98.58 µS/cm	0.96 mg/L	10.00 NTU	28.4 mV	16.74 ft	400.00 ml/min
3/19/2024 10:33 AM	50:00	5.90 pH	20.75 °C	92.66 µS/cm	0.87 mg/L	8.52 NTU	28.3 mV	16.74 ft	400.00 ml/min
3/19/2024 10:38 AM	55:00	5.87 pH	20.93 °C	89.42 µS/cm	0.78 mg/L	8.10 NTU	27.4 mV	16.74 ft	400.00 ml/min
3/19/2024 10:43 AM	01:00:00	5.86 pH	20.93 °C	88.35 µS/cm	0.76 mg/L	7.60 NTU	26.9 mV	16.74 ft	400.00 ml/min

3/19/2024 10:48 AM	01:05:00	5.83 pH	21.07 °C	83.89 µS/cm	0.70 mg/L	7.44 NTU	26.6 mV	16.74 ft	400.00 ml/min
3/19/2024 10:53 AM	01:10:00	5.77 pH	20.95 °C	76.96 µS/cm	0.58 mg/L	6.85 NTU	27.5 mV	16.74 ft	400.00 ml/min
3/19/2024 10:58 AM	01:15:00	5.78 pH	20.91 °C	77.21 µS/cm	0.54 mg/L	6.40 NTU	26.5 mV	16.74 ft	400.00 ml/min
3/19/2024 11:03 AM	01:20:00	5.76 pH	20.84 °C	75.31 µS/cm	0.53 mg/L	6.13 NTU	26.6 mV	16.74 ft	400.00 ml/min
3/19/2024 11:08 AM	01:25:00	5.75 pH	20.89 °C	74.06 µS/cm	0.51 mg/L	6.06 NTU	28.5 mV	16.74 ft	400.00 ml/min
3/19/2024 11:13 AM	01:30:00	5.76 pH	21.02 °C	75.07 µS/cm	0.56 mg/L	5.76 NTU	26.0 mV	16.74 ft	400.00 ml/min
3/19/2024 11:18 AM	01:35:00	5.72 pH	21.15 °C	71.34 µS/cm	0.50 mg/L	5.76 NTU	26.4 mV	16.74 ft	400.00 ml/min
3/19/2024 11:23 AM	01:40:00	5.70 pH	21.10 °C	68.93 µS/cm	0.47 mg/L	5.37 NTU	26.7 mV	16.74 ft	400.00 ml/min
3/19/2024 11:28 AM	01:45:00	5.69 pH	21.03 °C	67.49 µS/cm	0.41 mg/L	5.33 NTU	28.6 mV	16.74 ft	400.00 ml/min
3/19/2024 11:33 AM	01:50:00	5.65 pH	21.10 °C	64.21 µS/cm	0.38 mg/L	5.06 NTU	29.2 mV	16.74 ft	400.00 ml/min
3/19/2024 11:38 AM	01:55:00	5.65 pH	21.23 °C	63.55 µS/cm	0.42 mg/L	5.03 NTU	27.2 mV	16.74 ft	400.00 ml/min
3/19/2024 11:43 AM	02:00:00	5.60 pH	21.40 °C	59.51 µS/cm	0.31 mg/L	4.77 NTU	29.1 mV	16.74 ft	400.00 ml/min
3/19/2024 11:48 AM	02:05:00	5.60 pH	21.42 °C	59.99 µS/cm	0.32 mg/L	4.49 NTU	29.6 mV	16.74 ft	400.00 ml/min
3/19/2024 11:53 AM	02:10:00	5.63 pH	21.33 °C	62.01 µS/cm	0.38 mg/L	4.31 NTU	28.8 mV	16.74 ft	400.00 ml/min
3/19/2024 11:58 AM	02:15:00	5.60 pH	21.33 °C	59.33 µS/cm	0.33 mg/L	3.99 NTU	29.4 mV	16.74 ft	400.00 ml/min
3/19/2024 12:03 PM	02:20:00	5.59 pH	21.41 °C	59.16 µS/cm	0.32 mg/L	3.98 NTU	27.6 mV	16.74 ft	400.00 ml/min
3/19/2024 12:08 PM	02:25:00	5.57 pH	21.46 °C	57.49 µS/cm	0.33 mg/L	3.72 NTU	29.4 mV	16.74 ft	400.00 ml/min
3/19/2024 12:13 PM	02:30:00	5.59 pH	21.39 °C	58.53 µS/cm	0.34 mg/L	3.65 NTU	29.4 mV	16.74 ft	400.00 ml/min
3/19/2024 12:18 PM	02:35:00	5.61 pH	21.42 °C	59.62 µS/cm	0.39 mg/L	3.64 NTU	28.6 mV	16.74 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-19	Sample time 1225
EB-02	Sample time 1025
FB-02	Sample time 1054

Water Quality Instrument Calibration Form

Project/Site: Plant Daniel - GSA Project #: Field Personnel: Rick Hagendorfer RDH Environmental

Water Quality Meter - Model/Serial #: Aqua Troll 400- 1055720 Turbidimeter - Model/Serial # Hach 2100Q- 19100C080487

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L)[1]	Reading (mg/L)	Reading (%)	Pass or Fail
						Acceptance Criteria: +/-0.3mg/L		
CAL ICV CCV		3-18-24	1209	17.6	9.54	9.62	100.4	P F
CAL ICV CCV		3-18-24	1217	18.4	9.39	9.43	99.9	P F
CAL ICV CCV		3-18-24	1739	19.6	9.16	9.11	99.0	P F
CAL ICV CCV								P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
						Acceptance Criteria: +/- 5%		
CAL ICV CCV		3-18-24	1203	1413	36J1475	10/2024	1425	P F
CAL ICV CCV		3-18-24	1205	1413	36J1475	10/2024	1410	P F
CAL ICV CCV		3-18-24	1742	1413	36J1475	10/2024	1427	P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
						Acceptance Criteria: +/-0.2 SU		
CAL ICV CCV		3-18-24	1143	7.00	36E1252	5/2025	7.03	P F
CAL ICV CCV		3-18-24	1148	4.00	36E1074	5/2025	4.02	P F
CAL ICV CCV		3-14-24	1151	4.00	36E1074	5/2025	4.00	P F
CAL ICV CCV		3-18-24	1153	7.00	36E1252	5/2025	7.03	P F
CAL ICV CCV		3-18-24	1757	7.00	36E1252	5/2025	7.10	P F
CAL ICV CCV		3-18-24	1759	4.00	36E1074	5/2025	4.08	P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
						Geosyntec Acceptance Criteria: +/- 5%		
CAL ICV CCV		3-18-24	1155	228 @ 25°	24002258	6/2024	232	P F
CAL ICV CCV		3-18-24	1158	228 @ 25°	24002258	6/2024	228	P F
CAL ICV CCV		3-18-24	1744	228 @ 25°	24002258	6/2024	219	P F
CAL ICV CCV								P F

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

0.1 - 10 NTU Std 10 NTU	Date	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%	
CAL ICV CCV	3-18-24	9.25	P F
CAL ICV CCV	3-18-24	9.62	P F
CAL ICV CCV	3-18-24	9.61	P F
CAL ICV CCV			P F

Lot # A3199
Exp. 10/2024

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

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

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

Comments:

1. See Table FS 2200-2 on the back of this form

CAL - Initial Calibration

ICV - Initial Calibration Verification

CCV - Continuing Calibration Verification

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Water Quality Instrument Calibration Form

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

Water Quality Meter - Model/Serial #: Aqua Troll 400- 1055720 Turbidimeter - Model/Serial # Hach 2100Q- 191000080487

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L)[1]	Reading (mg/L)	Reading (%)	Pass or Fail
						Acceptance Criteria: +/-0.3mg/L		
CAL ICV CCV		3/19/2024	754	8.0	11.84	11.56	96.31	P F
CAL ICV CCV		3/19/2024	801	7.9	11.87	12.02	100.03	P F
CAL ICV CCV		3/19/2024	1233	18.4	9.39	9.65	101.78	P F
CAL ICV CCV		3/19/2024	1235	18.7	9.33	9.58	101.67	P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
						Acceptance Criteria: +/- 5%		
CAL ICV CCV		~~3/19/2024~~	~~748~~	~~1413~~	~~36C745~~	~~03/2024~~	~~1406.4 KK~~	P F
CAL ICV CCV		~~3/19/2024~~	~~751~~	~~1413~~	~~36C745~~	~~03/2024~~	~~1416 KK~~	P F
CAL ICV CCV		3/19/2024	809	1413	36J1475	10/2024	1389	P F
CAL ICV CCV		3/19/2024	819	1413	36J1475	10/2024	1413	P F
CAL ICV CCV		3/19/2024	1241	1413	36J1475	10/2024	1410	P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
						Acceptance Criteria: +/-0.2 SU		
CAL ICV CCV		3/19/2024	727	7.00	36E1252	05/2025	7.04	P F
CAL ICV CCV		3/19/2024	731	4.00	36E1074	05/2025	3.97	P F
CAL ICV CCV		3/19/2024	733	4.00	36E1074	05/2025	4.00	P F
CAL ICV CCV		3/19/2024	737	7.00	36E1252	05/2025	7.06	P F
CAL ICV CCV		3/19/2024		7.00	36E1252	05/2025	7.02	P F
CAL ICV CCV		3/19/2024	1255	4.00	36E1074	05/2025	4.08	P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
						Geosyntec Acceptance Criteria: +/- 5%		
CAL ICV CCV		3/19/2024	741	228	24002258	06/2024	228.6	P F
CAL ICV CCV		3/19/2024	743	228	24002258	06/2024	228.5	P F
CAL ICV CCV		3/19/2024	1248	228	24002258	06/2024	227.1	P F
CAL ICV CCV								P F

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

0.1 - 10 NTU Std 10 NTU	Date	Reading (NTU)	Pass or Fail
	Acceptance Criteria: +/- 10%		
CAL ICV CCV	3/19/2024	9.30	P F
CAL ICV CCV	3/19/2024	9.34	P F
CAL ICV CCV	3/19/2024	9.32	P F
CAL ICV CCV			P F

Lot # A3199 Exp. 10/2024

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

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

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

1. See Table FS 2200-2 on the back of this form

CAL - Initial Calibration

ICV - Initial Calibration Verification

CCV - Continuing Calibration Verification

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Comments:

Water Quality Instrument Calibration Form

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

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

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L)[1]	Reading (mg/L)	Reading (%)	Pass or Fail
						Acceptance Criteria: +/-0.3mg/L		
CAL ICV (CCV)		3-19-24	1237	18.9	9.29	9.39	100.1	(P) F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
							Acceptance Criteria: +/- 5%	
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
							Acceptance Criteria: +/-0.2 SU	
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
							Geosyntec Acceptance Criteria: +/- 5%	
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

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

Lot #

Exp.

0.1 - 10 NTU Std ____NTU	DATE/TIME	Reading (NTU)	Pass or Fail
	Acceptance Criteria: +/- 10%		
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F

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

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

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

1. **See Table FS 2200-2 on the back of this form**

CAL - Initial Calibration

ICV - Initial Calibration Verification

CCV - Continuing Calibration Verification

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Comments: Page 2 of 2 For 3-19-24

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ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

Plant Daniel NAMU CCR

JOB NUMBER

180-171268-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

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

PA Lab ID: 02-00416

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

Authorization

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

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Job Narrative
180-171268-1

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

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

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

Receipt
The samples were received on 3/21/2024 9:30 AM and 3/22/2024 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 1.0°C, 2.5°C, 2.5°C, 2.5°C, 3.6°C, 3.8°C and 4.0°C.

Receipt Exceptions
A Chain-of-Custody (COC) was not received with these samples: MW-11 (180-171268-1), MW-14 (180-171268-2), MW-15 (180-171268-3), MW-16 (180-171268-4), MW-17 (180-171268-5), MW-18 (180-171268-6), MW-19 (180-171268-7), DUP-02 (180-171268-8), DUP-03 (180-171268-9), DUP-06 (180-171268-10), EB-02 (180-171268-11) and FB-02 (180-171268-12). These samples were logged by the container and container label information.

The following samples were listed on the Chain of Custody (COC); however, no samples were received: DUP-06 (180-171268-10), EB-02 (180-171268-11) and FB-02 (180-171268-12). Samples were received on 032224.

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

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

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

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

Definitions/Glossary

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

Job ID: 180-171268-1

Qualifiers

HPLC/IC

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

Metals

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

Glossary

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

Accreditation/Certification Summary

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

Job ID: 180-171268-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-25
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23 *
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-25
Pennsylvania	NELAP	02-00416	04-30-25
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-24 *
US Fish & Wildlife	US Federal Programs	058448	03-31-24 *
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-24

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

Sample Summary

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

Job ID: 180-171268-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-171268-1	MW-11	Water	03/18/24 16:00	03/21/24 09:30
180-171268-2	MW-14	Water	03/20/24 12:05	03/21/24 09:30
180-171268-3	MW-15	Water	03/19/24 17:41	03/21/24 09:30
180-171268-4	MW-16	Water	03/19/24 15:45	03/21/24 09:30
180-171268-5	MW-17	Water	03/19/24 14:25	03/21/24 09:30
180-171268-6	MW-18	Water	03/20/24 13:05	03/21/24 09:30
180-171268-7	MW-19	Water	03/19/24 12:25	03/21/24 09:30
180-171268-8	DUP-02	Water	03/18/24 15:00	03/21/24 09:30
180-171268-9	DUP-03	Water	03/19/24 13:25	03/21/24 09:30
180-171268-10	DUP-06	Water	03/20/24 12:05	03/22/24 09:30
180-171268-11	EB-02	Water	03/19/24 10:25	03/22/24 09:30
180-171268-12	FB-02	Water	03/19/24 10:54	03/22/24 09:30

Method Summary

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

Job ID: 180-171268-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

Lab Chronicle

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

Job ID: 180-171268-1

Client Sample ID: MW-11

Lab Sample ID: 180-171268-1
Date Collected: 03/18/24 16:00
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 15:26	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 16:55	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463334	03/22/24 19:03	LWM	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			463881	03/18/24 17:00	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-14

Lab Sample ID: 180-171268-2
Date Collected: 03/20/24 12:05
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 15:40	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 16:58	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			463881	03/20/24 13:05	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-15

Lab Sample ID: 180-171268-3
Date Collected: 03/19/24 17:41
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 15:55	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:01	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463508	03/25/24 18:51	LWM	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			463881	03/19/24 18:41	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Lab Chronicle

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

Job ID: 180-171268-1

Client Sample ID: MW-16

Lab Sample ID: 180-171268-4
Date Collected: 03/19/24 15:45
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 16:10	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:15	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463508	03/25/24 18:51	LWM	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			463881	03/19/24 16:45	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-17

Lab Sample ID: 180-171268-5
Date Collected: 03/19/24 14:25
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 16:54	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:23	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463508	03/25/24 18:51	LWM	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			463881	03/19/24 15:25	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-18

Lab Sample ID: 180-171268-6
Date Collected: 03/20/24 13:05
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 17:09	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:26	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			463881	03/20/24 14:05	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Lab Chronicle

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

Job ID: 180-171268-1

Client Sample ID: MW-19

Lab Sample ID: 180-171268-7
Date Collected: 03/19/24 12:25
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 17:24	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:29	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463508	03/25/24 18:51	LWM	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			463881	03/19/24 13:25	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: DUP-02

Lab Sample ID: 180-171268-8
Date Collected: 03/18/24 15:00
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 17:39	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:32	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463334	03/22/24 19:03	LWM	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: DUP-03

Lab Sample ID: 180-171268-9
Date Collected: 03/19/24 13:25
Matrix: Water
Date Received: 03/21/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	463435	03/25/24 17:53	M1D	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:34	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463508	03/25/24 18:51	LWM	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: DUP-06

Lab Sample ID: 180-171268-10
Date Collected: 03/20/24 12:05
Matrix: Water
Date Received: 03/22/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	464084	04/01/24 14:13	AM	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:37	MRG	EET PIT
	Instrument ID:	DORY								

Lab Chronicle

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

Job ID: 180-171268-1

Client Sample ID: DUP-06
Date Collected: 03/20/24 12:05
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171268-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463633	03/26/24 16:48	LWM	EET PIT

Client Sample ID: EB-02
Date Collected: 03/19/24 10:25
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171268-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	464084	04/01/24 14:57	AM	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:40	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463508	03/25/24 18:51	LWM	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: FB-02
Date Collected: 03/19/24 10:54
Date Received: 03/22/24 09:30

Lab Sample ID: 180-171268-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	464084	04/01/24 15:12	AM	EET PIT
	Instrument ID:	CHICS2100B								
Total Recoverable	Prep	3005A			25 mL	25 mL	463490	03/26/24 09:36	SJM	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			463688	03/26/24 17:43	MRG	EET PIT
	Instrument ID:	DORY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	463508	03/25/24 18:51	LWM	EET PIT
	Instrument ID:	NOEQUIP								

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

Analyst References:
Lab: EET PIT
- Batch Type: Prep
  - SJM = Shannon Mueller
- Batch Type: Analysis
  - AM = Adzuira Musule
  - FDS = Sampler Field
  - LWM = Leslie McIntire
  - M1D = Maureen Donlin
  - MRG = Mismel Garcia

Client Sample Results

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

Job ID: 180-171268-1

Client Sample ID: MW-11

Lab Sample ID: 180-171268-1
Date Collected: 03/18/24 16:00
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.82		1.00	0.713	mg/L			03/25/24 15:26	1
Fluoride	0.0518	J B	0.100	0.0260	mg/L			03/25/24 15:26	1
Sulfate	2.81		1.00	0.756	mg/L			03/25/24 15:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 16:55	1
Calcium	1.19		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	33.0		10.0	10.0	mg/L			03/22/24 19:03	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.72				SU			03/18/24 17:00	1

Client Sample ID: MW-14

Lab Sample ID: 180-171268-2
Date Collected: 03/20/24 12:05
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.44		1.00	0.713	mg/L			03/25/24 15:40	1
Fluoride	0.0454	J B	0.100	0.0260	mg/L			03/25/24 15:40	1
Sulfate	1.61		1.00	0.756	mg/L			03/25/24 15:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 16:58	1
Calcium	1.70		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 16:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	39.0		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.88				SU			03/20/24 13:05	1

Client Sample ID: MW-15

Lab Sample ID: 180-171268-3
Date Collected: 03/19/24 17:41
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.42		1.00	0.713	mg/L			03/25/24 15:55	1
Fluoride	0.0428	J B	0.100	0.0260	mg/L			03/25/24 15:55	1
Sulfate	1.35		1.00	0.756	mg/L			03/25/24 15:55	1

Client Sample Results

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

Job ID: 180-171268-1

Client Sample ID: MW-15

Lab Sample ID: 180-171268-3
Date Collected: 03/19/24 17:41
Matrix: Water
Date Received: 03/21/24 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:01	1
Calcium	1.16		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	17.0		10.0	10.0	mg/L			03/25/24 18:51	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.73				SU			03/19/24 18:41	1

Client Sample ID: MW-16

Lab Sample ID: 180-171268-4
Date Collected: 03/19/24 15:45
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.92		1.00	0.713	mg/L			03/25/24 16:10	1
Fluoride	0.0380	J B	0.100	0.0260	mg/L			03/25/24 16:10	1
Sulfate	2.87		1.00	0.756	mg/L			03/25/24 16:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:15	1
Calcium	0.870		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	24.0		10.0	10.0	mg/L			03/25/24 18:51	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.55				SU			03/19/24 16:45	1

Client Sample ID: MW-17

Lab Sample ID: 180-171268-5
Date Collected: 03/19/24 14:25
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.06		1.00	0.713	mg/L			03/25/24 16:54	1
Fluoride	0.0440	J B	0.100	0.0260	mg/L			03/25/24 16:54	1
Sulfate	3.53		1.00	0.756	mg/L			03/25/24 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:23	1
Calcium	1.03		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	20.0		10.0	10.0	mg/L			03/25/24 18:51	1

Client Sample Results

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

Job ID: 180-171268-1

Client Sample ID: MW-17

Lab Sample ID: 180-171268-5
Date Collected: 03/19/24 14:25
Matrix: Water
Date Received: 03/21/24 09:30

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.87				SU			03/19/24 15:25	1

Client Sample ID: MW-18

Lab Sample ID: 180-171268-6
Date Collected: 03/20/24 13:05
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.44		1.00	0.713	mg/L			03/25/24 17:09	1
Fluoride	0.0417	J B	0.100	0.0260	mg/L			03/25/24 17:09	1
Sulfate	6.10		1.00	0.756	mg/L			03/25/24 17:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:26	1
Calcium	0.414	J	0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	25.0		10.0	10.0	mg/L			03/26/24 16:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.71				SU			03/20/24 14:05	1

Client Sample ID: MW-19

Lab Sample ID: 180-171268-7
Date Collected: 03/19/24 12:25
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.59		1.00	0.713	mg/L			03/25/24 17:24	1
Fluoride	0.0458	J B	0.100	0.0260	mg/L			03/25/24 17:24	1
Sulfate	3.31		1.00	0.756	mg/L			03/25/24 17:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:29	1
Calcium	6.05		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	31.0		10.0	10.0	mg/L			03/25/24 18:51	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.61				SU			03/19/24 13:25	1

Client Sample Results

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

Job ID: 180-171268-1

Client Sample ID: DUP-02

Lab Sample ID: 180-171268-8
Date Collected: 03/18/24 15:00
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.76		1.00	0.713	mg/L			03/25/24 17:39	1
Fluoride	0.0491	J B	0.100	0.0260	mg/L			03/25/24 17:39	1
Sulfate	2.72		1.00	0.756	mg/L			03/25/24 17:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:32	1
Calcium	1.24		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	32.0		10.0	10.0	mg/L			03/22/24 19:03	1

Client Sample ID: DUP-03

Lab Sample ID: 180-171268-9
Date Collected: 03/19/24 13:25
Matrix: Water
Date Received: 03/21/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.92		1.00	0.713	mg/L			03/25/24 17:53	1
Fluoride	0.0348	J B	0.100	0.0260	mg/L			03/25/24 17:53	1
Sulfate	3.41		1.00	0.756	mg/L			03/25/24 17:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:34	1
Calcium	1.04		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	10.0		10.0	10.0	mg/L			03/25/24 18:51	1

Client Sample ID: DUP-06

Lab Sample ID: 180-171268-10
Date Collected: 03/20/24 12:05
Matrix: Water
Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.08		1.00	0.713	mg/L			04/01/24 14:13	1
Fluoride	0.0320	J	0.100	0.0260	mg/L			04/01/24 14:13	1
Sulfate	5.76		1.00	0.756	mg/L			04/01/24 14:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:37	1
Calcium	0.425	J	0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:37	1

General Chemistry

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

Client Sample Results

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

Job ID: 180-171268-1

Client Sample ID: EB-02

Lab Sample ID: 180-171268-11
Date Collected: 03/19/24 10:25
Matrix: Water
Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			04/01/24 14:57	1
Fluoride	<0.0260		0.100	0.0260	mg/L			04/01/24 14:57	1
Sulfate	<0.756		1.00	0.756	mg/L			04/01/24 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:40	1
Calcium	<0.127		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<10.0		10.0	10.0	mg/L			03/25/24 18:51	1

Client Sample ID: FB-02

Lab Sample ID: 180-171268-12
Date Collected: 03/19/24 10:54
Matrix: Water
Date Received: 03/22/24 09:30

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			04/01/24 15:12	1
Fluoride	<0.0260		0.100	0.0260	mg/L			04/01/24 15:12	1
Sulfate	<0.756		1.00	0.756	mg/L			04/01/24 15:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 17:43	1
Calcium	<0.127		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 17:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<10.0		10.0	10.0	mg/L			03/25/24 18:51	1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-463435/6
Matrix: Water
Analysis Batch: 463435

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			03/25/24 11:53	1
Fluoride	0.02710	J	0.100	0.0260	mg/L			03/25/24 11:53	1
Sulfate	<0.756		1.00	0.756	mg/L			03/25/24 11:53	1

Lab Sample ID: LCS 180-463435/7
Matrix: Water
Analysis Batch: 463435

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	51.04		mg/L		102	80 - 120
Fluoride	2.50	2.746		mg/L		110	80 - 120
Sulfate	50.0	51.08		mg/L		102	80 - 120

Lab Sample ID: MB 180-464084/6
Matrix: Water
Analysis Batch: 464084

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			04/01/24 12:00	1
Fluoride	<0.0260		0.100	0.0260	mg/L			04/01/24 12:00	1
Sulfate	<0.756		1.00	0.756	mg/L			04/01/24 12:00	1

Lab Sample ID: LCS 180-464084/7
Matrix: Water
Analysis Batch: 464084

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.33		mg/L		97	80 - 120
Fluoride	2.50	2.623		mg/L		105	80 - 120
Sulfate	50.0	47.98		mg/L		96	80 - 120

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

Lab Sample ID: MB 180-463490/1-A
Matrix: Water
Analysis Batch: 463688

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 463490

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0601		0.0800	0.0601	mg/L		03/26/24 09:36	03/26/24 16:50	1
Calcium	<0.127		0.500	0.127	mg/L		03/26/24 09:36	03/26/24 16:50	1

Lab Sample ID: LCS 180-463490/2-A
Matrix: Water
Analysis Batch: 463688

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 463490

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.250	0.2381		mg/L		95	80 - 120
Calcium	25.0	26.95		mg/L		108	80 - 120

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

Lab Sample ID: 180-171268-3 MS — **Client Sample ID: MW-15**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 463688 — **Prep Batch: 463490**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	<0.0601		0.250	0.2506		mg/L		100	75 - 125
Calcium	1.16		25.0	28.66		mg/L		110	75 - 125

Lab Sample ID: 180-171268-3 MSD — **Client Sample ID: MW-15**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 463688 — **Prep Batch: 463490**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	<0.0601		0.250	0.2568		mg/L		103	75 - 125	2	20
Calcium	1.16		25.0	27.42		mg/L		105	75 - 125	4	20

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

Lab Sample ID: MB 180-463334/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			03/22/24 19:03	1

Lab Sample ID: LCS 180-463334/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	305	302.0		mg/L		99	85 - 115

Lab Sample ID: MB 180-463508/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			03/25/24 18:51	1

Lab Sample ID: LCS 180-463508/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	305	300.0		mg/L		98	85 - 115

Lab Sample ID: MB 180-463633/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463633

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			03/26/24 16:48	1

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

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

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			305	314.0		mg/L		103	85 - 115		

QC Association Summary

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

Job ID: 180-171268-1

HPLC/IC

Analysis Batch: 463435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-1	MW-11	Total/NA	Water	EPA 9056A	
180-171268-2	MW-14	Total/NA	Water	EPA 9056A	
180-171268-3	MW-15	Total/NA	Water	EPA 9056A	
180-171268-4	MW-16	Total/NA	Water	EPA 9056A	
180-171268-5	MW-17	Total/NA	Water	EPA 9056A	
180-171268-6	MW-18	Total/NA	Water	EPA 9056A	
180-171268-7	MW-19	Total/NA	Water	EPA 9056A	
180-171268-8	DUP-02	Total/NA	Water	EPA 9056A	
180-171268-9	DUP-03	Total/NA	Water	EPA 9056A	
MB 180-463435/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-463435/7	Lab Control Sample	Total/NA	Water	EPA 9056A	

Analysis Batch: 464084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-10	DUP-06	Total/NA	Water	EPA 9056A	
180-171268-11	EB-02	Total/NA	Water	EPA 9056A	
180-171268-12	FB-02	Total/NA	Water	EPA 9056A	
MB 180-464084/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-464084/7	Lab Control Sample	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 463490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-1	MW-11	Total Recoverable	Water	3005A	
180-171268-2	MW-14	Total Recoverable	Water	3005A	
180-171268-3	MW-15	Total Recoverable	Water	3005A	
180-171268-4	MW-16	Total Recoverable	Water	3005A	
180-171268-5	MW-17	Total Recoverable	Water	3005A	
180-171268-6	MW-18	Total Recoverable	Water	3005A	
180-171268-7	MW-19	Total Recoverable	Water	3005A	
180-171268-8	DUP-02	Total Recoverable	Water	3005A	
180-171268-9	DUP-03	Total Recoverable	Water	3005A	
180-171268-10	DUP-06	Total Recoverable	Water	3005A	
180-171268-11	EB-02	Total Recoverable	Water	3005A	
180-171268-12	FB-02	Total Recoverable	Water	3005A	
MB 180-463490/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-463490/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-171268-3 MS	MW-15	Total Recoverable	Water	3005A	
180-171268-3 MSD	MW-15	Total Recoverable	Water	3005A	

Analysis Batch: 463688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-1	MW-11	Total Recoverable	Water	EPA 6020B	463490
180-171268-2	MW-14	Total Recoverable	Water	EPA 6020B	463490
180-171268-3	MW-15	Total Recoverable	Water	EPA 6020B	463490
180-171268-4	MW-16	Total Recoverable	Water	EPA 6020B	463490
180-171268-5	MW-17	Total Recoverable	Water	EPA 6020B	463490
180-171268-6	MW-18	Total Recoverable	Water	EPA 6020B	463490
180-171268-7	MW-19	Total Recoverable	Water	EPA 6020B	463490
180-171268-8	DUP-02	Total Recoverable	Water	EPA 6020B	463490

Metals (Continued)

Analysis Batch: 463688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-9	DUP-03	Total Recoverable	Water	EPA 6020B	463490
180-171268-10	DUP-06	Total Recoverable	Water	EPA 6020B	463490
180-171268-11	EB-02	Total Recoverable	Water	EPA 6020B	463490
180-171268-12	FB-02	Total Recoverable	Water	EPA 6020B	463490
MB 180-463490/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	463490
LCS 180-463490/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	463490
180-171268-3 MS	MW-15	Total Recoverable	Water	EPA 6020B	463490
180-171268-3 MSD	MW-15	Total Recoverable	Water	EPA 6020B	463490

General Chemistry

Analysis Batch: 463334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-1	MW-11	Total/NA	Water	SM 2540C	
180-171268-8	DUP-02	Total/NA	Water	SM 2540C	
MB 180-463334/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-463334/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 463508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-3	MW-15	Total/NA	Water	SM 2540C	
180-171268-4	MW-16	Total/NA	Water	SM 2540C	
180-171268-5	MW-17	Total/NA	Water	SM 2540C	
180-171268-7	MW-19	Total/NA	Water	SM 2540C	
180-171268-9	DUP-03	Total/NA	Water	SM 2540C	
180-171268-11	EB-02	Total/NA	Water	SM 2540C	
180-171268-12	FB-02	Total/NA	Water	SM 2540C	
MB 180-463508/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-463508/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 463633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-2	MW-14	Total/NA	Water	SM 2540C	
180-171268-6	MW-18	Total/NA	Water	SM 2540C	
180-171268-10	DUP-06	Total/NA	Water	SM 2540C	
MB 180-463633/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-463633/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 463881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-171268-1	MW-11	Total/NA	Water	Field Sampling	
180-171268-2	MW-14	Total/NA	Water	Field Sampling	
180-171268-3	MW-15	Total/NA	Water	Field Sampling	
180-171268-4	MW-16	Total/NA	Water	Field Sampling	
180-171268-5	MW-17	Total/NA	Water	Field Sampling	
180-171268-6	MW-18	Total/NA	Water	Field Sampling	
180-171268-7	MW-19	Total/NA	Water	Field Sampling	

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

Chain of Custody Record

eurofins Environment Testing America

Client Information
Client Contact: SCS Contacts
Company: SCS
Address: 3535 Colonnade Pkwy Bin S 530 EC
City: Birmingham
State, Zip: Alabama
Phone: 205.992.6283
Email: SCS Contacts
Project Name: Daniel NAMU CCR
Site:

Sampler: Todd Voreis
Phone: 402-517-0347
Due Date Requested:
TAT Requested (days):
PO #:
WO #:
Project #: 18020047
SSOW#:

Lab PM: Brown, Shali
E-Mail: shali.brown@eurofinset.com
Carrier Tracking No(s):
COC No:
Page:
Job #:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Boron and Calcium	9056E Chloride Fluoride Sulfate	Total Dissolved Solids	Total Number of containers
			Preservation Code							
MW-11	18MAR24	1600	G	W	No	No	X	X	X	3
MW-14	20MAR24	1705	G	W	No	No	X	X	X	3
MW-15	19MAR24	1741	G	W	No	No	X	X	X	3
MW-16	19MAR24	1545	G	W	No	No	X	X	X	3
MW-17	19MAR24	1425	G	W	No	No	X	X	X	3
MW-18	20MAR24	1305	G	W	No	No	X	X	X	3
MW-19	19MAR24	1225	G	W	No	No	X	X	X	3
DUP-02	18MAR24	1500	G	W	No	No	X	X	X	3
DUP-03	19MAR24	1225	G	W	No	No	X	X	X	3
DUP-06	20MAR24	1205	G	W	No	No	X	X	X	3
EB-02	19MAR24	1025	G	W	No	No	X	X	X	3

180-171268 Chain of Custody

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

Special Instructions/Note:

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Todd Voreis	20MAR24 1337	RDHEM	[signature]	3/21/24 0930	EMHNE
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information			
Client Contact: SCS Contacts	Sampler: Todd Voses	Lab PM: Brown, Shali	Carrier Tracking No(s):
Company: SCS	Phone: 4025170142	E-Mail: shali.brown@eurofinset.com	COC No:
Address: 3535 Colonnade Pkwy Bin S 530 EC	Due Date Requested:		Page:
City: Birmingham	TAT Requested (days):		Job #:
State, Zip: Alabama			
Phone: 205 992 6283	PO #:		
Email: SCS Contacts	WO #		
Project Name: Daniel NAMU CCR	Project #: 18020047		
Site:	SSOW#:		

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Boron and Calcium	90656 Chloride Fluoride Sulfate	Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
FB-02	19MAR24	1054	G	W	N	N	X	X	X	3	

Preservation Codes:

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

Other:

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Todd Voses	20MAR24 1337	RDM ENV	[illegible]	3/21/24 0930	EFTAWE
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by	Date/Time	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Todd Voreis	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No.
Client Contact: SCS Contacts	Phone: 402-517-0342	E-Mail: shali.brown@eurofinset.com		Page
Company: SCS				Job #:
Address: 3535 Colonnade Pkwy Bin S 530 EC	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: Alabama				
Phone: 205 992 6283	PO #:			
Email: SCS Contacts	WO #:			
Project Name: Daniel NAMU CCR	Project #: 18020047			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Boron and Calcium	90656 Chloride Fluoride Sulfate	Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-11	18MAR24	1600	G	W	N	N	X	X	X	3	
MW-14	20MAR24	1205	G	W	N	N	X	X	X	3	
MW-15	19MAR24	1741	G	W	N	N	X	X	X	3	
MW-16	19MAR24	1545	G	W	N	N	X	X	X	3	
MW-17	19MAR24	1425	G	W	N	N	X	X	X	3	
MW-18	20MAR24	1305	G	W	N	N	X	X	X	3	
MW-19	19MAR24	1225	G	W	N	N	X	X	X	3	
DUP-02	18MAR24	1500	G	W	N	N	X	X	X	3	
DUP-03	19MAR24	1325	G	W	N	N	X	X	X	3	
DUP-06	20MAR24	1205	G	W	N	N	X	X	X	3	
EB-02	19MAR24	1025	G	W	N	N	X	X	X	3	

180-171268 Chain of Custody

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

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

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

Special Instructions/QC Requirements

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Todd Voreis	20MAR24 1337	RDHEM	[signature]	3/22/24 0930	EPAM
			RO 3/22/24		

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Todd Voreck	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 4025170142	E-Mail: shali.brown@eurofinset.com		Page:
Company: SCS				Job #:
Address: 3535 Colonnade Pkwy Bin S 530 EC	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: Alabama				
Phone: 205 992 6283	PO #:			
Email: SCS Contacts	WO #:			
Project Name: Daniel NAMU CCR	Project #: 18020047			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)		6020B Boron and Calcium	90656 Chloride Fluoride Sulfate	Total Dissolved Solids									Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
FB-02	19MAR24	1054	G	W	N	N		X	X	X									3	

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

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

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

Special Instructions/QC Requirements

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Todd Voreck	20MAR24 1337	RDH Eng	[signature]	3/22/24 0930	BDAMS
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by	Date/Time	Company	Received by:	Date/Time	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Todd Voreis	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 407517 0342	E-Mail: shali.brown@eurofinset.com		Page:
Company: SCS				Job #:
Address: 3535 Colonnade Pkwy Bin S 530 EC	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: Alabama				
Phone: 205 292 6283	PO #: SCS10382606			
Email: SCS Contacts	WO #:			
Project Name: Plant Daniel NAMU State	Project #: 18020047			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Arsenic Cadmium Selenium	Chloride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-11	18MAR24	1600	G	W	N	N	X	X	2	
MW-12	18MAR24	1727	G	W	N	N	X	X	2	
MW-13	18MAR24	1905	G	W	N	N	X	X	2	
MW-19	19MAR24	1225	G	W	N	N	X	X	2	
DUP-02	18MAR24	1500	G	W	N	N	X	X	2	
EB-02	19MAR24	1025	G	W	N	N	X	X	2	
FB-02	19MAR24	1054	G	W	N	N	X	X	2	

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

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

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

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Todd Voreis	20MAR24 1337	RDH FAU	[illegible]	3/22/24 0930	[illegible]
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

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

Ver: 01/16/2019

Do not lift using this tag.

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

SHIP DATE: 20MAR24
ACTWGT: 70.40 LB
CAD: 6994562/SSFE2500
DIMS: 24x19x14 IN
BILL THIRD PARTY

Mstr# 156297[illegible] FRI 08 FEB 2024 EXP-12/24

TO EUROFINS TESTAMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
INV:
PO:
REF:
DEPT:

FedEx Express

J241020110010 1

4 of 7
MPS# 0263 2724 1868 2622
Mstr# 2724 1868 2596

RT 198 7 10:30 2622 03:27
FZ 197

7 10:30A
VERNIGHT

XS AGCA

15238
PA-US PIT

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

180-171268 Waybill

FedEx®

Do not lift using this tag.

Recipient's Name *Please print.*	Phone Number
	( )

Company | Dept./Floor/Suite/Room

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

SHIP DATE: 20MAR24
ACTWGT: 72.25 LB
CAD: 6994562/SSFE2500
DIMS: 24x13x14 IN
BILL THIRD PARTY

TO EUROFINS TESTAMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO:

RT 198 1 10:30 A 2655 03.21
FZ 197

FedEx Express

J241024QT1001uv

Part # 156295-F86 RSS/FTSS
FORM PARCUB EXP 12/24

7 of 7
MPS# 0263 2724 1868 2655
Mstr# 2724 1868 2596 0201

THU - 21 MAR 10:30A
PRIORITY OVERNIGHT

XS AGCA

15238
PA-US PIT

Uncorrected temp °C
Thermometer ID 1.3 #11
CF -0.3 Initials KR
PT-WI-SR-001 effective 11/8/18

FedEx®

Do not lift using this tag.

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

SHIP DATE: 20MAR24
ACTWGT: 66.50 LB
CAD: 6994562/SSFE2500
DIMS: 24x13x14 IN
BILL THIRD PARTY

Part # 156297-5336/SSFE1FSS HRADB EXP 12/24

TO EUROFINS TESTAMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF: DEPT:
INV: PO:

FedEx Express
J241024011001UV

3 of 7
MPS# 0263 2724 1868 26
Mstr# 2724 1868 2

XS AGC

R 198 1 10:30 A 2611 03.21
FZ 197

AR 10:30A
OVERNIGHT
15238
PA-US PIT

Uncorrected temp 2.8 °C
Thermometer ID #17
CF -0.3 Initials HR
PT-WI-SR-001 effective 11/8/18

Do not lift using this tag.

ORIGIN ID:MOBA (850) 336-0192

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

SHIP DATE: 20MAR24
ACTWGT: 67.70 LB
CAD: 6994562/SSFE2500
DIMS: 24x13x14 IN

BILL THIRD PARTY

Part# 156297-435 RRLCB EXP 12/24

TO EUROFINS TESTAMERICA

301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238

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

FedEx Express

R 10:30A
RNIGHT

5 of 7

MPS# 0263 2724 1868 2633

Mstr# 2724 1868 2596 0201

XS AGCA

15238
PIT
PA-US

Uncorrected temp
Thermometer ID 4.3 #17
CF -0.3 Initials
PT-WI-SR-001 effective 11/8/18

Courier or Driver: Place Astra or barcode label here.

FedEx

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

SHIP DATE: 20MAR24
ACTWGT: 70.15 LB
CAD: 6994562/SSFE2500
DIMS: 24x13x14 IN
BILL THIRD PARTY

TO EUROFINS TESTAMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
INV:
PO:

Part # 156297-135 REV 7 TBSP FRIDB EXP 12/24

Uncorrected temp 3.4 °C
Thermometer ID 21
CF 0.9 Initials MC
PT-WI-SR-001 effective 11/8/18

FedEx Express

J241024011001uv

6 of 7
MPS# 0263 2724 1868 2644
Mstr# 2724 1868 2596 0201

THU - 21 MAR 10:30A
PRIORITY OVERNIGHT

XS AGCA

15238
PA-US PIT

FedEx

TO EUROFINS TESTAMERICA

301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238

(412) 963-7058

INV:

PO:

REF:

DEPT:

Uncorrected temp 3.4 °C

Thermometer ID 21

CF -0.9 Initials

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

FedEx Express

1 of 7

TRK# 0201 2724 1868 2596

MASTER

XS AGCA

THU - 21 MAR 10:30A

PRIORITY OVERNIGHT

AHS

15238

PA-US PIT

RT 198 1 10:30 A 2596 03:21

FZ 197

Part # 156629-435 REV 0 TEB EXP 12/24

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-171268-1

Login Number: 171268
List Number: 1
Creator: Ryan, Shannon G

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	False	
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.	False	
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	

Low-Flow Test Report:

Test Date / Time: 9/30/2024 4:14:29 PM
Project: Daniel NAMU CCR MW-11
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-11 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 30.5 ft** **Total Depth: 33 ft** **Initial Depth to Water: 14.42 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 30.5 ft** **Estimated Total Volume Pumped: 46000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 2.39 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Fair, 87 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
9/30/2024 4:14 PM	00:00	5.16 pH	29.45 °C	44.55 µS/cm	7.19 mg/L		190.4 mV	14.42 ft	400.00 ml/min
9/30/2024 4:19 PM	05:00	4.81 pH	22.26 °C	60.47 µS/cm	2.29 mg/L	12.80 NTU	170.5 mV	15.98 ft	400.00 ml/min
9/30/2024 4:24 PM	10:00	4.69 pH	21.91 °C	63.13 µS/cm	1.05 mg/L	25.80 NTU	211.3 mV	16.40 ft	400.00 ml/min
9/30/2024 4:29 PM	15:00	4.62 pH	21.70 °C	63.05 µS/cm	0.59 mg/L	26.30 NTU	156.8 mV	16.45 ft	400.00 ml/min
9/30/2024 4:34 PM	20:00	4.59 pH	21.70 °C	63.00 µS/cm	0.41 mg/L	28.30 NTU	141.5 mV	16.45 ft	400.00 ml/min
9/30/2024 4:39 PM	25:00	4.59 pH	21.73 °C	62.74 µS/cm	0.33 mg/L	25.30 NTU	127.8 mV	16.50 ft	400.00 ml/min
9/30/2024 4:44 PM	30:00	4.59 pH	21.63 °C	62.29 µS/cm	0.27 mg/L	21.00 NTU	114.5 mV	16.60 ft	400.00 ml/min
9/30/2024 4:49 PM	35:00	4.59 pH	21.55 °C	62.00 µS/cm	0.25 mg/L	19.10 NTU	126.9 mV	16.60 ft	400.00 ml/min
9/30/2024 4:54 PM	40:00	4.60 pH	21.55 °C	61.52 µS/cm	0.24 mg/L	15.30 NTU	118.6 mV	16.68 ft	400.00 ml/min
9/30/2024 4:59 PM	45:00	4.60 pH	21.55 °C	61.23 µS/cm	0.22 mg/L	13.40 NTU	111.6 mV	16.75 ft	400.00 ml/min
9/30/2024 5:04 PM	50:00	4.60 pH	21.53 °C	61.26 µS/cm	0.22 mg/L	11.40 NTU	105.9 mV	16.75 ft	400.00 ml/min
9/30/2024 5:09 PM	55:00	4.59 pH	21.49 °C	61.04 µS/cm	0.20 mg/L	11.40 NTU	101.7 mV	16.75 ft	400.00 ml/min
9/30/2024 5:14 PM	01:00:00	4.59 pH	21.53 °C	60.90 µS/cm	0.19 mg/L	9.73 NTU	98.1 mV	16.75 ft	400.00 ml/min

9/30/2024 5:19 PM	01:05:00	4.59 pH	21.55 °C	60.83 µS/cm	0.19 mg/L	9.57 NTU	94.6 mV	16.75 ft	400.00 ml/min
9/30/2024 5:24 PM	01:10:00	4.59 pH	21.44 °C	60.62 µS/cm	0.19 mg/L	8.83 NTU	92.1 mV	16.77 ft	400.00 ml/min
9/30/2024 5:29 PM	01:15:00	4.59 pH	21.49 °C	60.61 µS/cm	0.18 mg/L	8.82 NTU	89.6 mV	16.78 ft	400.00 ml/min
9/30/2024 5:34 PM	01:20:00	4.59 pH	21.46 °C	60.64 µS/cm	0.18 mg/L	8.25 NTU	88.0 mV	16.79 ft	400.00 ml/min
9/30/2024 5:39 PM	01:25:00	4.59 pH	21.64 °C	60.62 µS/cm	0.17 mg/L	7.60 NTU	86.0 mV	16.79 ft	400.00 ml/min
9/30/2024 5:44 PM	01:30:00	4.60 pH	21.63 °C	60.45 µS/cm	0.17 mg/L	7.16 NTU	84.1 mV	16.81 ft	400.00 ml/min
9/30/2024 5:49 PM	01:35:00	4.58 pH	21.50 °C	60.60 µS/cm	0.17 mg/L	6.66 NTU	83.6 mV	16.81 ft	400.00 ml/min
9/30/2024 5:54 PM	01:40:00	4.60 pH	21.42 °C	60.44 µS/cm	0.17 mg/L	6.93 NTU	81.7 mV	16.81 ft	400.00 ml/min
9/30/2024 5:59 PM	01:45:00	4.59 pH	21.34 °C	60.42 µS/cm	0.16 mg/L	5.61 NTU	81.1 mV	16.81 ft	400.00 ml/min
9/30/2024 6:04 PM	01:50:00	4.60 pH	21.52 °C	60.46 µS/cm	0.16 mg/L	4.90 NTU	70.6 mV	16.81 ft	400.00 ml/min
9/30/2024 6:09 PM	01:55:00	4.59 pH	21.46 °C	60.34 µS/cm	0.16 mg/L	4.90 NTU	78.2 mV	16.81 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-11	Sample time 1815
DUP-02	Fake Sample Time 1715

Low-Flow Test Report:

Test Date / Time: 10/1/2024 3:28:05 PM
Project: Daniel NAMU MW-12
Operator Name: Todd Voreis

Location Name: Daniel NAMU MW-12 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 17.9 ft** **Total Depth: 22.9 ft** **Initial Depth to Water: 17.59 ft**	**Pump Type: QED** **Tubing Type: PE** **Pump Intake From TOC: 20.4 ft** **Estimated Total Volume Pumped: 8000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1055720**

Test Notes:

Weather Conditions:
Partly cloudy, 90 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/1/2024 3:28 PM	00:00	4.08 pH	24.74 °C	93.97 µS/cm	3.69 mg/L		112.7 mV	17.59 ft	400.00 ml/min
10/1/2024 3:33 PM	05:00	4.01 pH	22.40 °C	95.14 µS/cm	3.58 mg/L	0.88 NTU	97.6 mV	17.62 ft	400.00 ml/min
10/1/2024 3:38 PM	10:00	4.06 pH	22.31 °C	95.96 µS/cm	3.52 mg/L	0.66 NTU	120.9 mV	17.62 ft	400.00 ml/min
10/1/2024 3:43 PM	15:00	4.07 pH	22.40 °C	98.14 µS/cm	3.48 mg/L	0.45 NTU	125.5 mV	17.62 ft	400.00 ml/min
10/1/2024 3:48 PM	20:00	4.12 pH	22.45 °C	96.20 µS/cm	3.47 mg/L	0.42 NTU	127.0 mV	17.62 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-12	Sample time 1552
EB-02	Sample time 1605
FB-02	Sample time 1615

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 10/1/2024 4:27:54 PM
Project: Daniel NAMU CCR MW-13
Operator Name: Keith Krisman

Location Name: Daniel NAMU CCR MW-13 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 21.5 ft** **Total Depth: 26.5 ft** **Initial Depth to Water: 22.4 ft**	**Pump Type: PP** **Tubing Type: Pe** **Pump Intake From TOC: 24.5 ft** **Estimated Total Volume Pumped: 12000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.11 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 800306**

Test Notes:

Weather Conditions:
Sunny 89 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/1/2024 4:27 PM	00:00	4.64 pH	22.34 °C	63.64 µS/cm	4.02 mg/L		79.7 mV	22.40 ft	400.00 ml/min
10/1/2024 4:32 PM	05:00	4.64 pH	21.00 °C	65.79 µS/cm	4.22 mg/L	4.61 NTU	115.4 mV	22.51 ft	400.00 ml/min
10/1/2024 4:37 PM	10:00	4.63 pH	20.95 °C	66.24 µS/cm	4.24 mg/L	2.95 NTU	116.5 mV	22.51 ft	400.00 ml/min
10/1/2024 4:42 PM	15:00	4.64 pH	20.84 °C	66.24 µS/cm	4.26 mg/L	1.02 NTU	194.9 mV	22.51 ft	400.00 ml/min
10/1/2024 4:47 PM	20:00	4.64 pH	20.82 °C	66.13 µS/cm	4.27 mg/L	0.68 NTU	116.0 mV	22.51 ft	400.00 ml/min
10/1/2024 4:52 PM	25:00	4.64 pH	20.86 °C	66.01 µS/cm	4.27 mg/L	0.40 NTU	114.6 mV	22.51 ft	400.00 ml/min
10/1/2024 4:57 PM	30:00	4.65 pH	20.86 °C	66.12 µS/cm	4.28 mg/L	0.34 NTU	114.3 mV	22.51 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-13	Sample time 1700

Low-Flow Test Report:

Test Date / Time: 9/30/2024 2:19:30 PM
Project: Daniel NAMU CCR MW-14
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-14 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 35.7 ft** **Total Depth: 40.7 ft** **Initial Depth to Water: 13.67 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 38.2 ft** **Estimated Total Volume Pumped: 39593.332 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Partly cloudy, 88 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
9/30/2024 2:19 PM	00:00	4.80 pH	22.47 °C	60.59 µS/cm	3.39 mg/L		161.5 mV	13.67 ft	400.00 ml/min
9/30/2024 2:24 PM	05:00	4.85 pH	22.49 °C	60.73 µS/cm	3.37 mg/L	19.60 NTU	154.4 mV	13.68 ft	400.00 ml/min
9/30/2024 2:29 PM	10:00	4.85 pH	22.40 °C	59.64 µS/cm	3.38 mg/L	15.90 NTU	153.2 mV	13.68 ft	400.00 ml/min
9/30/2024 2:34 PM	15:00	4.81 pH	22.40 °C	58.67 µS/cm	3.37 mg/L	12.20 NTU	153.2 mV	13.68 ft	400.00 ml/min
9/30/2024 2:39 PM	20:00	4.80 pH	22.44 °C	58.44 µS/cm	3.37 mg/L	10.60 NTU	200.8 mV	13.68 ft	400.00 ml/min
9/30/2024 2:44 PM	25:00	4.78 pH	22.43 °C	57.61 µS/cm	3.36 mg/L	7.98 NTU	203.2 mV	13.68 ft	400.00 ml/min
9/30/2024 2:49 PM	30:00	4.76 pH	22.22 °C	57.25 µS/cm	3.38 mg/L	6.51 NTU	203.7 mV	13.68 ft	400.00 ml/min
9/30/2024 2:54 PM	35:00	4.77 pH	22.09 °C	56.97 µS/cm	3.38 mg/L	5.96 NTU	202.6 mV	13.68 ft	400.00 ml/min
9/30/2024 2:59 PM	40:00	4.76 pH	22.14 °C	57.03 µS/cm	3.37 mg/L	5.13 NTU	202.5 mV	13.68 ft	400.00 ml/min
9/30/2024 3:04 PM	45:00	4.73 pH	22.22 °C	56.93 µS/cm	3.38 mg/L	4.60 NTU	203.4 mV	13.68 ft	400.00 ml/min
9/30/2024 3:09 PM	50:00	4.74 pH	22.26 °C	56.92 µS/cm	3.38 mg/L	4.08 NTU	202.8 mV	13.68 ft	400.00 ml/min
9/30/2024 3:14 PM	55:00	4.74 pH	22.30 °C	56.66 µS/cm	3.38 mg/L	4.13 NTU	202.3 mV	13.68 ft	400.00 ml/min
9/30/2024 3:19 PM	01:00:00	4.73 pH	22.17 °C	56.81 µS/cm	3.38 mg/L	3.79 NTU	202.5 mV	13.68 ft	400.00 ml/min

9/30/2024 3:24 PM	01:05:00	4.73 pH	22.17 °C	56.46 µS/cm	3.38 mg/L	3.65 NTU	201.8 mV	13.68 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-14	Sample time 1529

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/30/2024 12:55:29 PM
Project: Daniel NAMU CCR MW-15
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-15 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 34.5 ft** **Total Depth: 39.5 ft** **Initial Depth to Water: 12.91 ft**	**Pump Type: BP** **Tubing Type: PE** **Pump Intake From TOC: 34.5 ft** **Estimated Total Volume Pumped: 20000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 852546**

Test Notes:

Weather Conditions:
Partly cloudy, 88 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
9/30/2024 12:55 PM	00:00	5.12 pH	25.27 °C	41.58 µS/cm	4.39 mg/L		149.0 mV	12.91 ft	400.00 ml/min
9/30/2024 1:00 PM	05:00	4.73 pH	22.09 °C	41.90 µS/cm	3.57 mg/L	9.69 NTU	162.3 mV	12.92 ft	400.00 ml/min
9/30/2024 1:05 PM	10:00	4.68 pH	22.09 °C	41.72 µS/cm	3.51 mg/L	7.96 NTU	167.2 mV	12.92 ft	400.00 ml/min
9/30/2024 1:10 PM	15:00	4.67 pH	22.13 °C	41.59 µS/cm	3.50 mg/L	5.34 NTU	225.8 mV	12.92 ft	400.00 ml/min
9/30/2024 1:15 PM	20:00	4.69 pH	22.44 °C	41.47 µS/cm	3.48 mg/L	4.37 NTU	225.8 mV	12.92 ft	400.00 ml/min
9/30/2024 1:20 PM	25:00	4.70 pH	22.57 °C	41.43 µS/cm	3.51 mg/L	3.48 NTU	226.7 mV	12.92 ft	400.00 ml/min
9/30/2024 1:25 PM	30:00	4.70 pH	22.62 °C	41.28 µS/cm	3.51 mg/L	2.56 NTU	226.6 mV	12.92 ft	400.00 ml/min
9/30/2024 1:30 PM	35:00	4.70 pH	22.67 °C	41.10 µS/cm	3.51 mg/L	2.16 NTU	226.5 mV	12.92 ft	400.00 ml/min
9/30/2024 1:35 PM	40:00	4.70 pH	22.67 °C	41.10 µS/cm	3.51 mg/L	1.72 NTU	225.5 mV	12.92 ft	400.00 ml/min
9/30/2024 1:40 PM	45:00	4.71 pH	22.59 °C	41.05 µS/cm	3.53 mg/L	1.35 NTU	224.1 mV	12.92 ft	400.00 ml/min
9/30/2024 1:45 PM	50:00	4.70 pH	22.55 °C	41.04 µS/cm	3.50 mg/L	1.26 NTU	223.0 mV	12.92 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-15	Sample time 1349

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 10/1/2024 3:06:19 PM
Project: Daniel NAMU CCR MW-16
Operator Name: Keith Kristan

Location Name: Daniel NAMU CCR MW-16 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 23.3 ft** **Total Depth: 28.3 ft** **Initial Depth to Water: 11 ft**	**Pump Type: QED** **Tubing Type: Pe** **Pump Intake From TOC: 25.8 ft** **Estimated Total Volume Pumped: 12000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 800306**

Test Notes:

Weather Conditions:
Partly cloudy 89 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/1/2024 3:06 PM	00:00	4.43 pH	22.45 °C	46.44 µS/cm	0.42 mg/L		155.3 mV	11.00 ft	400.00 ml/min
10/1/2024 3:11 PM	05:00	4.44 pH	21.67 °C	47.71 µS/cm	0.16 mg/L	0.85 NTU	134.1 mV	11.07 ft	400.00 ml/min
10/1/2024 3:16 PM	10:00	4.45 pH	21.62 °C	47.89 µS/cm	0.14 mg/L	0.39 NTU	125.1 mV	11.07 ft	400.00 ml/min
10/1/2024 3:21 PM	15:00	4.46 pH	21.53 °C	47.96 µS/cm	0.14 mg/L	0.50 NTU	122.8 mV	11.07 ft	400.00 ml/min
10/1/2024 3:26 PM	20:00	4.47 pH	21.49 °C	47.93 µS/cm	0.13 mg/L	0.25 NTU	121.9 mV	11.07 ft	400.00 ml/min
10/1/2024 3:31 PM	25:00	4.48 pH	21.58 °C	48.06 µS/cm	0.13 mg/L	0.46 NTU	121.5 mV	11.07 ft	400.00 ml/min
10/1/2024 3:36 PM	30:00	4.49 pH	21.54 °C	48.01 µS/cm	0.12 mg/L	0.26 NTU	121.8 mV	11.07 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-16	Sample time 1538

FB-02 sample time 1543
EB-02 sample time 1548

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 10/1/2024 10:44:39 AM
Project: Daniel NAMU CCR MW-17
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-17 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 23.5 ft** **Total Depth: 28.5 ft** **Initial Depth to Water: 8.32 ft**	**Pump Type: QED** **Tubing Type: PE** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 26613.334 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1055720**

Test Notes:

Weather Conditions:
Sunny, 84 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/1/2024 10:44 AM	00:00	4.95 pH	24.79 °C	42.57 µS/cm	1.38 mg/L		114.6 mV	8.32 ft	400.00 ml/min
10/1/2024 10:49 AM	05:00	4.93 pH	23.38 °C	43.52 µS/cm	0.70 mg/L	4.98 NTU	96.3 mV	8.32 ft	400.00 ml/min
10/1/2024 10:54 AM	10:00	4.96 pH	23.35 °C	43.54 µS/cm	0.32 mg/L	2.62 NTU	86.3 mV	8.32 ft	400.00 ml/min
10/1/2024 10:59 AM	15:00	4.95 pH	23.35 °C	43.62 µS/cm	0.27 mg/L	2.64 NTU	99.9 mV	8.33 ft	400.00 ml/min
10/1/2024 11:04 AM	20:00	4.96 pH	23.53 °C	43.71 µS/cm	0.25 mg/L	1.89 NTU	94.9 mV	8.33 ft	400.00 ml/min
10/1/2024 11:09 AM	25:00	4.96 pH	23.59 °C	43.67 µS/cm	0.24 mg/L	1.40 NTU	91.6 mV	8.33 ft	400.00 ml/min
10/1/2024 11:14 AM	30:00	4.95 pH	23.55 °C	43.71 µS/cm	0.24 mg/L	1.33 NTU	89.8 mV	8.33 ft	400.00 ml/min
10/1/2024 11:19 AM	35:00	4.97 pH	23.45 °C	43.65 µS/cm	0.24 mg/L	1.22 NTU	86.7 mV	8.33 ft	400.00 ml/min
10/1/2024 11:24 AM	40:00	4.96 pH	23.43 °C	43.64 µS/cm	0.23 mg/L	1.10 NTU	85.4 mV	8.33 ft	400.00 ml/min
10/1/2024 11:29 AM	45:00	4.96 pH	23.57 °C	43.74 µS/cm	0.23 mg/L	0.98 NTU	84.0 mV	8.33 ft	400.00 ml/min
10/1/2024 11:34 AM	50:00	4.97 pH	23.54 °C	43.69 µS/cm	0.23 mg/L	0.91 NTU	82.3 mV	8.33 ft	400.00 ml/min
10/1/2024 11:39 AM	55:00	4.98 pH	23.79 °C	43.52 µS/cm	0.23 mg/L	0.77 NTU	80.5 mV	8.33 ft	400.00 ml/min
10/1/2024 11:44 AM	01:00:00	4.96 pH	23.25 °C	43.61 µS/cm	0.22 mg/L	0.88 NTU	80.4 mV	8.33 ft	400.00 ml/min

10/1/2024 11:49 AM	01:05:00	4.97 pH	23.31 °C	43.60 µS/cm	0.22 mg/L	0.73 NTU	79.0 mV	8.33 ft	400.00 ml/min
10/1/2024 11:51 AM	01:06:32	4.97 pH	23.43 °C	43.69 µS/cm	0.22 mg/L	0.71 NTU	78.5 mV	8.33 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-17	Sample time 1155

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 10/1/2024 9:29:49 AM
Project: Daniel CCR MW-18
Operator Name: Todd Voreis

Location Name: Daniel CCR MW-18 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 39.4 ft** **Total Depth: 44.4 ft** **Initial Depth to Water: 18.1 ft**	**Pump Type: QED** **Tubing Type: PE** **Pump Intake From TOC: 41.9 ft** **Estimated Total Volume Pumped: 8000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1055720**

Test Notes:

Weather Conditions:
Sunny, 80 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/1/2024 9:29 AM	00:00	4.54 pH	21.77 °C	49.29 µS/cm	1.87 mg/L		120.0 mV	18.10 ft	400.00 ml/min
10/1/2024 9:34 AM	05:00	4.59 pH	21.35 °C	51.73 µS/cm	0.39 mg/L	3.95 NTU	88.7 mV	18.10 ft	400.00 ml/min
10/1/2024 9:39 AM	10:00	4.62 pH	21.28 °C	51.60 µS/cm	0.29 mg/L	2.23 NTU	95.5 mV	18.11 ft	400.00 ml/min
10/1/2024 9:44 AM	15:00	4.61 pH	21.30 °C	51.53 µS/cm	0.27 mg/L	0.86 NTU	92.9 mV	18.11 ft	400.00 ml/min
10/1/2024 9:49 AM	20:00	4.61 pH	21.33 °C	51.54 µS/cm	0.25 mg/L	0.68 NTU	91.1 mV	18.11 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-18	Sample time 0955
DUP-02	Sample time 0855

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 10/1/2024 12:42:28 PM
Project: Daniel NAMU CCR MW-19
Operator Name: Todd Voreis

Location Name: Daniel NAMU CCR MW-19 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.4 ft** **Total Depth: 32.4 ft** **Initial Depth to Water: 19.75 ft**	**Pump Type: QED** **Tubing Type: PE** **Pump Intake From TOC: 27.4 ft** **Estimated Total Volume Pumped: 30833.334 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1055720**

Test Notes:

Weather Conditions:
Fair, 88 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
10/1/2024 12:42 PM	00:00	5.56 pH	27.94 °C	81.34 µS/cm	5.31 mg/L		103.4 mV	19.75 ft	400.00 ml/min
10/1/2024 12:47 PM	05:00	5.84 pH	23.24 °C	98.22 µS/cm	0.30 mg/L	3.59 NTU	69.5 mV	19.77 ft	400.00 ml/min
10/1/2024 12:52 PM	10:00	5.71 pH	23.09 °C	74.09 µS/cm	0.20 mg/L	2.52 NTU	61.0 mV	19.77 ft	400.00 ml/min
10/1/2024 12:57 PM	15:00	5.62 pH	23.16 °C	64.32 µS/cm	0.18 mg/L	2.30 NTU	64.5 mV	19.77 ft	400.00 ml/min
10/1/2024 1:02 PM	20:00	5.54 pH	23.04 °C	59.41 µS/cm	0.17 mg/L	2.14 NTU	63.1 mV	19.78 ft	400.00 ml/min
10/1/2024 1:07 PM	25:00	5.46 pH	22.85 °C	53.96 µS/cm	0.16 mg/L	2.07 NTU	61.9 mV	19.78 ft	400.00 ml/min
10/1/2024 1:12 PM	30:00	5.42 pH	23.08 °C	52.20 µS/cm	0.16 mg/L	2.15 NTU	60.0 mV	19.78 ft	400.00 ml/min
10/1/2024 1:17 PM	35:00	5.40 pH	23.19 °C	50.82 µS/cm	0.16 mg/L	1.82 NTU	57.6 mV	19.78 ft	400.00 ml/min
10/1/2024 1:22 PM	40:00	5.39 pH	23.98 °C	49.35 µS/cm	0.19 mg/L	3.70 NTU	54.1 mV	19.78 ft	400.00 ml/min
10/1/2024 1:27 PM	45:00	5.39 pH	23.13 °C	49.42 µS/cm	0.17 mg/L	3.10 NTU	49.6 mV	19.78 ft	400.00 ml/min
10/1/2024 1:32 PM	50:00	5.33 pH	22.97 °C	47.92 µS/cm	0.17 mg/L	2.43 NTU	48.2 mV	19.78 ft	400.00 ml/min
10/1/2024 1:37 PM	55:00	5.33 pH	23.10 °C	46.35 µS/cm	0.16 mg/L	1.84 NTU	49.6 mV	19.78 ft	400.00 ml/min
10/1/2024 1:42 PM	01:00:00	5.31 pH	23.02 °C	46.39 µS/cm	0.16 mg/L	1.78 NTU	45.0 mV	19.78 ft	400.00 ml/min

10/1/2024 1:47 PM	01:05:00	5.31 pH	23.03 °C	46.44 µS/cm	0.16 mg/L	1.40 NTU	45.5 mV	19.78 ft	400.00 ml/min
10/1/2024 1:49 PM	01:07:05	5.32 pH	23.03 °C	46.70 µS/cm	0.16 mg/L	1.24 NTU	45.2 mV	19.78 ft	400.00 ml/min
10/1/2024 1:54 PM	01:12:05	5.30 pH	23.01 °C	45.50 µS/cm	0.16 mg/L		41.1 mV	19.78 ft	400.00 ml/min
10/1/2024 1:59 PM	01:17:05	5.29 pH	22.89 °C	44.64 µS/cm	0.16 mg/L	1.22 NTU	43.0 mV	19.78 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-19	Sample time 1405

Created using VuSitu from In-Situ, Inc.

Water Quality Instrument Calibration Form

Project/Site: Daniel CCR GSA Project #: Field Personnel: Keith Krisman RDH Environmental

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

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L)[1]	Reading (mg/L)	Reading (%)	Pass or Fail
						Acceptance Criteria: +/-0.3mg/L		
CAL ICV CCV		9/30/24	1152	28.2	7.800	7.81	100.14	P F
CAL ICV CCV		9/30/24	1155	27.5	7.759	7.77	99.90	P F
CAL ICV CCV		9/30/24	1645	29.5	7.625	7.63	100.24	P F
CAL ICV CCV								P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
						Acceptance Criteria: +/- 5%		
CAL ICV CCV		9/30/24	1145	1413	46C194	3-2025	1413	P F
CAL ICV CCV		9/30/24	1146	1413	46C194	3-2025	1413	P F
CAL ICV CCV		9/30/24	1636	1413	46C194	3-2025	1413	P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
						Acceptance Criteria: +/-0.2 SU		
CAL ICV CCV		9/30/24	1130	4.00	46D0076	4-2026	4.02	P F
CAL ICV CCV		9/30/24	1132	7.00	46C0526	3-2026	6.99	P F
CAL ICV CCV		9/30/24	1134	7.00	46C0526	3-2026	7.00	P F
CAL ICV CCV		9/30/24	1136	4.00	46D0076	4-2026	4.01	P F
CAL ICV CCV		9/30/24	1641	4.00	46D0076	4-2026	4.02	P F
CAL ICV CCV		9/30/24	1642	7.00	46C0526	3-2026	7.01	P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
						Geosynfec Acceptance Criteria: +/- 5%		
CAL ICV CCV		9/30/24	1138	228	24006903	12-2024	228	P F
CAL ICV CCV		9/30/24	1139	228	24006903	12-2024	228	P F
CAL ICV CCV		9/30/24	1627	228	24006903	12-2024	228	P F
CAL ICV CCV								P F

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

0.1 - 10 NTU Std 10 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
	Acceptance Criteria: +/- 10%		
CAL ICV CCV	9/30/24 / 1126	9.64	P F
CAL ICV CCV	9/30/24 / 1127	9.61	P F
CAL ICV CCV	9/30/24 / 1630	9.84	P F
CAL ICV CCV			P F

Lot # A9046
Exp. 5-2025

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

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

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

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

Comments: pH Sensor Changed

Water Quality Instrument Calibration Form

Project/Site: Daniel GSA Project #: Field Personnel: Keith Krisman RDH Environmental

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

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L)[1]	Reading (mg/L)	Reading (%)	Pass or Fail
						Acceptance Criteria: +/-0.3mg/L		
CAL ICV CCV		10/1/24	0703	22.4	8.677	8.66	99.74	P F
CAL ICV CCV		10/1/24	0704	22.4	8.677	8.72	100.46	P F
CAL ICV CCV		10/1/24	1448	31.3	7.39	7.29	98.63	P F
CAL ICV CCV								P F

0.1 - 10 NTU Std 10 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
	Acceptance Criteria: +/- 10%		
CAL ICV CCV	10/1/24/0639	9.79	P F
CAL ICV CCV	10/1/24/0640	9.81	P F
CAL ICV CCV	10/1/24/1458	9.88	P F
CAL ICV CCV			P F

Lot # 44046 Exp. 5-2025

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
						Acceptance Criteria: +/- 5%		
CAL ICV CCV		10/1/24	0656	1413	461194	3-2025	1409	P F
CAL ICV CCV		10/1/24	0657	1413	461194	3-2025	1411	P F
CAL ICV CCV		10/1/24	1456	1413	461194	3-2025	1410	P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

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

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
						Acceptance Criteria: +/-0.2 SU		
CAL ICV CCV		10/1/24	0640	4.00	46D0076	4-2026	3.97	P F
CAL ICV CCV		10/1/24	0643	7.00	46C0576	3-2026	7.03	P F
CAL ICV CCV		10/1/24	0644	7.00	46C0576	3-2026	7.00	P F
CAL ICV CCV		10/1/24	0647	4.00	46D0076	4-2026	4.00	P F
CAL ICV CCV		10/1/24	1502	4.00	46D0076	4-2026	4.06	P F
CAL ICV CCV		10/1/24	1501	7.00	46C0576	3-2026	6.98	P F

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

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
						Geosyntec Acceptance Criteria: +/- 5%		
CAL ICV CCV		10/1/24	0650	228	24006903	12-2024	228	P F
CAL ICV CCV		10/1/24	0651	228	24006903	12-2024	228	P F
CAL ICV CCV		10/1/24	1459	228	24006903	12-2024	220	P F
CAL ICV CCV								P F

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

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

1. See Table FB 2200-2 on the back of this form

CAL - Initial Calibration

ICV - Initial Calibration Verification

CCV - Continuing Calibration Verification

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Comments:

Water Quality Instrument Calibration Form

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

Water Quality Meter - Model/Serial #: Aqua Troll 400/ Serial # 1057720

Turbidimeter - Model/Serial # Hach 2100Q/Serial # 18080C068795 Lot # A4046 Exp. 5-2025

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L)[1]	Reading (mg/L)	Reading (%)	Pass or Fail
						Acceptance Criteria: +/-0.3mg/L		
CAL ICV CCV		10/2/24	0717	23.2	8.546	8.49	99.83	P F
CAL ICV CCV		10/2/24	0718	23.4	8.568	8.48	99.87	P F
CAL ICV CCV		10/2/24	2050	25.5	8.19	8.16 KK 10/2/24	99.86	P F
CAL ICV CCV								P F

0.1 - 10 NTU Std 1.0 NTU	DATE/TIME	Reading (NTU)	Pass or Fail
	Acceptance Criteria: +/- 10%		
CAL ICV CCV	10/2/24/0702	9.76	P F
CAL ICV CCV	10/2/24/0703	9.72	P F
CAL ICV CCV	10/2/24/2045	9.81	P F
CAL ICV CCV			P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (uS/cm)	Standard Lot #	Standard Exp. Date	Reading (uS/cm)	Pass or Fail
						Acceptance Criteria: +/- 5%		
CAL ICV CCV		10/2/24	0711	1413	4GC1194	3-2025	1411	P F
CAL ICV CCV		10/2/24	0712	1413	4GC1194	3-2025	1413	P F
CAL ICV CCV		10/2/24	2041	1413	4GC1194	3-2025	1412	P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

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

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
						Acceptance Criteria: +/-0.2 SU		
CAL ICV CCV		10/2/24	0653	4.00	4GD0076	4-2026	4.03	P F
CAL ICV CCV		10/2/24	0654	7.00	4GC0576	3-2026	6.97	P F
CAL ICV CCV		10/2/24	0657	7.00	4GC0576	3-2026	7.00	P F
CAL ICV CCV		10/2/24	0659	4.00	4GD0076	4-2026	4.00	P F
CAL ICV CCV		10/2/24	2025	4.00	4GD0076	4-2026	3.99	P F
CAL ICV CCV		10/2/24	2028	7.00	4GC0576	3-2026	6.99	P F

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

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
						Geosynlec Acceptance Criteria: +/- 5%		
CAL ICV CCV		10/2/24	0701	228	24006903	12-2024	228	P F
CAL ICV CCV		10/2/24	0706	228	24006903	12-2024	228	P F
CAL ICV CCV		10/2/24	2033	228	24006903	12-2024	227	P F
CAL ICV CCV								P F

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

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

1. See Table FS 2200-2 on the back of this form

CAL - Initial Calibration

ICV - Initial Calibration Verification

CCV - Continuing Calibration Verification

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Comments:

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/30/2024 7:49:50 PM Revision 1

JOB DESCRIPTION

PlantDaniel NAMU CCR

JOB NUMBER

180-180753-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

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

PA Lab ID: 02-00416

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

Authorization

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Revision 1

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

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Job Narrative
180-180753-1

103024 Revised report to include field pH at client request. This report replaces the report previously issued on 101124

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

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

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

Receipt
The samples were received on 10/3/2024 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.3°C.

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

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

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

Definitions/Glossary

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Qualifiers

HPLC/IC

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

Metals

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

Glossary

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

Accreditation/Certification Summary

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-28-25
California	State	2891	04-30-24 *
Connecticut	State	PH-0688	09-30-24 *
Florida	NELAP	E871008	06-30-25
Georgia	State	PA 02-00416	04-30-25
Illinois	NELAP	004375	07-31-25
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-25
Kentucky (WW)	State	KY98043	12-31-24
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-25
New Jersey	NELAP	PA005	06-30-25
New York	NELAP	11182	04-01-25
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-25
Pennsylvania	NELAP	02-00416	04-30-25
Rhode Island	State	LAO00362	01-01-25
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-25
US Fish & Wildlife	US Federal Programs	058448	04-30-25
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	05-31-25
Virginia	NELAP	10043	07-14-24 *
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-25

Laboratory: Eurofins Savannah

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

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

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

Laboratory: Eurofins Savannah (Continued)

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

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

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

Sample Summary

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-180753-1	EB-02	Water	10/01/24 15:48	10/03/24 09:15
180-180753-2	FB-02	Water	10/01/24 15:43	10/03/24 09:15
180-180753-3	MW-15	Water	09/30/24 13:49	10/03/24 09:15
180-180753-4	MW-14	Water	09/30/24 15:29	10/03/24 09:15
180-180753-5	MW-11	Water	09/30/24 18:15	10/03/24 09:15
180-180753-6	DUP-02	Water	09/30/24 17:15	10/03/24 09:15
180-180753-7	MW-17	Water	10/01/24 11:55	10/03/24 09:15
180-180753-8	MW-19	Water	10/01/24 14:05	10/03/24 09:15
180-180753-9	DUP-04	Water	10/01/24 08:55	10/03/24 09:15
180-180753-10	MW-18	Water	10/01/24 09:56	10/03/24 09:15
180-180753-11	MW-16	Water	10/01/24 15:38	10/03/24 09:15

Method Summary

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

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

Lab Chronicle

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: EB-02

Lab Sample ID: 180-180753-1
Date Collected: 10/01/24 15:48
Matrix: Water
Date Received: 10/03/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 13:36	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858766	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 17:09	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: FB-02

Lab Sample ID: 180-180753-2
Date Collected: 10/01/24 15:43
Matrix: Water
Date Received: 10/03/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 13:54	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 18:01	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-15

Lab Sample ID: 180-180753-3
Date Collected: 09/30/24 13:49
Matrix: Water
Date Received: 10/03/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 12:40	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858766	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 16:48	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			483190	09/30/24 14:49	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-14

Lab Sample ID: 180-180753-4
Date Collected: 09/30/24 15:29
Matrix: Water
Date Received: 10/03/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 14:13	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 17:37	BWR	EET SAV
	Instrument ID:	ICPMSC								

Lab Chronicle

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: MW-14
Date Collected: 09/30/24 15:29
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-4
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	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
Total/NA	Analysis	Field Sampling		1			483190	09/30/24 16:29	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-11
Date Collected: 09/30/24 18:15
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 15:45	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 18:22	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481018	10/04/24 10:20	EBA	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			483190	09/30/24 19:15	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: DUP-02
Date Collected: 09/30/24 17:15
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 16:04	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858766	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 17:13	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-17
Date Collected: 10/01/24 11:55
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 16:22	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 17:49	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								

Lab Chronicle

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: MW-17
Date Collected: 10/01/24 11:55
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-7
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	Field Sampling		1			483190	10/01/24 12:55	FDS	EET PIT

Client Sample ID: MW-19
Date Collected: 10/01/24 14:05
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 16:40	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858766	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 17:05	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			483190	10/01/24 15:05	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: DUP-04
Date Collected: 10/01/24 08:55
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 17:36	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858766	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 16:52	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: MW-18
Date Collected: 10/01/24 09:56
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 17:54	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858766	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859079	10/10/24 16:44	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			483190	10/01/24 10:56	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Lab Chronicle

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: MW-16

Date Collected: 10/01/24 15:38
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1	1 mL	1 mL	481230	10/08/24 18:50	M1D	EET PIT
	Instrument ID:	INTEGRION								
Total Recoverable	Prep	3005A			25 mL	125 mL	858765	10/10/24 07:42	RR	EET SAV
Total Recoverable	Analysis	6020B		1			859028	10/10/24 17:45	BWR	EET SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481017	10/04/24 10:13	EBA	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	Field Sampling		1			483190	10/01/24 16:38	FDS	EET PIT
	Instrument ID:	NOEQUIP								

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Analyst References:

Lab: EET PIT
- Batch Type: Analysis
  - EBA = Elizabeth Arbster
  - FDS = Sampler Field
  - M1D = Maureen Donlin

Lab: EET SAV
- Batch Type: Prep
  - RR = Robert Rancourt
- Batch Type: Analysis
  - BWR = Bryn Robertson

Client Sample Results

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: EB-02

Lab Sample ID: 180-180753-1
Date Collected: 10/01/24 15:48
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			10/08/24 13:36	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/08/24 13:36	1
Sulfate	<0.756		1.00	0.756	mg/L			10/08/24 13:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 17:09	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<10.0		10.0	10.0	mg/L			10/04/24 10:13	1

Client Sample ID: FB-02

Lab Sample ID: 180-180753-2
Date Collected: 10/01/24 15:43
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			10/08/24 13:54	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/08/24 13:54	1
Sulfate	<0.756		1.00	0.756	mg/L			10/08/24 13:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 18:01	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 18:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<10.0		10.0	10.0	mg/L			10/04/24 10:13	1

Client Sample ID: MW-15

Lab Sample ID: 180-180753-3
Date Collected: 09/30/24 13:49
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.42**		1.00	0.713	mg/L			10/08/24 12:40	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/08/24 12:40	1
Sulfate	**1.58**		1.00	0.756	mg/L			10/08/24 12:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 16:48	1
Calcium	**0.896**		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 16:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**28.0**		10.0	10.0	mg/L			10/04/24 10:13	1

Client Sample Results

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: MW-15

Lab Sample ID: 180-180753-3
Date Collected: 09/30/24 13:49
Matrix: Water
Date Received: 10/03/24 09:15

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.70				SU			09/30/24 14:49	1

Client Sample ID: MW-14

Lab Sample ID: 180-180753-4
Date Collected: 09/30/24 15:29
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.5		1.00	0.713	mg/L			10/08/24 14:13	1
Fluoride	0.0312	J	0.100	0.0260	mg/L			10/08/24 14:13	1
Sulfate	1.41		1.00	0.756	mg/L			10/08/24 14:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 17:37	1
Calcium	2.69		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 17:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	37.0		10.0	10.0	mg/L			10/04/24 10:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.24				SU			09/30/24 16:29	1

Client Sample ID: MW-11

Lab Sample ID: 180-180753-5
Date Collected: 09/30/24 18:15
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.3		1.00	0.713	mg/L			10/08/24 15:45	1
Fluoride	0.0367	J	0.100	0.0260	mg/L			10/08/24 15:45	1
Sulfate	2.69		1.00	0.756	mg/L			10/08/24 15:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 18:22	1
Calcium	1.58		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 18:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	33.0		10.0	10.0	mg/L			10/04/24 10:20	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.59				SU			09/30/24 19:15	1

Client Sample Results

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: DUP-02

Lab Sample ID: 180-180753-6
Date Collected: 09/30/24 17:15
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.3		1.00	0.713	mg/L			10/08/24 16:04	1
Fluoride	0.0380	J	0.100	0.0260	mg/L			10/08/24 16:04	1
Sulfate	2.79		1.00	0.756	mg/L			10/08/24 16:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 17:13	1
Calcium	1.57		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 17:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	39.0		10.0	10.0	mg/L			10/04/24 10:13	1

Client Sample ID: MW-17

Lab Sample ID: 180-180753-7
Date Collected: 10/01/24 11:55
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.72		1.00	0.713	mg/L			10/08/24 16:22	1
Fluoride	<0.0260		0.100	0.0260	mg/L			10/08/24 16:22	1
Sulfate	4.89		1.00	0.756	mg/L			10/08/24 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 17:49	1
Calcium	0.939		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 17:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	33.0		10.0	10.0	mg/L			10/04/24 10:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.97				SU			10/01/24 12:55	1

Client Sample ID: MW-19

Lab Sample ID: 180-180753-8
Date Collected: 10/01/24 14:05
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.78		1.00	0.713	mg/L			10/08/24 16:40	1
Fluoride	0.0270	J	0.100	0.0260	mg/L			10/08/24 16:40	1
Sulfate	2.77		1.00	0.756	mg/L			10/08/24 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 17:05	1
Calcium	2.61		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 17:05	1

Client Sample Results

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: MW-19

Lab Sample ID: 180-180753-8
Date Collected: 10/01/24 14:05
Matrix: Water
Date Received: 10/03/24 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	30.0		10.0	10.0	mg/L			10/04/24 10:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.29				SU			10/01/24 15:05	1

Client Sample ID: DUP-04

Lab Sample ID: 180-180753-9
Date Collected: 10/01/24 08:55
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.14		1.00	0.713	mg/L			10/08/24 17:36	1
Fluoride	0.0281	J	0.100	0.0260	mg/L			10/08/24 17:36	1
Sulfate	5.38		1.00	0.756	mg/L			10/08/24 17:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0260	J	0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 16:52	1
Calcium	0.665		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	37.0		10.0	10.0	mg/L			10/04/24 10:13	1

Client Sample ID: MW-18

Lab Sample ID: 180-180753-10
Date Collected: 10/01/24 09:56
Matrix: Water
Date Received: 10/03/24 09:15

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.15		1.00	0.713	mg/L			10/08/24 17:54	1
Fluoride	0.0283	J	0.100	0.0260	mg/L			10/08/24 17:54	1
Sulfate	5.43		1.00	0.756	mg/L			10/08/24 17:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0257	J	0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 16:44	1
Calcium	0.647		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 16:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	35.0		10.0	10.0	mg/L			10/04/24 10:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.61				SU			10/01/24 10:56	1

Client Sample Results

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Client Sample ID: MW-16

Date Collected: 10/01/24 15:38
Date Received: 10/03/24 09:15

Lab Sample ID: 180-180753-11

Matrix: Water

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.89		1.00	0.713	mg/L			10/08/24 18:50	1
Fluoride	0.0282	J	0.100	0.0260	mg/L			10/08/24 18:50	1
Sulfate	3.36		1.00	0.756	mg/L			10/08/24 18:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 17:45	1
Calcium	0.988		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 17:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	33.0		10.0	10.0	mg/L			10/04/24 10:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.49				SU			10/01/24 16:38	1

QC Sample Results

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Method: EPA 9056A - Anions, Ion Chromatography

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

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

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

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	46.72		mg/L		93	80 - 120
Fluoride	2.50	2.388		mg/L		96	80 - 120
Sulfate	50.0	46.72		mg/L		93	80 - 120

Lab Sample ID: 180-180753-3 MS
Matrix: Water
Analysis Batch: 481230

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7.42		50.0	54.21		mg/L		94	80 - 120
Fluoride	<0.0260		2.50	2.375		mg/L		95	80 - 120
Sulfate	1.58		50.0	49.07		mg/L		95	80 - 120

Lab Sample ID: 180-180753-3 MSD
Matrix: Water
Analysis Batch: 481230

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7.42		50.0	54.02		mg/L		93	80 - 120	0	15
Fluoride	<0.0260		2.50	2.388		mg/L		96	80 - 120	1	15
Sulfate	1.58		50.0	48.80		mg/L		94	80 - 120	1	15

Lab Sample ID: 180-180753-8 MS
Matrix: Water
Analysis Batch: 481230

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.78		50.0	52.63		mg/L		94	80 - 120
Fluoride	0.0270	J	2.50	2.409		mg/L		95	80 - 120
Sulfate	2.77		50.0	50.22		mg/L		95	80 - 120

Lab Sample ID: 180-180753-8 MSD
Matrix: Water
Analysis Batch: 481230

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.78		50.0	52.80		mg/L		94	80 - 120	0	15
Fluoride	0.0270	J	2.50	2.421		mg/L		96	80 - 120	0	15
Sulfate	2.77		50.0	50.07		mg/L		95	80 - 120	0	15

QC Sample Results

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

Method: 6020B - Metals (ICP/MS)

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

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 858765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 17:25	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 17:25	1

Lab Sample ID: LCS 680-858765/2-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 858765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.400	0.3907		mg/L		98	80 - 120
Calcium	5.00	5.422		mg/L		108	80 - 120

Lab Sample ID: LCSD 680-858765/3-A
Matrix: Water
Analysis Batch: 859028

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 858765

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.400	0.3790		mg/L		95	80 - 120	3	20
Calcium	5.00	5.335		mg/L		107	80 - 120	2	20

Lab Sample ID: MB 680-858766/1-A
Matrix: Water
Analysis Batch: 859079

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 858766

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0220		0.0800	0.0220	mg/L		10/10/24 07:42	10/10/24 15:27	1
Calcium	<0.140		0.500	0.140	mg/L		10/10/24 07:42	10/10/24 15:27	1

Lab Sample ID: LCS 680-858766/2-A
Matrix: Water
Analysis Batch: 859079

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 858766

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.400	0.4065		mg/L		102	80 - 120
Calcium	5.00	5.161		mg/L		103	80 - 120

Lab Sample ID: LCSD 680-858766/3-A
Matrix: Water
Analysis Batch: 859079

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 858766

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.400	0.3866		mg/L		97	80 - 120	5	20
Calcium	5.00	4.886		mg/L		98	80 - 120	5	20

QC Sample Results

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

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

Lab Sample ID: MB 180-481017/1
Matrix: Water
Analysis Batch: 481017

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			10/04/24 10:13	1

Lab Sample ID: LCS 180-481017/2
Matrix: Water
Analysis Batch: 481017

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	721	690.0		mg/L		96	85 - 115

Lab Sample ID: 180-180753-1 DU
Matrix: Water
Analysis Batch: 481017

Client Sample ID: EB-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	<10.0		<10.0		mg/L		NC	10

Lab Sample ID: 180-180753-2 DU
Matrix: Water
Analysis Batch: 481017

Client Sample ID: FB-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	<10.0		<10.0		mg/L		NC	10

Lab Sample ID: MB 180-481018/1
Matrix: Water
Analysis Batch: 481018

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			10/04/24 10:20	1

Lab Sample ID: LCS 180-481018/2
Matrix: Water
Analysis Batch: 481018

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	721	730.0		mg/L		101	85 - 115

QC Association Summary

Client: Southern Company
Project/Site: PlantDaniel NAMU CCR

Job ID: 180-180753-1

HPLC/IC

Analysis Batch: 481230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180753-1	EB-02	Total/NA	Water	EPA 9056A	
180-180753-2	FB-02	Total/NA	Water	EPA 9056A	
180-180753-3	MW-15	Total/NA	Water	EPA 9056A	
180-180753-4	MW-14	Total/NA	Water	EPA 9056A	
180-180753-5	MW-11	Total/NA	Water	EPA 9056A	
180-180753-6	DUP-02	Total/NA	Water	EPA 9056A	
180-180753-7	MW-17	Total/NA	Water	EPA 9056A	
180-180753-8	MW-19	Total/NA	Water	EPA 9056A	
180-180753-9	DUP-04	Total/NA	Water	EPA 9056A	
180-180753-10	MW-18	Total/NA	Water	EPA 9056A	
180-180753-11	MW-16	Total/NA	Water	EPA 9056A	
MB 180-481230/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-481230/7	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-180753-3 MS	MW-15	Total/NA	Water	EPA 9056A	
180-180753-3 MSD	MW-15	Total/NA	Water	EPA 9056A	
180-180753-8 MS	MW-19	Total/NA	Water	EPA 9056A	
180-180753-8 MSD	MW-19	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 858765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180753-2	FB-02	Total Recoverable	Water	3005A	
180-180753-4	MW-14	Total Recoverable	Water	3005A	
180-180753-5	MW-11	Total Recoverable	Water	3005A	
180-180753-7	MW-17	Total Recoverable	Water	3005A	
180-180753-11	MW-16	Total Recoverable	Water	3005A	
MB 680-858765/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-858765/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 680-858765/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Prep Batch: 858766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180753-1	EB-02	Total Recoverable	Water	3005A	
180-180753-3	MW-15	Total Recoverable	Water	3005A	
180-180753-6	DUP-02	Total Recoverable	Water	3005A	
180-180753-8	MW-19	Total Recoverable	Water	3005A	
180-180753-9	DUP-04	Total Recoverable	Water	3005A	
180-180753-10	MW-18	Total Recoverable	Water	3005A	
MB 680-858766/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-858766/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 680-858766/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Analysis Batch: 859028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180753-2	FB-02	Total Recoverable	Water	6020B	858765
180-180753-4	MW-14	Total Recoverable	Water	6020B	858765
180-180753-5	MW-11	Total Recoverable	Water	6020B	858765
180-180753-7	MW-17	Total Recoverable	Water	6020B	858765
180-180753-11	MW-16	Total Recoverable	Water	6020B	858765
MB 680-858765/1-A	Method Blank	Total Recoverable	Water	6020B	858765

Metals (Continued)

Analysis Batch: 859028 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-858765/2-A	Lab Control Sample	Total Recoverable	Water	6020B	858765
LCSD 680-858765/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	858765

Analysis Batch: 859079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180753-1	EB-02	Total Recoverable	Water	6020B	858766
180-180753-3	MW-15	Total Recoverable	Water	6020B	858766
180-180753-6	DUP-02	Total Recoverable	Water	6020B	858766
180-180753-8	MW-19	Total Recoverable	Water	6020B	858766
180-180753-9	DUP-04	Total Recoverable	Water	6020B	858766
180-180753-10	MW-18	Total Recoverable	Water	6020B	858766
MB 680-858766/1-A	Method Blank	Total Recoverable	Water	6020B	858766
LCS 680-858766/2-A	Lab Control Sample	Total Recoverable	Water	6020B	858766
LCSD 680-858766/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	858766

General Chemistry

Analysis Batch: 481017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180753-1	EB-02	Total/NA	Water	SM 2540C	
180-180753-2	FB-02	Total/NA	Water	SM 2540C	
180-180753-3	MW-15	Total/NA	Water	SM 2540C	
180-180753-4	MW-14	Total/NA	Water	SM 2540C	
180-180753-6	DUP-02	Total/NA	Water	SM 2540C	
180-180753-7	MW-17	Total/NA	Water	SM 2540C	
180-180753-8	MW-19	Total/NA	Water	SM 2540C	
180-180753-9	DUP-04	Total/NA	Water	SM 2540C	
180-180753-10	MW-18	Total/NA	Water	SM 2540C	
180-180753-11	MW-16	Total/NA	Water	SM 2540C	
MB 180-481017/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-481017/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-180753-1 DU	EB-02	Total/NA	Water	SM 2540C	
180-180753-2 DU	FB-02	Total/NA	Water	SM 2540C	

Analysis Batch: 481018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180753-5	MW-11	Total/NA	Water	SM 2540C	
MB 180-481018/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-481018/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 483190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-180753-3	MW-15	Total/NA	Water	Field Sampling	
180-180753-4	MW-14	Total/NA	Water	Field Sampling	
180-180753-5	MW-11	Total/NA	Water	Field Sampling	
180-180753-7	MW-17	Total/NA	Water	Field Sampling	
180-180753-8	MW-19	Total/NA	Water	Field Sampling	
180-180753-10	MW-18	Total/NA	Water	Field Sampling	
180-180753-11	MW-16	Total/NA	Water	Field Sampling	

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: TODD VOREES / RIBITH KRISHNAN	Lab PM: Brown, Shali	Carrier Tracking No(s)	COC No:
Client Contact: SCS Contacts	Phone: 402-517-0542	E-Mail: shali.brown@eurofinset.com		Page
Company: SCS				Job #:

Address: 3535 Colonnade Pkwy Bin S 530 EC	Due Date Requested:
City: Birmingham	TAT Requested (days):
State, Zip: Alabama	
Phone: 205.992.6283	PO #:
Email: SCS Contacts	WO #:
Project Name: Daniel NAMU CCR	Project #: 18020047
Site	SSOW#:

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Boron and Calcium	90656 Chloride Fluoride Sulfate	Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
EB 02	10CT24	1548	G	w			X	X	X	4	
FB-02	10CT24	1543	G	w			X	X	X	4	
MW-15	30SEP24	1349	G	w			X	X	X	4	
MW-14	30SEP24	1529	G	w			X	X	X	4	
MW-11	30SEP24	1815	G	w			X	X	X	4	
DUP-02	30SEP24	1715	G	w			X	X	X	4	
MW-17	10CT24	1155	G	w			X	X	X	4	
MW-19	10CT24	1405	G	w			X	X	X	4	
DUP-04	10CT24	0855	G	w			X	X	X	4	
MW-18	10CT24	0955	G	w			X	X	X	4	
MW-16	10CT24	1538	G	w			X	X	X	4	

180-180753 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Todd Vorees	10CT24 1705	RDU BW		10/03/24 0915	GATHING

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

Ver: 01/16/2019

ORIGIN ID:BIXA (850) 316-7197

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

SHIP DATE: 03OCT24
ACTWGT: 70.00 LB
CAD: 6993799/SSFE2...
DIMS: 23x13x15 IN

BILL THIRD PARTY

Part #:6297... XP 08/25

TO **EUROFINS TEST AMERICA**

301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(000) 000-0000 REF:
INV:
PO: DEPT:

Uncorrected temp 3.2
Thermometer ID 25
CF +0.1 Initials PM
PT-WI-SR-001 effective 11/8/18

FedEx Express

J243024071301uv

2 of 3

MPS# 0263 **2801 9376 9196**

Mstr# 2801 9376 9185 0201

THU - 03 OCT 10:30A
PRIORITY OVERNIGHT

XS AGCA

15238
PA-US **PIT**

180-180753 Waybill

Do not lift using this tag.

ORIGIN ID:BIXA (850) 316-7197

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

SHIP DATE: 02OCT24
ACTWGT: 70.00 LB
CAD: 6993799/SSFE2541
DIMS: 23x13x15 IN

BILL THIRD PARTY

Part # 156297-439 REV 0 EXP 08/25

TO **EUROFINS TEST AMERICA**

301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238

(000) 000-0000 REF:
INV:
PO: DEPT:

Uncorrected temp 1.0 °C
Thermometer ID 17
CF -0.1 Initials NR
PT-WI-SR-001 effective 11/8/18

FedEx Express

AR LGC-LADY2024-2

1 of 3

TRK# 0201 2801 9376 9185

THU - 03 OCT 10:30A
PRIORITY OVERNIGHT

MASTER

XS AGCA

15238
PA-US PIT

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-525433.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Mississippi	Page: Page 1 of 2
Company: Eurofins Environment Testing Southeast L		Accreditations Required (See note):		Job #: 180-180753-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 10/16/2024			Preservation Codes: -
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: PlantDaniel NAMU CCR	Project #: 18020047			
Site:	SSOW#:			Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A App III Boron and Calcium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EB-02 (180-180753-1)	10/1/24	15:48 Central	G	Water			X	2	
FB-02 (180-180753-2)	10/1/24	15:43 Central	G	Water			X	2	
MW-15 (180-180753-3)	9/30/24	13:49 Central	G	Water			X	2	
MW-14 (180-180753-4)	9/30/24	15:29 Central	G	Water			X	2	
MW-11 (180-180753-5)	9/30/24	18:15 Central	G	Water			X	2	
DUP-02 (180-180753-6)	9/30/24	17:15 Central	G	Water			X	2	
MW-17 (180-180753-7)	10/1/24	11:55 Central	G	Water			X	2	
MW-19 (180-180753-8)	10/1/24	14:05 Central	G	Water			X	2	
DUP-04 (180-180753-9)	10/1/24	08:55 Central	G	Water			X	2	

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

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

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 10-8-24 1700	Company: EFI Pitts	Received by:	Date/Time: 10/09/24 0953	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.3/0.3		

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-525433.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Mississippi	Page: Page 2 of 2
Company: Eurofins Environment Testing Southeast L		Accreditations Required (See note):		Job #: 180-180753-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 10/16/2024			Preservation Codes: -
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: PlantDaniel NAMU CCR	Project #: 18020047			
Site:	SSOW#:			Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A App III Boron and Calcium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-18 (180-180753-10)	10/1/24	09:56 Central	G	Water			X	2	
MW-16 (180-180753-11)	10/1/24	15:38 Central	G	Water			X	2	

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

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

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 10-8-24 1200	Company: FedEx	Received by:	Date/Time: 10/09/24 0953	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.3 / 0.3		

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-180753-1

Login Number: 180753
List Number: 1
Creator: Ryan, Shannon G

List Source: Eurofins Pittsburgh

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-180753-1

Login Number: 180753
List Number: 2
Creator: Lincoln, Alyssa

List Source: Eurofins Savannah
List Creation: 10/09/24 02:20 PM

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

Southern Company

APPENDIX B

Statistical Analyses

GROUNDWATER STATS
CONSULTING

May 28, 2024

Southern Company Services
Attn: Mr. Trey Singleton
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Daniel North Ash Management Unit (NAMU)
Background Update and Statistical Analysis – March 2024

Dear Mr. Singleton,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the background update and statistical analysis of groundwater data for the 2024 Groundwater Monitoring Annual report for Mississippi Power Company's Plant Daniel NAMU. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

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

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

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

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

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

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of well/constituent pairs containing 100% non-detects follow this letter.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. For calculating intrawell prediction limits, the substitution is performed for individual wells and may differ across wells. This generally gives the most conservative limit in each case.

Time series plots for Appendix III parameters are provided for all wells and are used to evaluate concentrations over time as well as for the purpose of updating statistical limits. Additionally, box plots are included for all constituents at upgradient and downgradient wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graph. 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 initial screening, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods were recommended. Power curves were provided with the screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance recommendations as discussed below.

Summary of Statistical Methods

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

- Intrawell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the

nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

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

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents are re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Two-Step Statistical Analysis

Intrawell statistical methods, combined with a 1-of-2 resample plan, may be used as a conservative first step for identifying potential facility impacts in downgradient wells. Intrawell methods use background data for individual wells and may be overly sensitive to spatial variation. In particular for nonparametric limits with small background sample sizes, the probability of a false positive is much higher than the desired annual sitewide rate of 10%. Therefore, a large number of exceedances may occur as a result of spatial variation rather than facility impacts. A second step can be used to further evaluate those exceedances and reduce the overall number of SSIs that result from spatial variation. In instances where intrawell statistical methods identify an apparent SSI, a second step of

interwell statistical evaluation may be used to determine whether the measurement exceeds the sitewide background limit based on pooled upgradient well data. This is similar in concept to the procedure used in compliance monitoring programs where an interwell statistical limit is used to determine "background" (USEPA Unified Guidance (2009), Chapter 7, Section 7.5). For the detection monitoring program, if the result does not exceed sitewide (interwell) background, an SSI is not declared.

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

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

Summary of Background Screening – Conducted in October 2017

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

No suspected outliers were observed in any of the data sets for Appendix III parameters. When any values are identified as outliers, they are plotted in a lighter font on the time series graph.

Seasonality

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

Trend Test Evaluation

While trends may be visual, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed a few statistically significant decreasing and increasing trends. All trends noted were relatively low in magnitude when compared to average concentrations; therefore, no adjustments were made to any of the data sets.

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

Summary of Background Update – Appendix III Parameters – May 2024

Outlier Analysis

Prior to updating background records, data were re-evaluated for Appendix III constituents at all wells using Tukey's outlier test and visual screening on all historical data through the October 2023 sample event. A few values were noted by Tukey's as potential outliers; however, these values were not drastically different than concentrations within the respective wells and were not flagged as outliers. Additionally, when Tukey's outlier test detects an outlier for the most recent sample, it often will not be flagged in the event that the reported concentration precedes a trend that is more representative of current concentrations. Although not identified by Tukey's test, the highest value for calcium in downgradient well MW-19 was flagged in order to construct a statistical limit that is conservative (i.e., lower) from a regulatory perspective. A full list of outliers and Tukey's test results are included with this update.

Mann-Whitney Test of Medians

The Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through October 2021 to the new compliance samples at each well through October 2023 to evaluate whether the groups are statistically different at the 99%

confidence level for each of the Appendix III parameters. Any records that used a truncated portion of the dataset from previous updates retained the curtailed portion of their record for the Mann-Whitney test. Note that the Mann-Whitney was not performed for boron at downgradient wells MW-16 and MW-17 as these records contain 100% non-detects. When no differences exist are identified by the Mann-Whitney test, background data sets may be updated to include newer data for construction of prediction limits. This results in statistical limits that are representative of present-day conditions. Statistically significant differences were found between the two groups for the following well/constituent pairs:

Increase:

- Calcium: MW-19
- Chloride: MW-16
- Fluoride: MW-19
- Sulfate: MW-18 (upgradient)

Decrease:

- Calcium: MW-18 (upgradient)

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data sets are not updated to include the newer data but will be reconsidered in the future. Although calcium at upgradient well MW-18 was identified with a statistically significant decreasing median, this record was updated since reported concentrations are similar to those reported historically.

Regarding well/constituent pairs with statistically significant increases in medians, the more recent concentrations for chloride at downgradient well MW-16 were similar to concentrations in background. For fluoride at downgradient well MW-19, although more recent concentrations were slightly higher than historic detected measurements, the compliance measurements remained below the most recent reporting limit of 0.1 mg/L. Compliance observations for sulfate at upgradient well MW-18 were above existing concentrations in background; however, all more recent data are relatively stable and are assumed to represent groundwater quality unrelated to the facility. Regarding calcium at downgradient well MW-19, while the more recent median was higher than the background median, the concentrations are similar to those reported historically in upgradient well MW-14. Therefore, this record, along with all other records, was updated through October 2023.

Statistical Analysis of Appendix III Parameters – March 2024

Intrawell Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample strategy, were established for each of the Appendix III parameters at each well using historical data through October 2023 for comparison of the March 2024 samples. Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at the same well. The March 2024 samples from each well were compared to the prediction limits to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary. Complete graphical results of the prediction limits may be found following this letter. An exceedance was identified for the following well/constituent pair:

- Calcium: MW-19

Two-Step Analysis

Following the two-step analysis procedure, an interwell prediction limit was then constructed using pooled upgradient well data to evaluate the apparent intrawell prediction limit exceedance among downgradient wells. The following exceedance was identified:

- Calcium: MW-19

Trend Test Evaluation

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level. Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and

downgradient wells is an indication of variability in groundwater that is unrelated to practices at the site. Statistically significant trends were identified for the following well/constituent pairs which is an indication of changing groundwater quality:

Increasing:

- Calcium: MW-19

Decreasing:

- Calcium: MW-14 and MW-18 (both upgradient)

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

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina L. Rayner
Senior Statistician

Sanitas™ v.10.0.16e Software licensed to . UG

100% Non-Detects

Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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

Welch's t-test/Mann-Whitney - Significant Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 1:22 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
Calcium (mg/L)	**MW-18 (bg)**	**-3.001**	**Yes**	**0.01**	**Yes**	**Mann-W**
Calcium (mg/L)	**MW-19**	**3.662**	**Yes**	**0.01**	**Yes**	**Mann-W**
Chloride (mg/L)	**MW-16**	**2.961**	**Yes**	**0.01**	**Yes**	**Mann-W**
Fluoride (mg/L)	**MW-19**	**3.032**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	**MW-18 (bg)**	**3.002**	**Yes**	**0.01**	**Yes**	**Mann-W**

Welch's t-test/Mann-Whitney - All Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 1:22 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
Boron (mg/L)	MW-11 (bg)	-1.324	No	0.01	No	Mann-W
Boron (mg/L)	MW-14 (bg)	0.3638	No	0.01	No	Mann-W
Boron (mg/L)	MW-15	-1.318	No	0.01	No	Mann-W
Boron (mg/L)	MW-18 (bg)	-0.1537	No	0.01	No	Mann-W
Boron (mg/L)	MW-19	-1.952	No	0.01	No	Mann-W
Calcium (mg/L)	MW-11 (bg)	-2.171	No	0.01	No	Mann-W
Calcium (mg/L)	MW-14 (bg)	-1.837	No	0.01	No	Mann-W
Calcium (mg/L)	MW-15	-1.665	No	0.01	No	Mann-W
Calcium (mg/L)	MW-16	2.513	No	0.01	No	Mann-W
Calcium (mg/L)	MW-17	-1.841	No	0.01	No	Mann-W
Calcium (mg/L)	**MW-18 (bg)**	**-3.001**	**Yes**	**0.01**	**Yes**	**Mann-W**
Calcium (mg/L)	**MW-19**	**3.662**	**Yes**	**0.01**	**Yes**	**Mann-W**
Chloride (mg/L)	MW-11 (bg)	-0.1765	No	0.01	No	Mann-W
Chloride (mg/L)	MW-14 (bg)	1.121	No	0.01	No	Mann-W
Chloride (mg/L)	MW-15	-1.076	No	0.01	No	Mann-W
Chloride (mg/L)	**MW-16**	**2.961**	**Yes**	**0.01**	**Yes**	**Mann-W**
Chloride (mg/L)	MW-17	-1.479	No	0.01	No	Mann-W
Chloride (mg/L)	MW-18 (bg)	-1.478	No	0.01	No	Mann-W
Chloride (mg/L)	MW-19	2.041	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-11 (bg)	-0.4621	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-14 (bg)	2.347	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-15	2.458	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-16	2.241	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-17	2.517	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-18 (bg)	0	No	0.01	No	Mann-W
Fluoride (mg/L)	**MW-19**	**3.032**	**Yes**	**0.01**	**Yes**	**Mann-W**
pH (SU)	MW-11 (bg)	-0.7685	No	0.01	No	Mann-W
pH (SU)	MW-14 (bg)	-1.926	No	0.01	No	Mann-W
pH (SU)	MW-15	0.1346	No	0.01	No	Mann-W
pH (SU)	MW-16	-1.974	No	0.01	No	Mann-W
pH (SU)	MW-17	-1.753	No	0.01	No	Mann-W
pH (SU)	MW-18 (bg)	1.327	No	0.01	No	Mann-W
pH (SU)	MW-19	1.79	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-11 (bg)	-1.134	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-14 (bg)	0	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-15	1.422	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-16	-0.7832	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-17	2.02	No	0.01	No	Mann-W
Sulfate (mg/L)	**MW-18 (bg)**	**3.002**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	MW-19	-0.3188	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-11 (bg)	1.121	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-14 (bg)	0.8076	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-15	1.069	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-16	0.9871	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-17	0.8528	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-18 (bg)	-0.315	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-19	2.355	No	0.01	No	Mann-W

Intrawell Prediction Limits - Significant Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 4:03 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	**MW-19**	**5.84**	**n/a**	**3/19/2024**	**6.05**	**Yes**	**21**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003999**	**NP Intra (normality) 1 of 2**

Intrawell Prediction Limits - All Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 4:03 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.103	n/a	3/18/2024	0.08ND	No	21	n/a	n/a	85.71	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.08	n/a	3/20/2024	0.08ND	No	21	n/a	n/a	95.24	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.08	n/a	3/19/2024	0.08ND	No	21	n/a	n/a	90.48	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.0927	n/a	3/20/2024	0.08ND	No	21	n/a	n/a	61.9	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-19	0.08	n/a	3/19/2024	0.08ND	No	22	n/a	n/a	95.45	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.14	n/a	3/18/2024	1.19	No	21	11.51	4.784	4.762	None	x^4	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	5.45	n/a	3/20/2024	1.7	No	21	1.778	0.2818	4.762	None	sqrt(x)	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.592	n/a	3/19/2024	1.16	No	21	1.133	0.2321	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.249	n/a	3/19/2024	0.87	No	22	0.8682	0.1942	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.253	n/a	3/19/2024	1.03	No	21	0.9997	0.1281	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-18	0.9961	n/a	3/20/2024	0.414J	No	21	0.6266	0.1871	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	**MW-19**	**5.84**	**n/a**	**3/19/2024**	**6.05**	**Yes**	**21**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003999**	**NP Intra (normality) 1 of 2**
Chloride (mg/L)	MW-11	15.86	n/a	3/18/2024	8.82	No	36	12.44	1.847	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.24	n/a	3/20/2024	7.44	No	21	9.109	1.586	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.16	n/a	3/19/2024	8.42	No	21	7.741	1.227	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	11.41	n/a	3/19/2024	7.92	No	23	8.088	1.705	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.088	n/a	3/19/2024	7.06	No	21	6.617	0.745	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.41	n/a	3/20/2024	5.44	No	21	7.771	1.844	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	6.91	n/a	3/19/2024	5.59	No	22	n/a	n/a	4.545	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	3/18/2024	0.0518J	No	21	n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.0511	n/a	3/20/2024	0.0454J	No	21	n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.0484	n/a	3/19/2024	0.0428J	No	21	n/a	n/a	76.19	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.0612	n/a	3/19/2024	0.038J	No	21	n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.0511	n/a	3/19/2024	0.044J	No	21	n/a	n/a	76.19	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	3/20/2024	0.0417J	No	21	n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.0849	n/a	3/19/2024	0.0458J	No	22	n/a	n/a	68.18	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.897	4.494	3/18/2024	4.72	No	22	4.696	0.1027	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.464	4.648	3/20/2024	4.88	No	21	1.715	0.0234	0	None	x^(1/3)	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	4.981	4.434	3/19/2024	4.73	No	21	4.708	0.1383	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.781	4.402	3/19/2024	4.55	No	21	4.591	0.09588	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.42	4.79	3/19/2024	4.87	No	21	n/a	n/a	0	n/a	n/a	0.007998	NP Intra (normality) 1 of 2
pH (SU)	MW-18	4.83	4.47	3/20/2024	4.71	No	20	4.65	0.09032	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	6.06	4.81	3/19/2024	5.61	No	23	n/a	n/a	0	n/a	n/a	0.006831	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-11	11.5	n/a	3/18/2024	2.81	No	36	n/a	n/a	13.89	n/a	n/a	0.001429	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-14	2.435	n/a	3/20/2024	1.61	No	21	2.621	1.674	28.57	Kaplan-Meier	x^2	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-15	3.38	n/a	3/19/2024	1.35	No	21	n/a	n/a	47.62	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	3/19/2024	2.87	No	21	n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-17	3.848	n/a	3/19/2024	3.53	No	21	2.469	0.698	9.524	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	7.288	n/a	3/20/2024	6.1	No	21	2.055	0.3266	4.762	None	sqrt(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	3/19/2024	3.31	No	22	n/a	n/a	31.82	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	76.45	n/a	3/18/2024	33	No	21	44.86	15.99	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	67.05	n/a	3/20/2024	39	No	21	37.62	14.9	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	55.48	n/a	3/19/2024	17	No	22	29.09	13.45	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	59.04	n/a	3/19/2024	24	No	21	26.74	16.35	14.29	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	48.32	n/a	3/19/2024	20	No	21	27.22	10.68	4.762	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	44.58	n/a	3/20/2024	25	No	21	26.67	9.068	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	52.09	n/a	3/19/2024	31	No	22	25.89	13.35	4.545	None	No	0.00188	Param Intra 1 of 2

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

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	**MW-19**	**4.388**	**n/a**	**3/19/2024**	**6.05**	**Yes**	**66**	**1.297**	**0.4494**	**3.03**	**None**	**sqrt(x)**	**0.00188**	**Param Inter 1 of 2**

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 3:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	**MW-14 (bg)**	**-0.3148**	**-170**	**-92**	**Yes**	**22**	**4.545**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.06414**	**-154**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.1374**	**111**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 3:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	MW-11 (bg)	-0.02361	-46	-92	No	22	4.545	n/a	0.01	NP
Calcium (mg/L)	**MW-14 (bg)**	**-0.3148**	**-170**	**-92**	**Yes**	**22**	**4.545**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.06414**	**-154**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.1374**	**111**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 3:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	**MW-14 (bg)**	**-0.3148**	**-170**	**-92**	**Yes**	**22**	**4.545**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.06414**	**-154**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.1374**	**111**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 3:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	MW-11 (bg)	-0.02361	-46	-92	No	22	4.545	n/a	0.01	NP
Calcium (mg/L)	**MW-14 (bg)**	**-0.3148**	**-170**	**-92**	**Yes**	**22**	**4.545**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.06414**	**-154**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.1374**	**111**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**

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Time Series

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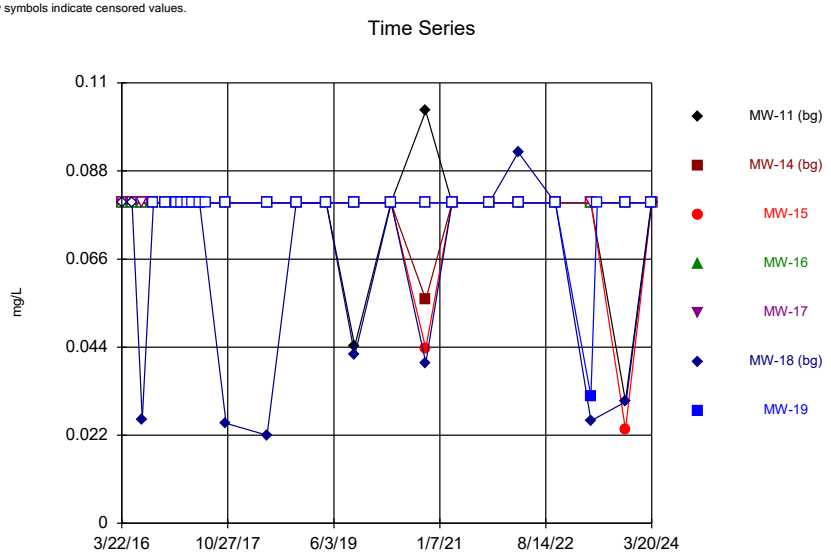
Hollow symbols indicate censored values.



Constituent: Boron Analysis Run 5/22/2024 1:11 PM
Plant Daniel Data: NAMU CCR

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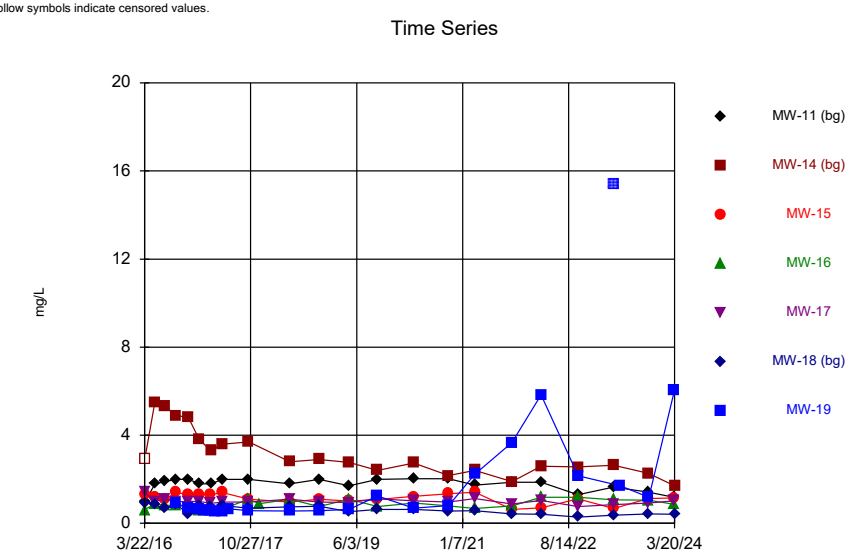
Hollow symbols indicate censored values.



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Plant Daniel Data: NAMU CCR

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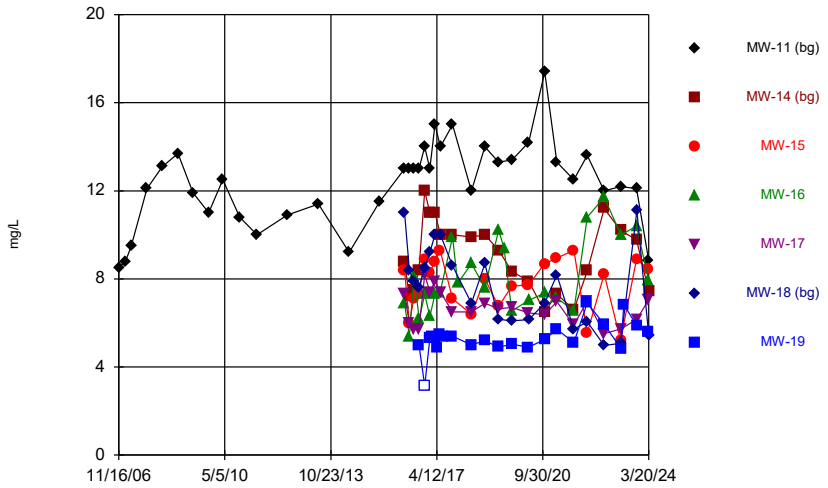
Hollow symbols indicate censored values.



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Plant Daniel Data: NAMU CCR

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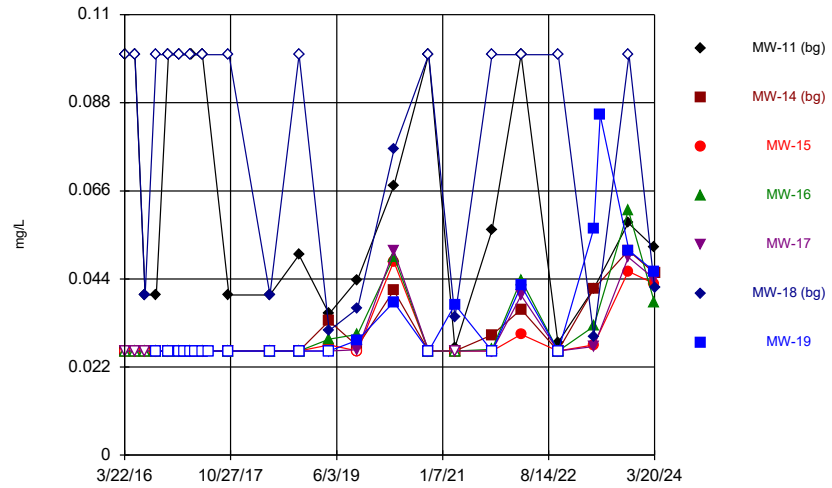
Hollow symbols indicate censored values.



Constituent: Fluoride Analysis Run 5/22/2024 1:11 PM
Plant Daniel Data: NAMU CCR

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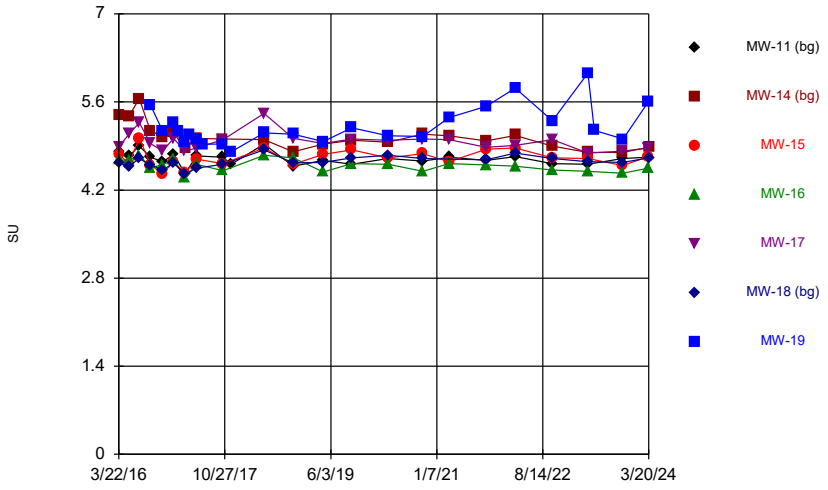
Time Series



Constituent: pH Analysis Run 5/22/2024 1:11 PM

Plant Daniel Data: NAMU CCR

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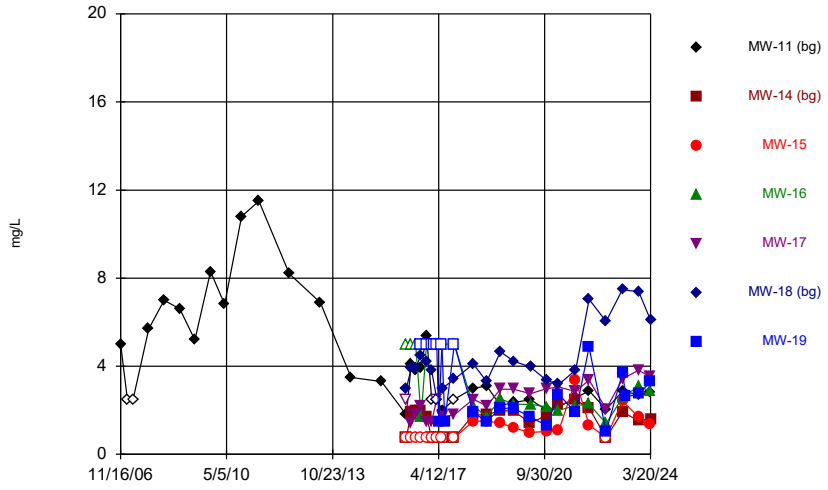
Hollow symbols indicate censored values.

Time Series



Constituent: Sulfate Analysis Run 5/22/2024 1:11 PM

Plant Daniel Data: NAMU CCR

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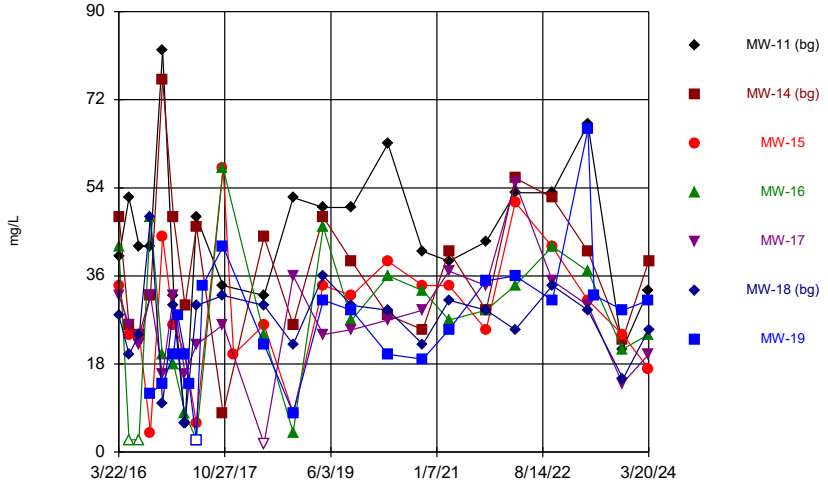
Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:11 PM

Plant Daniel Data: NAMU CCR

Time Series

Constituent: Boron (mg/L) Analysis Run 5/22/2024 1:13 PM

Plant Daniel 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)	
3/16/2021	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
10/5/2021	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
3/15/2022	<0.08	<0.08	<0.08	<0.08			<0.08
3/16/2022					<0.08	0.0927	
10/4/2022	<0.08	<0.08	<0.08				
10/5/2022				<0.08	<0.08	<0.08	<0.08
4/19/2023	<0.08	<0.08	<0.08			0.0256 (J)	
4/20/2023				<0.08	<0.08		0.0318 (J)
5/24/2023							<0.08
10/27/2023	0.0305 (J)	<0.08	0.0234 (J)	<0.08	<0.08		
10/30/2023						0.0304 (J)	<0.08
3/18/2024	<0.08						
3/19/2024			<0.08	<0.08	<0.08		<0.08
3/20/2024		<0.08				<0.08	

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

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			1.3 (B1)	0.61 (B1)	1.4 (B1)	0.93 (B1)	
3/23/2016	<1.9 (*)	<5.9 (*)					
5/18/2016	1.8	5.5	1.2	0.89	1	0.85	
7/11/2016				0.82			
7/12/2016	1.9	5.3	1.1		1.1	0.69	
9/12/2016	2	4.9	1.4		0.98	0.86	0.92
9/13/2016				0.82			
11/17/2016				0.75			
11/18/2016	2				1	0.41	0.68
11/19/2016		4.8	1.3				
1/18/2017		3.8		0.58	1	0.81	0.64
1/19/2017	1.8		1.3				
2/10/2017							0.58
3/21/2017			1.3	0.6	0.91	0.76	0.56
3/22/2017	1.8	3.3					
4/14/2017							0.51
5/23/2017			1.4	0.65			0.54
5/24/2017	2	3.6			0.96	0.8	
6/26/2017							0.66
10/17/2017	2	3.7	1.1	1.1	0.96	0.69	0.58
12/15/2017				0.89 (RS)			
5/31/2018	1.8			1.1	1.1	0.75	0.56
6/1/2018		2.8	0.97				
11/7/2018	2	2.9	1.1				
11/8/2018				0.76	0.96	0.78	0.57
4/22/2019	1.71			1.09	0.946	0.531	0.634
4/23/2019		2.76	1.01				
9/26/2019		2.4	1.08	0.758	1.11	0.631	1.24
9/27/2019	1.99						
4/13/2020	2.03	2.74	1.22		1.03		0.687
4/14/2020				0.92		0.627	
10/21/2020				0.798			0.806
10/22/2020	2.02	2.17	1.35		0.969	0.553	
3/16/2021	1.74	2.4	1.41	0.681	1.12	0.57	2.23
10/5/2021	1.87	1.89	0.632	0.793	0.883	0.43 (J)	3.67
3/15/2022	1.87	2.59	0.703	1.18			5.84
3/16/2022					1.04	0.406 (J)	
10/4/2022	1.3	2.56	1.11				
10/5/2022				1.19	0.755	0.285 (J)	2.16
4/19/2023	1.65	2.63	0.682			0.368 (J)	
4/20/2023				1.07	0.855		15.4 (o)
5/24/2023							1.7
10/27/2023	1.42	2.28	1.13	1.05	0.916		
10/30/2023						0.427 (J)	1.19
3/18/2024	1.19						
3/19/2024			1.16	0.87	1.03		6.05
3/20/2024		1.7				0.414 (J)	

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

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

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

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

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/16/2022					7	6.05	
10/4/2022	12	11.2	8.22				
10/5/2022				11.7	5.51	4.97	5.94
4/19/2023	12.2	10.2	5.21			5.08	
4/20/2023				10	5.73		4.84
5/24/2023							6.84
10/27/2023	12.1	9.77	8.9	10.4	6.16		
10/30/2023						11.1	5.88
3/18/2024	8.82						
3/19/2024			8.42	7.92	7.06		5.59
3/20/2024		7.44				5.44	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			<0.026 (B1)	<0.026 (B1)	<0.026 (B1)	<0.1 (B1)	
3/23/2016	<0.1	<0.026 (B1)					
5/18/2016	<0.1	<0.026	<0.026	<0.026	<0.026	<0.1	
7/11/2016				<0.026			
7/12/2016	0.04 (J)	<0.026	<0.026		<0.026	0.04 (J)	
9/12/2016	0.04 (J)	<0.026	<0.026		<0.026	<0.1	<0.026
9/13/2016				<0.026			
11/17/2016				<0.026			
11/18/2016	<0.1				<0.026	<0.1	<0.026
11/19/2016		<0.026	<0.026				
1/18/2017		<0.026		<0.026	<0.026	<0.1	<0.026
1/19/2017	<0.1		<0.026				
2/10/2017							<0.026
3/21/2017			<0.026	<0.026	<0.026	<0.1	<0.026
3/22/2017	<0.1	<0.026					
4/14/2017							<0.026
5/23/2017			<0.026	<0.026			<0.026
5/24/2017	<0.1	<0.026			<0.026	<0.1	
6/26/2017							<0.026
10/17/2017	0.04 (J)	<0.026	<0.026	<0.026	<0.026	<0.1	<0.026
5/31/2018	0.04 (J)			<0.026	<0.026	0.04 (J)	<0.026
6/1/2018		<0.026	<0.026				
11/7/2018	0.05 (J)	<0.026	<0.026				
11/8/2018				<0.026	<0.026	<0.1	<0.026
4/22/2019	0.0353 (J)			0.029 (J)	<0.026	0.0311 (J)	<0.026
4/23/2019		0.0335 (J)	0.0275 (J)				
9/26/2019		0.0272 (J)	<0.026	0.0302 (J)	0.0263 (J)	0.0366 (J)	0.0287 (J)
9/27/2019	0.0438 (J)						
4/13/2020	0.0672 (J)	0.0411 (J)	0.0484 (J)		0.0511 (J)		0.0382 (J)
4/14/2020				0.0496 (J)		0.0764 (J)	
10/21/2020				<0.026			<0.026
10/22/2020	<0.1	<0.026	<0.026		<0.026	<0.1	
3/16/2021	0.0269 (J)	<0.026	<0.026	<0.026	<0.026	0.0344 (J)	0.0376 (J)
10/5/2021	0.0561 (J)	0.03 (J)	<0.026	0.0264 (J)	<0.026	<0.1	<0.026
3/15/2022	<0.1	0.0364 (J)	0.0302 (J)	0.0438 (J)			0.0423 (J)
3/16/2022					0.0399 (J)	<0.1	
10/4/2022	0.0281 (J)	<0.026	<0.026				
10/5/2022				<0.026	<0.026	<0.1	<0.026
4/19/2023	0.0416 (J)	0.0415 (J)	0.0275 (J)			0.0297 (J)	
4/20/2023				0.0322 (J)	0.0271 (J)		0.0566 (J)
5/24/2023							0.0849 (J)
10/27/2023	0.058 (J)	0.0511 (J)	0.0459 (J)	0.0612 (J)	0.0494 (J)		
10/30/2023						<0.1	0.0511 (J)
3/18/2024	0.0518 (J)						
3/19/2024			0.0428 (J)	0.038 (J)	0.044 (J)		0.0458 (J)
3/20/2024		0.0454 (J)				0.0417 (J)	

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

Time Series

Constituent: pH (SU) Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			4.77	4.68	4.89	4.63	
3/23/2016	4.8	5.4					
5/18/2016	4.74	5.38	4.62	4.67	5.09	4.58	
7/11/2016				4.75			
7/12/2016	4.9	5.65	5.03		5.27	4.7	
9/12/2016	4.72	5.14	4.6		4.94	4.6	5.55
9/13/2016				4.56			
11/17/2016				4.6			
11/18/2016	4.65				4.82	4.52	5.14
11/19/2016		5.05	4.46				
1/18/2017		5.11		4.68	5.02	4.63	5.27
1/19/2017	4.77		4.65				
2/10/2017							5.14
3/21/2017			4.47	4.39	4.82	4.45	4.96
3/22/2017	4.46	4.86					
4/14/2017							5.07
5/23/2017			4.69	4.61			5.01
5/24/2017	4.74	5.02			4.87	4.55	
6/26/2017							4.93
10/17/2017	4.72	5.01	4.62	4.51	5	4.61	4.93
11/30/2017	4.61						4.81
5/31/2018	4.93			4.75	5.42	4.84	5.11
6/1/2018		5	4.87				
11/7/2018	4.58	4.81	4.61				
11/8/2018				4.71	5.02	4.63	5.09
4/22/2019	4.67			4.49	4.94	4.64	4.97
4/23/2019		4.93	4.77				
9/26/2019		4.99	4.84	4.62	5.01	4.71	5.19
9/27/2019	4.61						
4/13/2020	4.7	4.96	4.71		4.99		5.06
4/14/2020				4.61		4.75	
10/21/2020				4.5			5.05
10/22/2020	4.66	5.09	4.78		5.01	4.7	
3/16/2021	4.72	5.06	4.65	4.62	5		5.35
10/5/2021	4.67	4.98	4.85	4.6	4.88	4.68	5.53
3/15/2022	4.73	5.07	4.87	4.58			5.82
3/16/2022					4.91	4.79	
10/4/2022	4.62	4.9	4.71				
10/5/2022				4.52	5	4.7	5.3
4/19/2023	4.61	4.8	4.7			4.65	
4/20/2023				4.5	4.79		6.06
5/24/2023							5.15
10/27/2023	4.7	4.8	4.59	4.47	4.82		
10/30/2023						4.64	5.01
3/18/2024	4.72						
3/19/2024			4.73	4.55	4.87		5.61
3/20/2024		4.88				4.71	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

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

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

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
10/5/2022				1.4	2.05	6.04	1.02
4/19/2023	2.85	1.93	2.42			7.48	
4/20/2023				2.59	3.44		3.73
5/24/2023							2.62
10/27/2023	2.72	1.53	1.7	3.08	3.82		
10/30/2023						7.39	2.73
3/18/2024	2.81						
3/19/2024			1.35	2.87	3.53		3.31
3/20/2024		1.61				6.1	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			34 (B1)	42 (B1)	32 (B1)	28 (B1)	
3/23/2016	40	48 (B1)					
5/18/2016	52	26	24	<5	26	20	
7/11/2016				<5			
7/12/2016	42	24	24		22	24	
9/12/2016	42	32	4 (J)		32	48	12
9/13/2016				48			
11/17/2016				20			
11/18/2016	82				16	10	14
11/19/2016		76	44				
1/18/2017		48		18	32	30	20
1/19/2017	32		26				
2/10/2017							28
3/21/2017			20	8	16	6	20
3/22/2017	6	30					
4/14/2017							14
5/23/2017			6	<5			<5
5/24/2017	48	46			22	30	
6/26/2017							34
10/17/2017	34	8	58	58	26	32	42
12/15/2017			20 (RS)				
5/31/2018	32			24	<3.4	30	22
6/1/2018		44	26				
11/7/2018	52	26	8				
11/8/2018				4 (J)	36	22	8
4/22/2019	50			46	24	36	31
4/23/2019		48	34				
9/26/2019		39	32	27	25	30	29
9/27/2019	50						
4/13/2020	63	28	39		27		20
4/14/2020				36		29	
10/21/2020				33			19
10/22/2020	41	25	34		29	22	
3/16/2021	39	41	34	27	37	31	25
10/5/2021	43	29	25	29	34	29	35
3/15/2022	53	56	51	34			36
3/16/2022					55	25	
10/4/2022	53	52	42				
10/5/2022				42	35	34	31
4/19/2023	67	41	31			29	
4/20/2023				37	30		66
5/24/2023							32
10/27/2023	21	23	24	21	14		
10/30/2023						15	29
3/18/2024	33						
3/19/2024			17	24	20		31
3/20/2024		39				25	

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

Box Plots

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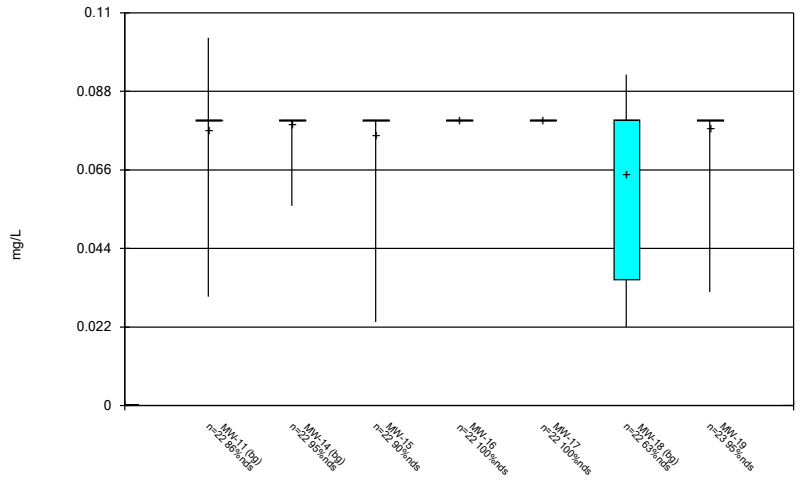
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

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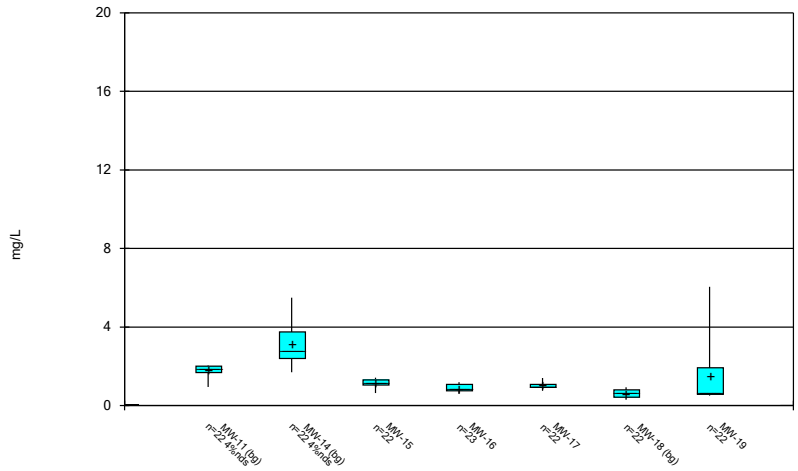
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

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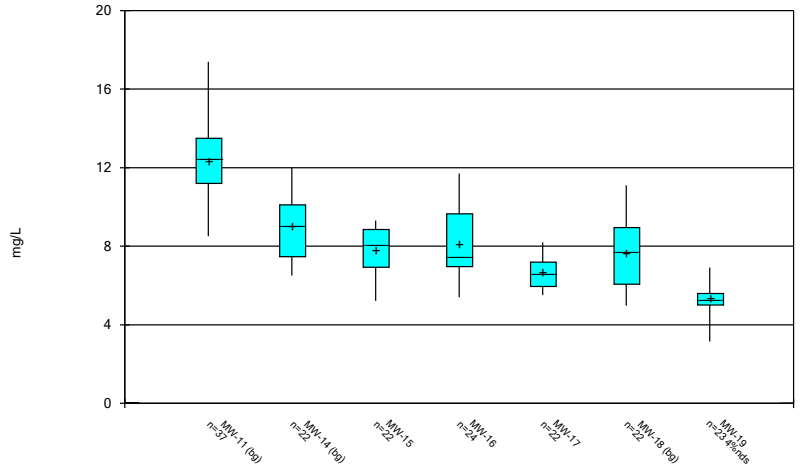
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

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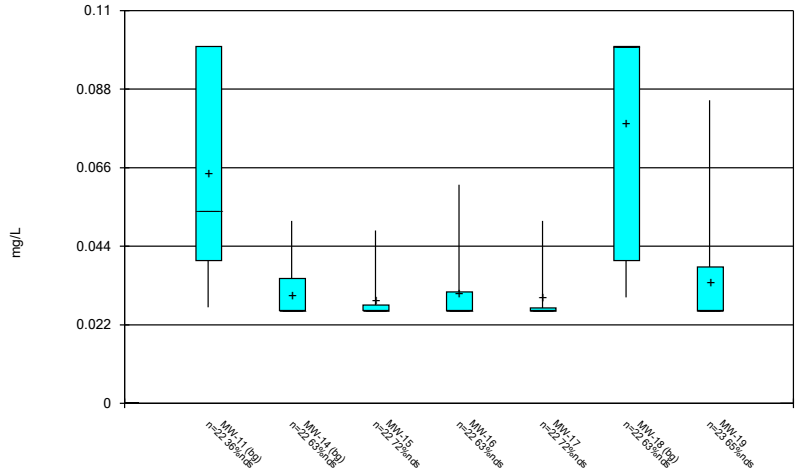
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

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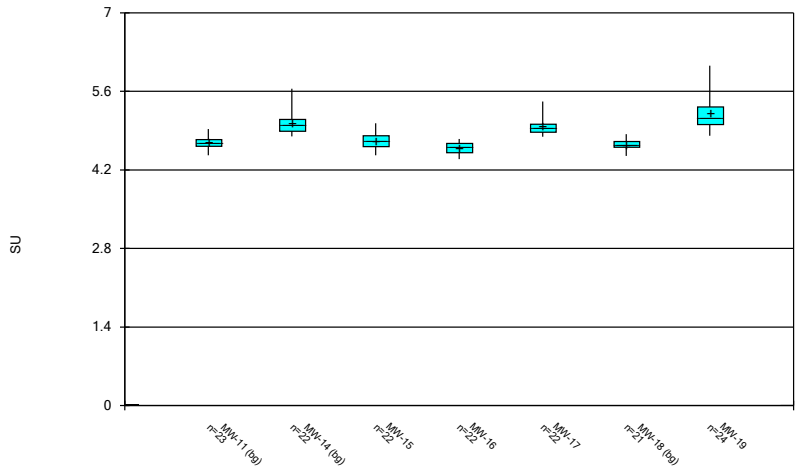
Box & Whiskers Plot



Constituent: pH Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

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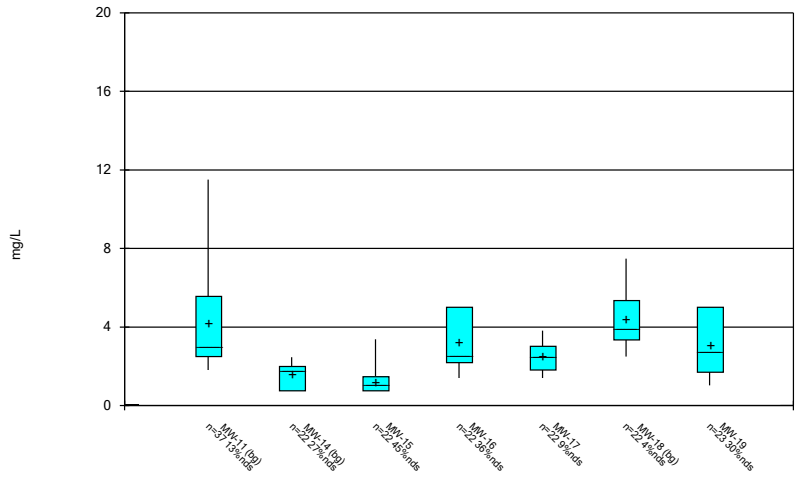
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

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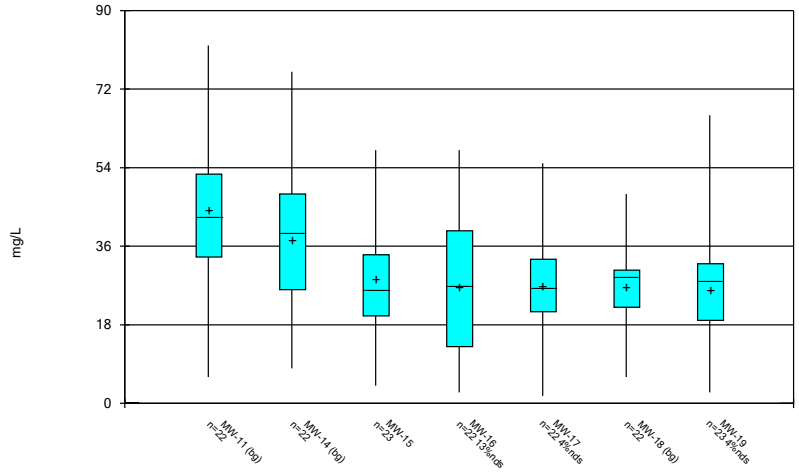
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:13 PM

Plant Daniel Data: NAMU CCR

Tukey's Outlier Test & Outlier Summary

Outlier Summary

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 1:14 PM

	MW-19 Calcium (mg/L)
4/20/2023	15.4 (o)

Tukey's Outlier Test - Significant Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 1:05 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Fluoride (mg/L)	**MW-15**	**Yes**	**0.0484,0.0302,0.0459**	**4/13/2020,3/15/2022,10/27/2023**	**NP**	**NaN**	**21**	**0.02836**	**0.006337**	**ln(x)**	**ShapiroWilk**
Fluoride (mg/L)	**MW-16**	**Yes**	**0.0496,0.0438,0.0612**	**4/14/2020,3/15/2022,10/27/2023**	**NP**	**NaN**	**21**	**0.0303**	**0.009458**	**ln(x)**	**ShapiroWilk**
Fluoride (mg/L)	**MW-17**	**Yes**	**0.0511,0.0399,0.0271,0.0494**	**4/13/2020,3/16/2022,4/20/2023,10/27/2023**	**NP**	**NaN**	**21**	**0.02904**	**0.007675**	**ln(x)**	**ShapiroWilk**

Tukey's Outlier Test - All Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 1:05 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Boron (mg/L)	MW-11 (bg)	n/a	n/a	n/a	NP	NaN	21	0.09418	0.01901	unknown	ShapiroWilk
Boron (mg/L)	MW-14 (bg)	n/a	n/a	n/a	NP	NaN	21	0.07885	0.005259	unknown	ShapiroWilk
Boron (mg/L)	MW-15	n/a	n/a	n/a	NP	NaN	21	0.09367	0.02024	unknown	ShapiroWilk
Boron (mg/L)	MW-16	No	n/a	n/a	NP	NaN	21	0.08	0	normal	ShapiroWilk
Boron (mg/L)	MW-17	No	n/a	n/a	NP	NaN	21	0.08	0	normal	ShapiroWilk
Boron (mg/L)	MW-18 (bg)	No	n/a	n/a	NP	NaN	21	0.05167	0.01763	normal	ShapiroWilk
Boron (mg/L)	MW-19	n/a	n/a	n/a	NP	NaN	22	0.07781	0.01028	unknown	ShapiroWilk
Calcium (mg/L)	MW-11 (bg)	No	n/a	n/a	NP	NaN	21	1.793	0.2745	x^6	ShapiroWilk
Calcium (mg/L)	MW-14 (bg)	No	n/a	n/a	NP	NaN	21	3.237	1.064	ln(x)	ShapiroWilk
Calcium (mg/L)	MW-15	No	n/a	n/a	NP	NaN	21	1.133	0.2321	x^3	ShapiroWilk
Calcium (mg/L)	MW-16	No	n/a	n/a	NP	NaN	22	0.8682	0.1942	ln(x)	ShapiroWilk
Calcium (mg/L)	MW-17	No	n/a	n/a	NP	NaN	21	0.9997	0.1281	ln(x)	ShapiroWilk
Calcium (mg/L)	MW-18 (bg)	No	n/a	n/a	NP	NaN	21	0.6266	0.1871	normal	ShapiroWilk
Calcium (mg/L)	MW-19	No	n/a	n/a	NP	NaN	22	1.925	3.27	ln(x)	ShapiroWilk
Chloride (mg/L)	MW-11 (bg)	No	n/a	n/a	NP	NaN	36	12.44	1.847	normal	ShapiroWilk
Chloride (mg/L)	MW-14 (bg)	No	n/a	n/a	NP	NaN	21	9.109	1.586	normal	ShapiroWilk
Chloride (mg/L)	MW-15	No	n/a	n/a	NP	NaN	21	7.741	1.227	x^3	ShapiroWilk
Chloride (mg/L)	MW-16	No	n/a	n/a	NP	NaN	23	8.088	1.705	ln(x)	ShapiroWilk
Chloride (mg/L)	MW-17	No	n/a	n/a	NP	NaN	21	6.617	0.745	ln(x)	ShapiroWilk
Chloride (mg/L)	MW-18 (bg)	No	n/a	n/a	NP	NaN	21	7.771	1.844	x^(1/3)	ShapiroWilk
Chloride (mg/L)	MW-19	No	n/a	n/a	NP	NaN	22	5.312	0.7421	x^2	ShapiroWilk
Fluoride (mg/L)	MW-11 (bg)	No	n/a	n/a	NP	NaN	21	0.0651	0.02945	ln(x)	ShapiroWilk
Fluoride (mg/L)	MW-14 (bg)	No	n/a	n/a	NP	NaN	21	0.02975	0.007016	ln(x)	ShapiroWilk
Fluoride (mg/L)	**MW-15**	**Yes**	**0.0484,0.0302,0.0459**	**4/13/2020,3/15/2022,10/27/2023**	**NP**	**NaN**	**21**	**0.02836**	**0.006337**	**ln(x)**	**ShapiroWilk**
Fluoride (mg/L)	**MW-16**	**Yes**	**0.0496,0.0438,0.0612**	**4/14/2020,3/15/2022,10/27/2023**	**NP**	**NaN**	**21**	**0.0303**	**0.009458**	**ln(x)**	**ShapiroWilk**
Fluoride (mg/L)	**MW-17**	**Yes**	**0.0511,0.0399,0.0271,0.0494**	**4/13/2020,3/16/2022,4/20/2023,10/27/2023**	**NP**	**NaN**	**21**	**0.02904**	**0.007675**	**ln(x)**	**ShapiroWilk**
Fluoride (mg/L)	MW-18 (bg)	No	n/a	n/a	NP	NaN	21	0.08039	0.02974	ln(x)	ShapiroWilk
Fluoride (mg/L)	MW-19	No	n/a	n/a	NP	NaN	22	0.03315	0.01458	ln(x)	ShapiroWilk
pH (SU)	MW-11 (bg)	No	n/a	n/a	NP	NaN	22	4.696	0.1027	ln(x)	ShapiroWilk
pH (SU)	MW-14 (bg)	No	n/a	n/a	NP	NaN	21	5.048	0.21	ln(x)	ShapiroWilk
pH (SU)	MW-15	No	n/a	n/a	NP	NaN	21	4.708	0.1383	ln(x)	ShapiroWilk
pH (SU)	MW-16	No	n/a	n/a	NP	NaN	21	4.591	0.09588	x^2	ShapiroWilk
pH (SU)	MW-17	No	n/a	n/a	NP	NaN	21	4.977	0.1495	ln(x)	ShapiroWilk
pH (SU)	MW-18 (bg)	No	n/a	n/a	NP	NaN	20	4.65	0.09032	x^2	ShapiroWilk
pH (SU)	MW-19	No	n/a	n/a	NP	NaN	23	5.196	0.2986	ln(x)	ShapiroWilk
Sulfate (mg/L)	MW-11 (bg)	No	n/a	n/a	NP	NaN	36	4.241	2.531	ln(x)	ShapiroWilk
Sulfate (mg/L)	MW-14 (bg)	No	n/a	n/a	NP	NaN	21	1.577	0.5741	x^3	ShapiroWilk
Sulfate (mg/L)	MW-15	No	n/a	n/a	NP	NaN	21	1.196	0.6632	ln(x)	ShapiroWilk
Sulfate (mg/L)	MW-16	No	n/a	n/a	NP	NaN	21	3.257	1.44	ln(x)	ShapiroWilk
Sulfate (mg/L)	MW-17	No	n/a	n/a	NP	NaN	21	2.469	0.698	normal	ShapiroWilk
Sulfate (mg/L)	MW-18 (bg)	No	n/a	n/a	NP	NaN	21	4.323	1.447	ln(x)	ShapiroWilk
Sulfate (mg/L)	MW-19	No	n/a	n/a	NP	NaN	22	3.099	1.564	ln(x)	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-11 (bg)	No	n/a	n/a	NP	NaN	21	44.86	15.99	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-14 (bg)	No	n/a	n/a	NP	NaN	21	37.62	14.9	sqrt(x)	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-15	No	n/a	n/a	NP	NaN	22	29.09	13.45	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-16	No	n/a	n/a	NP	NaN	21	26.74	16.35	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-17	No	n/a	n/a	NP	NaN	21	27.22	10.68	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-18 (bg)	No	n/a	n/a	NP	NaN	21	26.67	9.068	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-19	No	n/a	n/a	NP	NaN	22	25.89	13.35	sqrt(x)	ShapiroWilk

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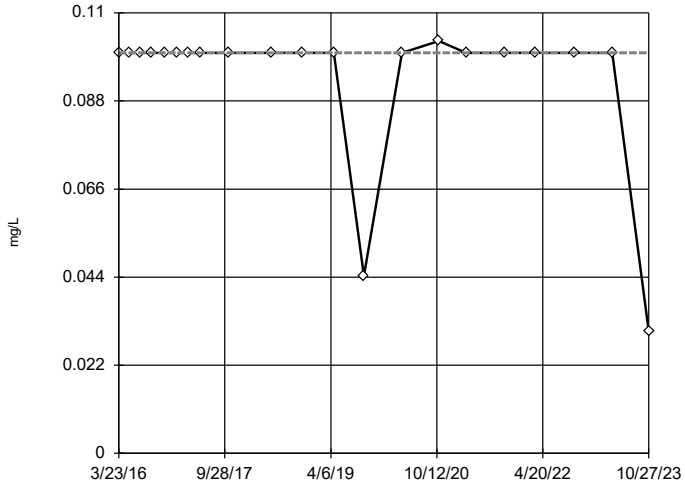
Tukey's Outlier Screening

MW-11 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Boron Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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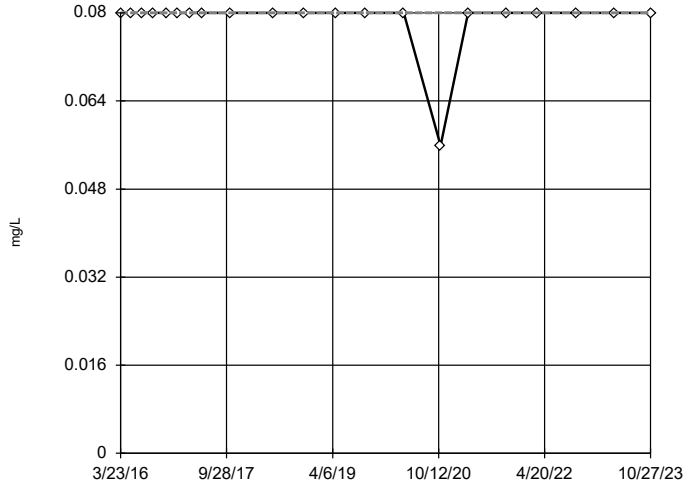
Tukey's Outlier Screening

MW-14 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Boron Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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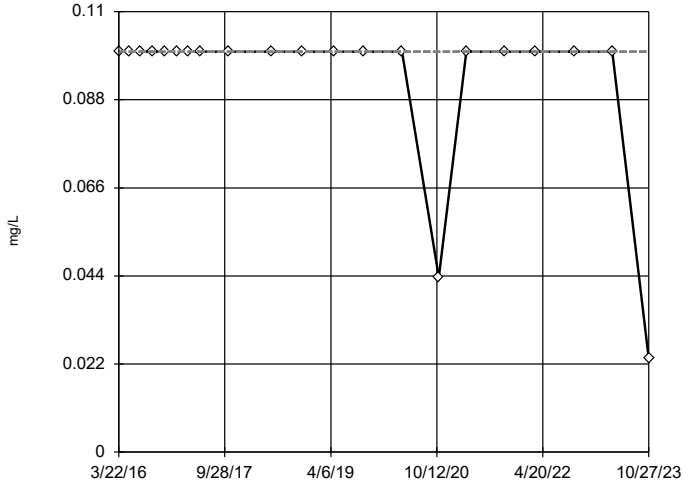
Tukey's Outlier Screening

MW-15



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Boron Analysis Run 5/22/2024 1:02 PM View: Outliers

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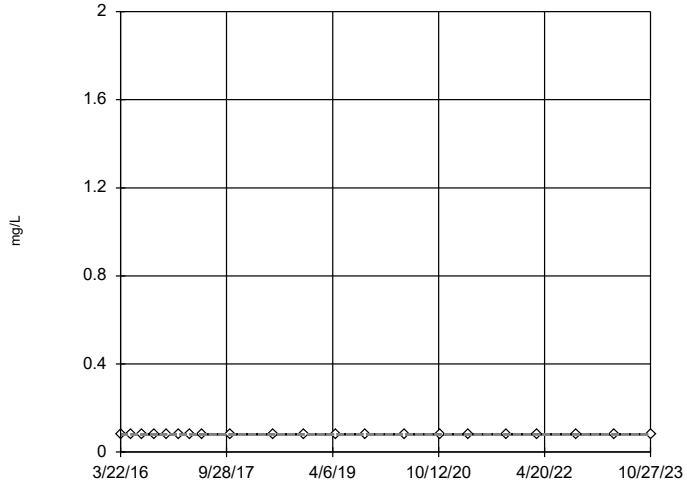
Tukey's Outlier Screening

MW-16



n = 21

No outliers found. Tukey's method selected by user.

All values are the same.

Constituent: Boron Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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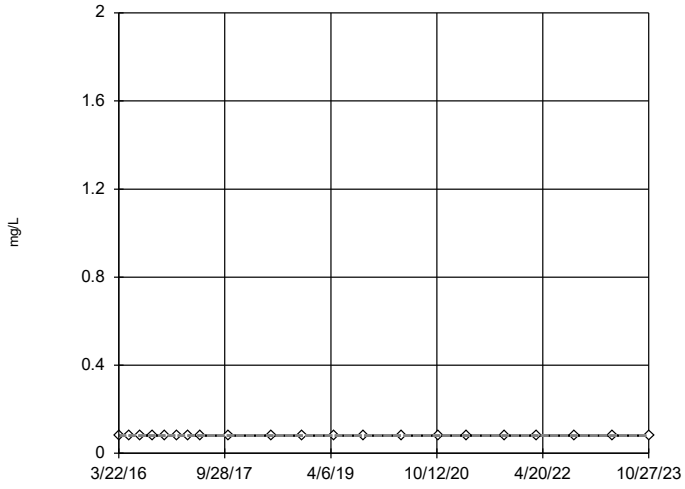
Tukey's Outlier Screening

MW-17



n = 21

No outliers found. Tukey's method selected by user.

All values are the same.

Constituent: Boron Analysis Run 5/22/2024 1:02 PM View: Outliers

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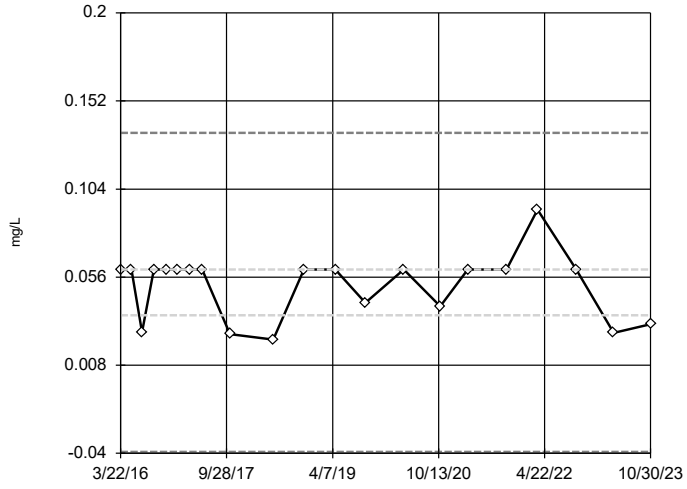
Tukey's Outlier Screening

MW-18 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.1347, low cutoff = -0.0393, based on IQR multiplier of 3.

Constituent: Boron Analysis Run 5/22/2024 1:02 PM View: Outliers

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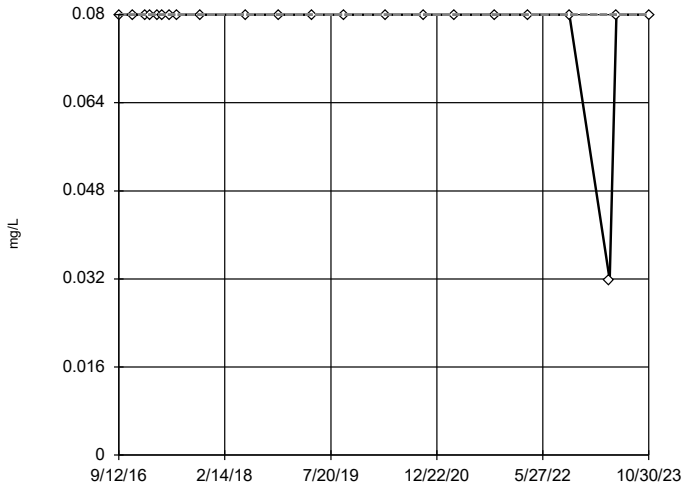
Tukey's Outlier Screening

MW-19



n = 22

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Boron Analysis Run 5/22/2024 1:02 PM View: Outliers

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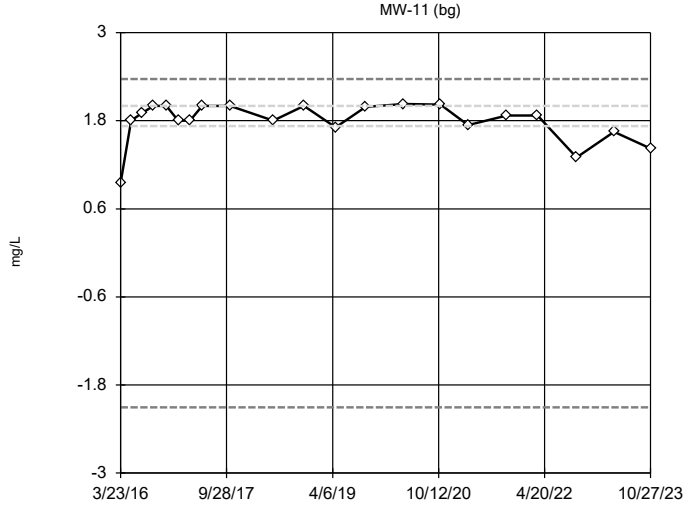
Tukey's Outlier Screening

MW-11 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 2.369, low cutoff = -2.103, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 5/22/2024 1:02 PM View: Outliers

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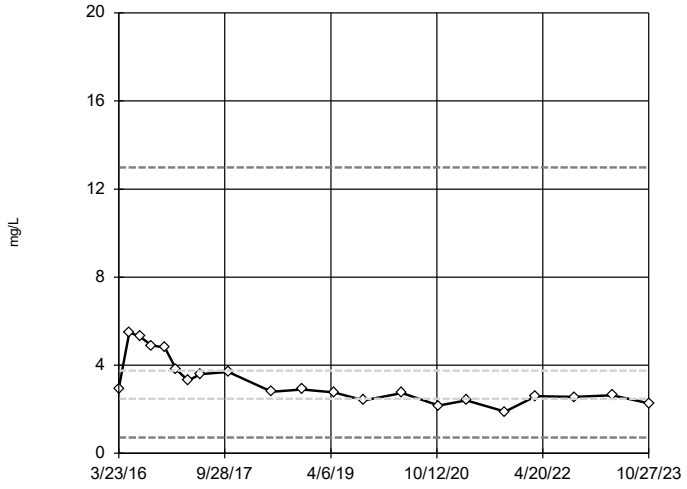
Tukey's Outlier Screening

MW-14 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 12.98, low cutoff = 0.716, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 5/22/2024 1:02 PM View: Outliers

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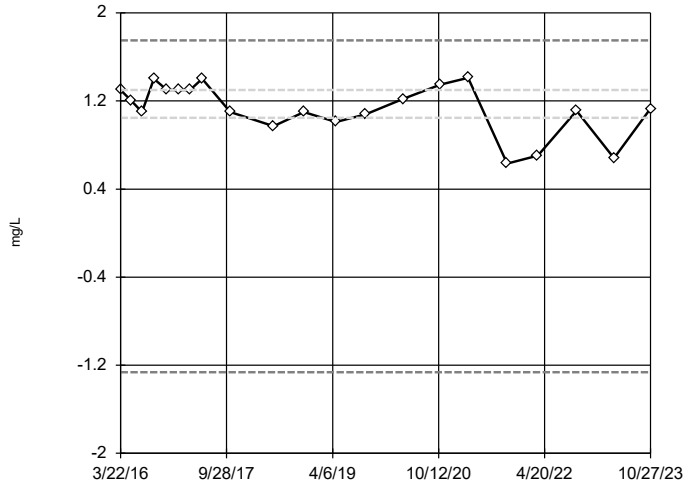
Tukey's Outlier Screening

MW-15



n = 21

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1.749, low cutoff = -1.262, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 5/22/2024 1:02 PM View: Outliers

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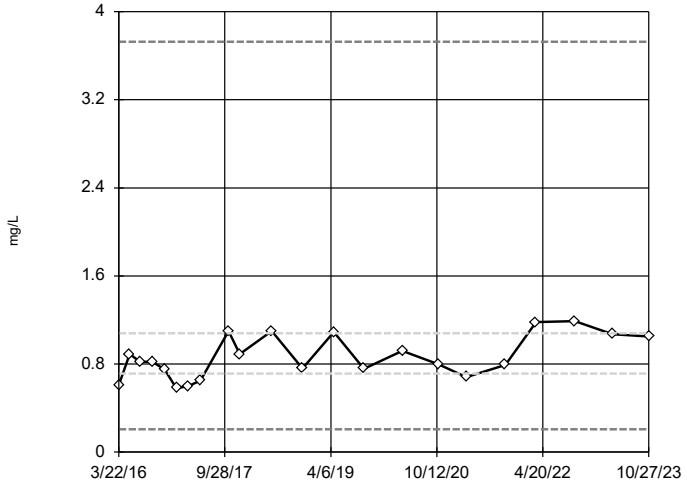
Tukey's Outlier Screening

MW-16



n = 22

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.727, low cutoff = 0.2071, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 5/22/2024 1:02 PM View: Outliers

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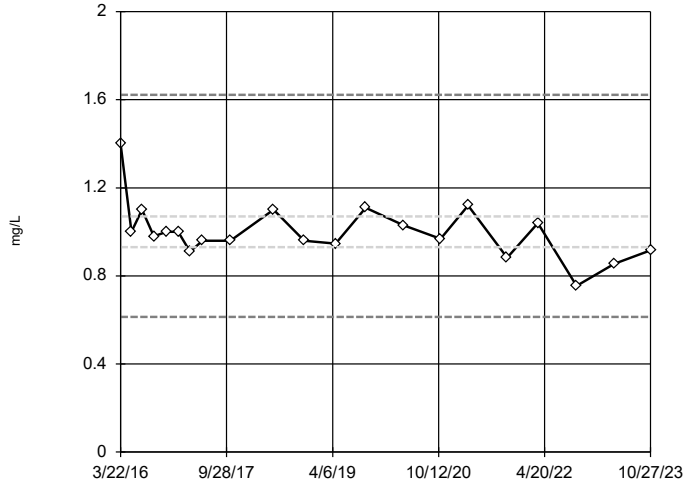
Tukey's Outlier Screening

MW-17



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1.622, low cutoff = 0.6137, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 5/22/2024 1:02 PM View: Outliers

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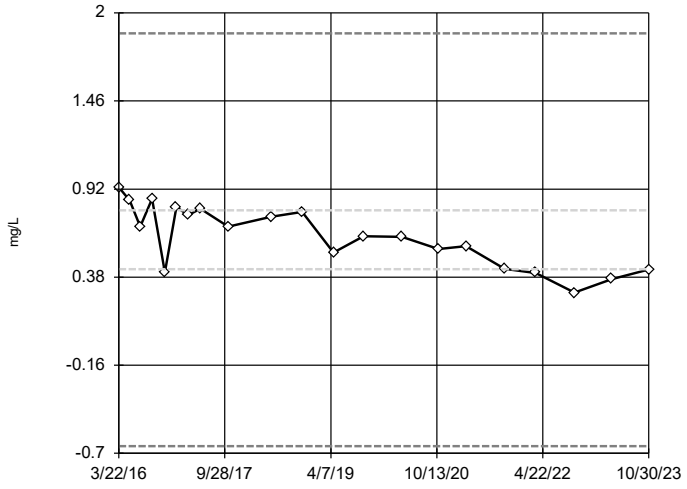
Tukey's Outlier Screening

MW-18 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 1.875, low cutoff = -0.656, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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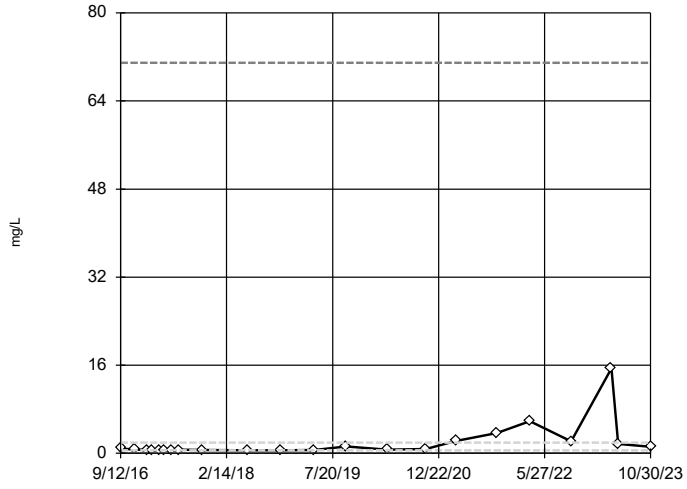
Tukey's Outlier Screening

MW-19



n = 22

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 70.93, low cutoff = 0.01553, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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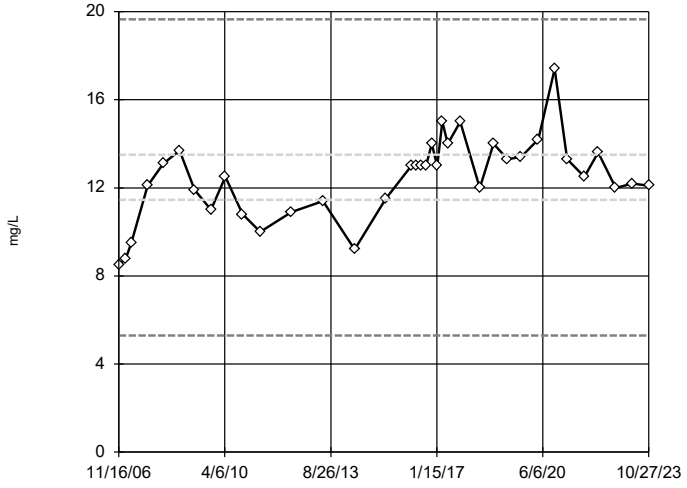
Tukey's Outlier Screening

MW-11 (bg)



n = 36

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 19.65, low cutoff = 5.3, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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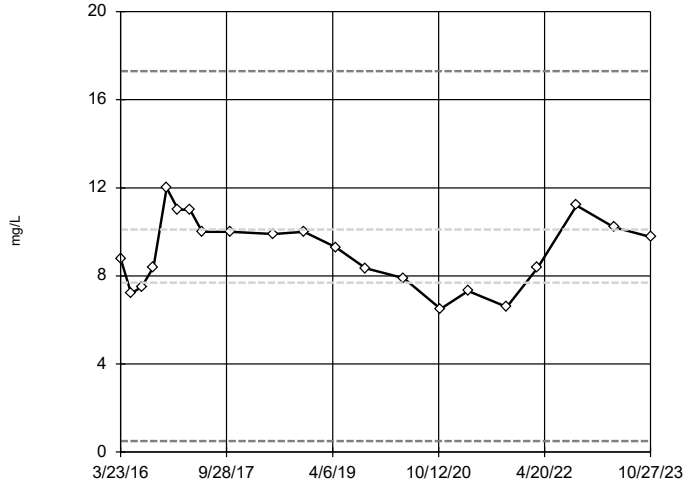
Tukey's Outlier Screening

MW-14 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 17.3, low cutoff = 0.5, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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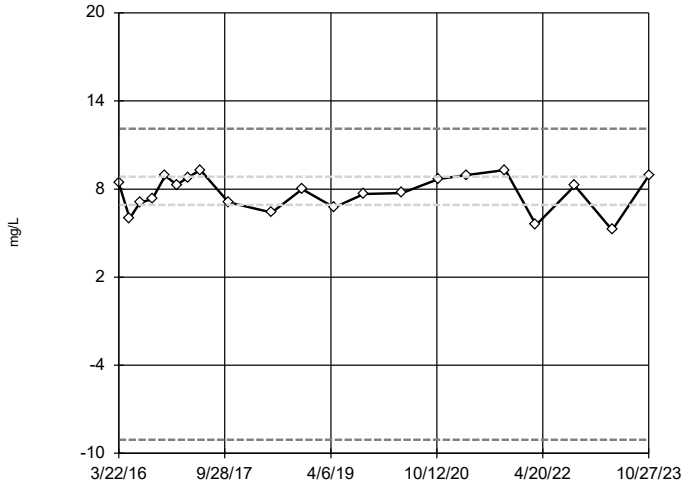
Tukey's Outlier Screening

MW-15



n = 21

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

High cutoff = 12.11, low cutoff = -9.081, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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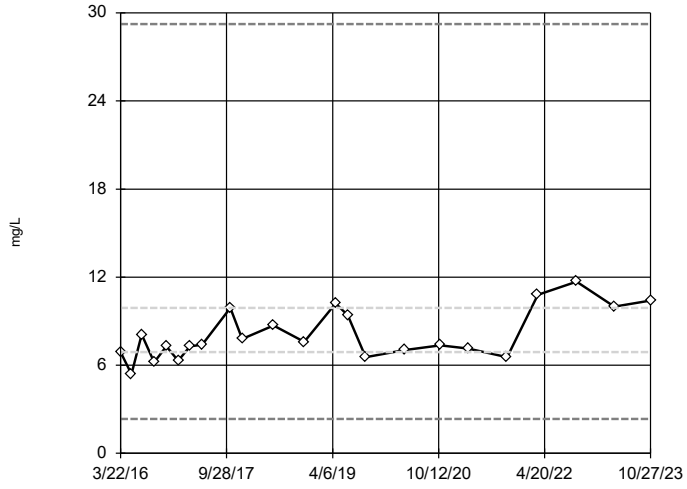
Tukey's Outlier Screening

MW-16



n = 23

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 29.24, low cutoff = 2.336, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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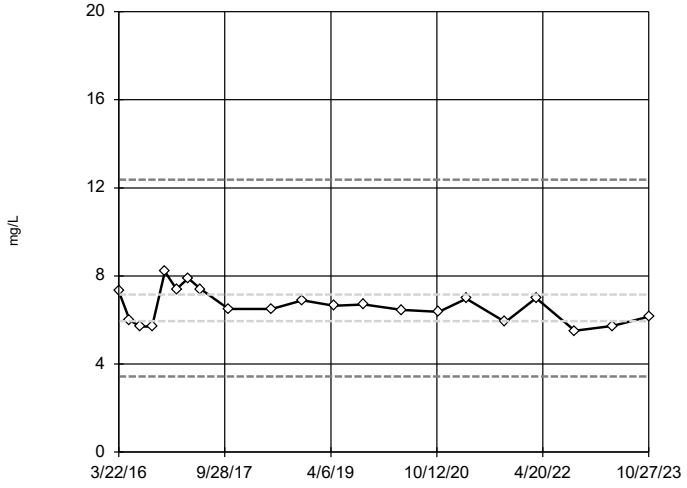
Tukey's Outlier Screening

MW-17



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 12.37, low cutoff = 3.442, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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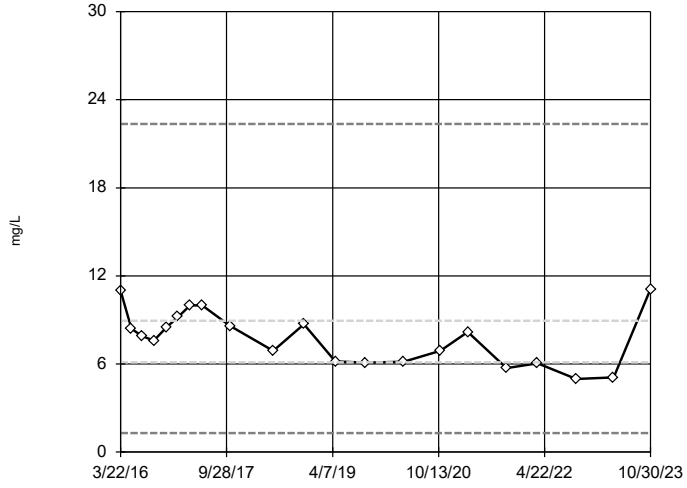
Tukey's Outlier Screening

MW-18 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 22.35, low cutoff = 1.29, based on IQR multiplier of 3.

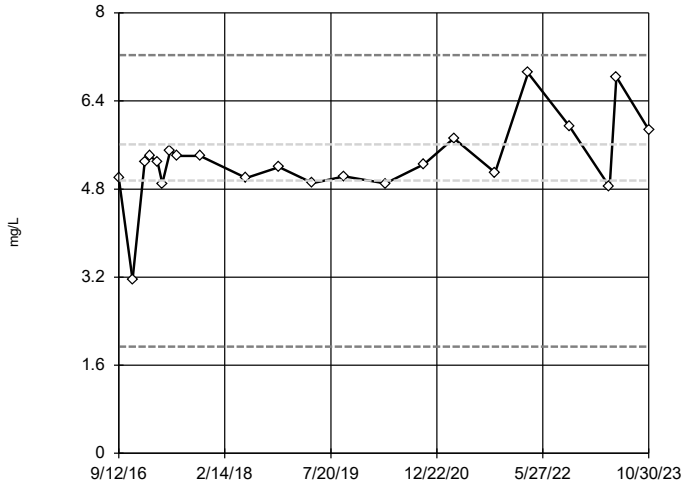
Constituent: Chloride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Tukey's Outlier Screening

MW-19



n = 22

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 7.23, low cutoff = 1.94, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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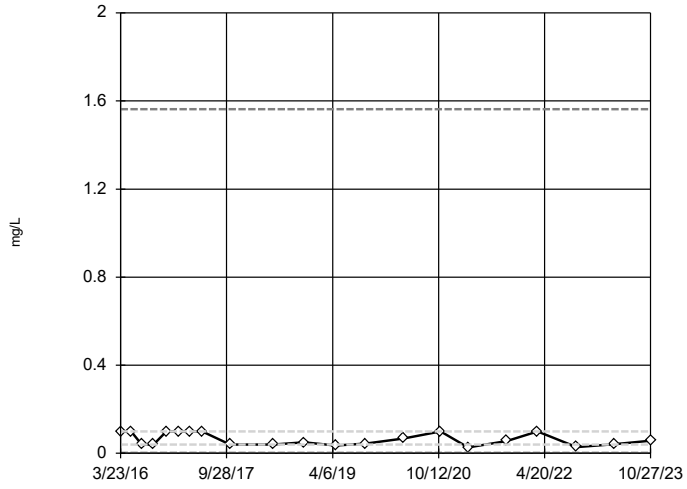
Tukey's Outlier Screening

MW-11 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1.563, low cutoff = 0.00256, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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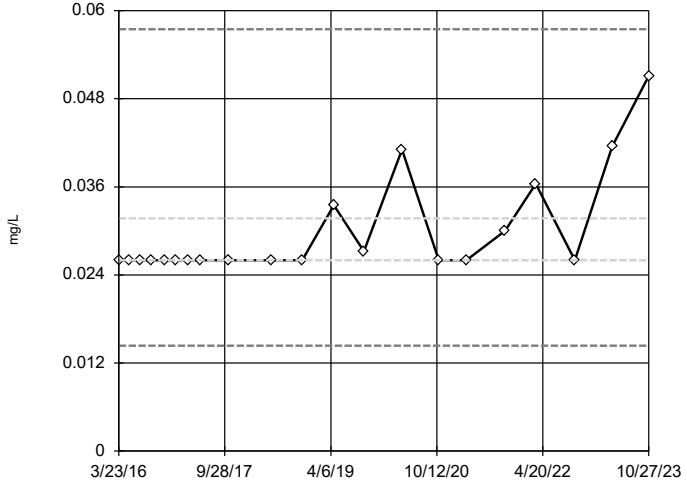
Tukey's Outlier Screening

MW-14 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.05747, low cutoff = 0.01434, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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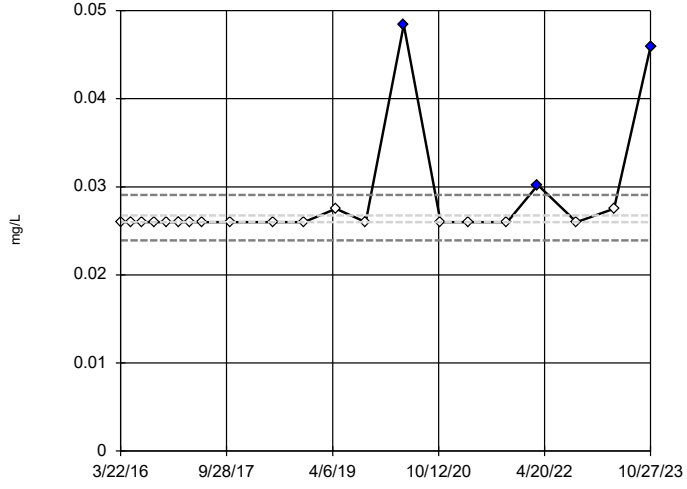
Tukey's Outlier Screening

MW-15



n = 21

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.02909, low cutoff = 0.0239, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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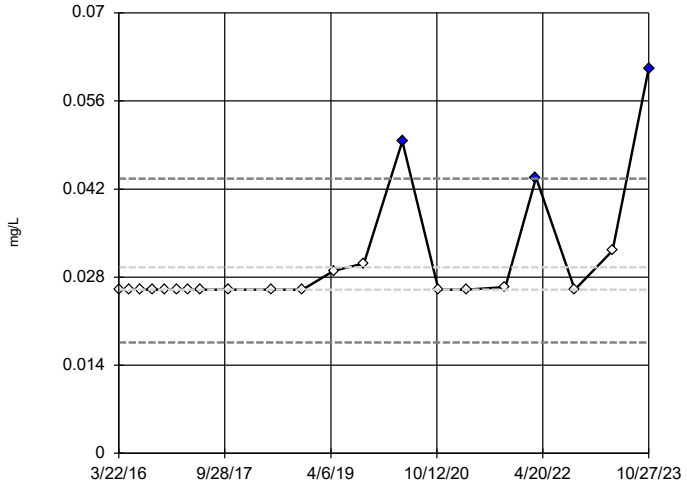
Tukey's Outlier Screening

MW-16



n = 21

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.04364, low cutoff = 0.01763, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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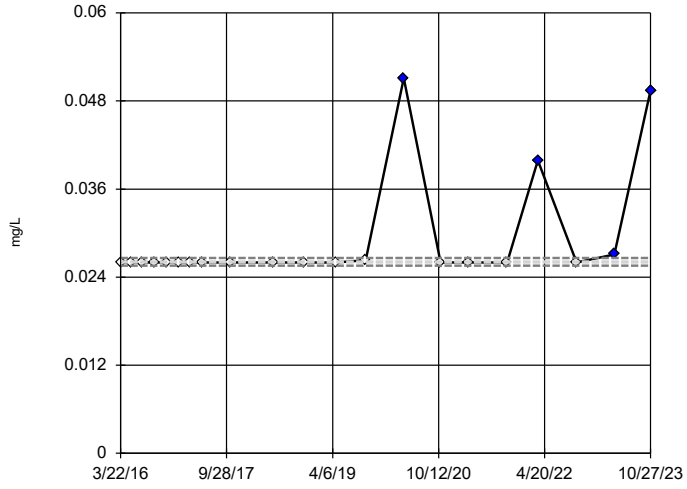
Tukey's Outlier Screening

MW-17



n = 21

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0266, low cutoff = 0.02556, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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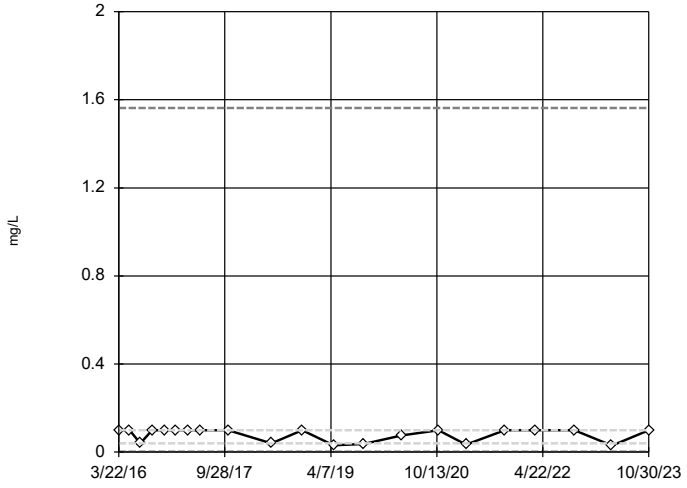
Tukey's Outlier Screening

MW-18 (bg)



n = 21

No outliers found.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1.563, low cutoff = 0.00256, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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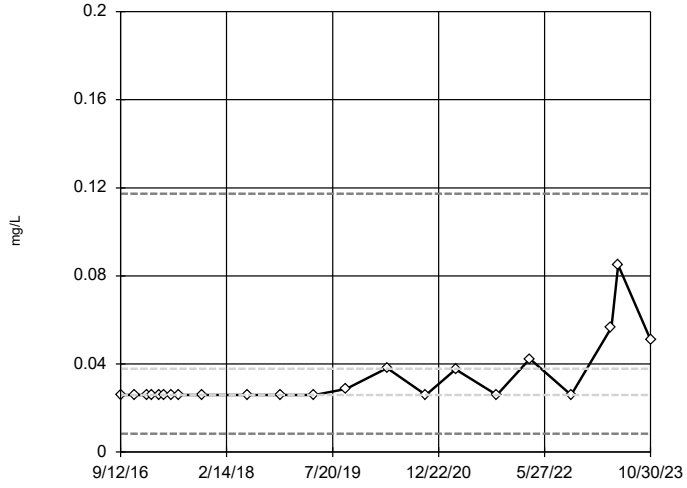
Tukey's Outlier Screening

MW-19



n = 22

No outliers found.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.1174, low cutoff = 0.008395, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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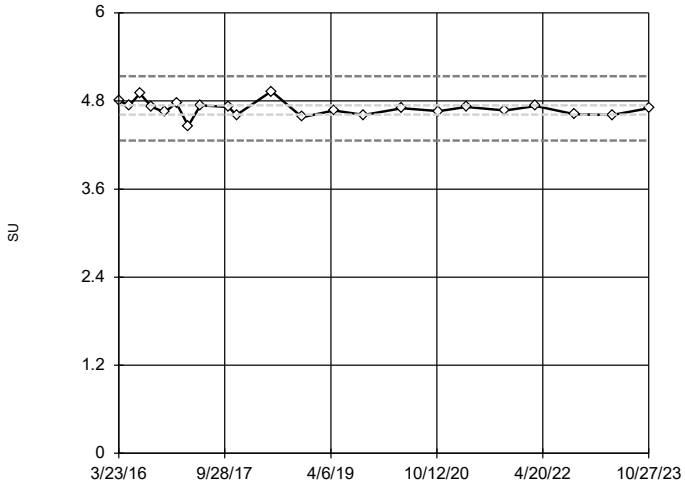
Tukey's Outlier Screening

MW-11 (bg)



n = 22

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5.136, low cutoff = 4.259, based on IQR multiplier of 3.

Constituent: pH Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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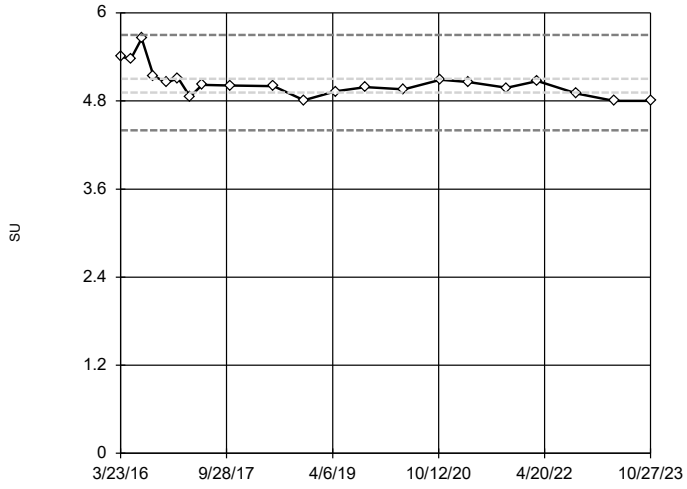
Tukey's Outlier Screening

MW-14 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5.698, low cutoff = 4.399, based on IQR multiplier of 3.

Constituent: pH Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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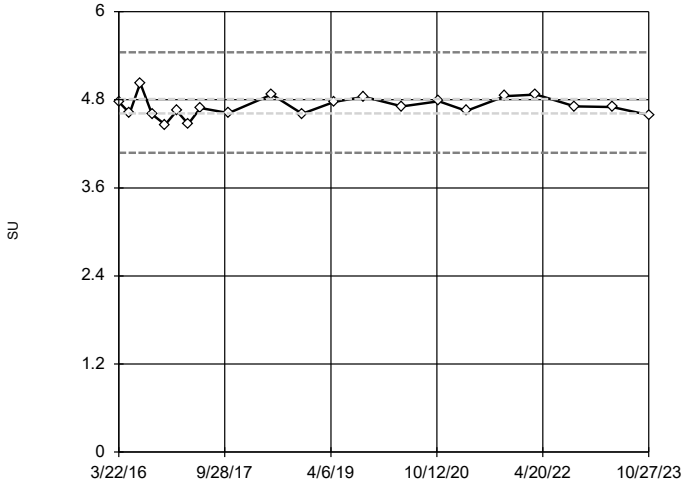
Tukey's Outlier Screening

MW-15



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5.445, low cutoff = 4.076, based on IQR multiplier of 3.

Constituent: pH Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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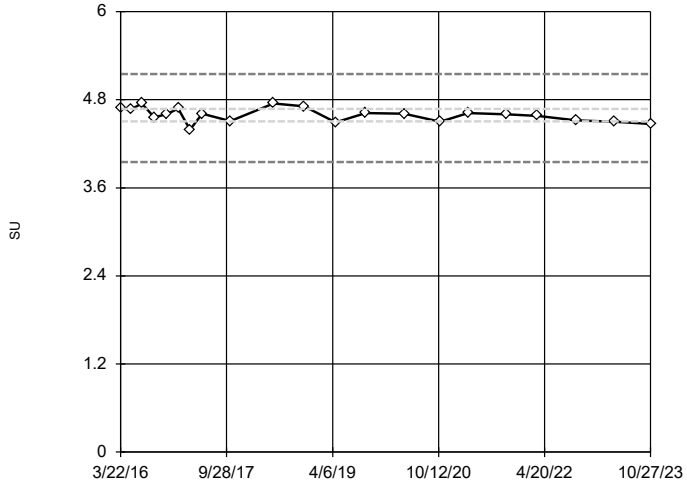
Tukey's Outlier Screening

MW-16



n = 21

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5.151, low cutoff = 3.951, based on IQR multiplier of 3.

Constituent: pH Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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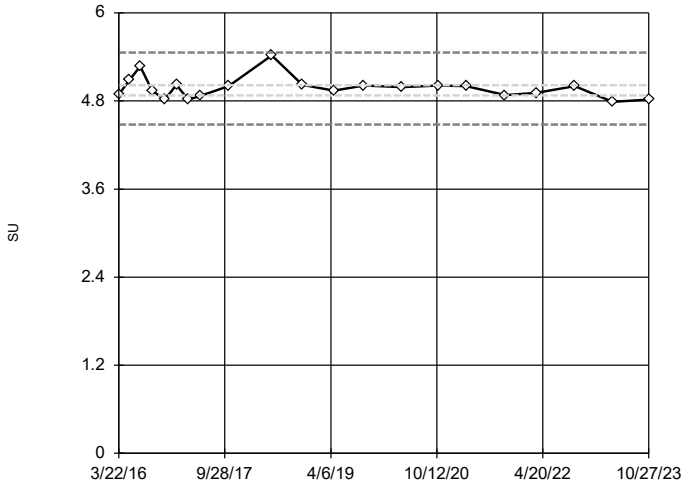
Tukey's Outlier Screening

MW-17



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5.46, low cutoff = 4.478, based on IQR multiplier of 3.

Constituent: pH Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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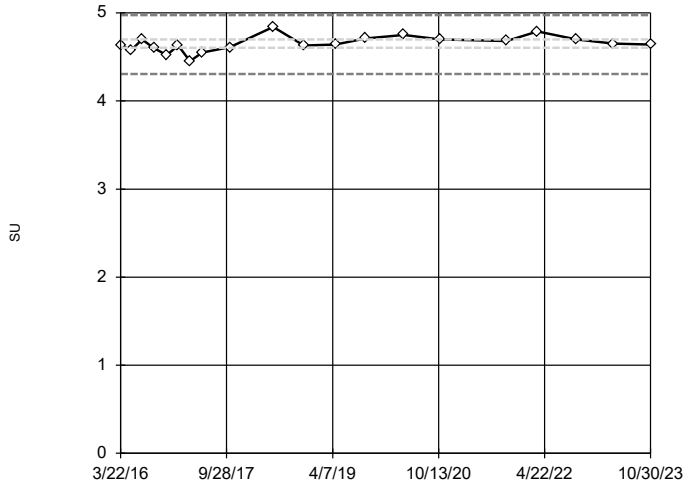
Tukey's Outlier Screening

MW-18 (bg)



n = 20

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 4.974, low cutoff = 4.307, based on IQR multiplier of 3.

Constituent: pH Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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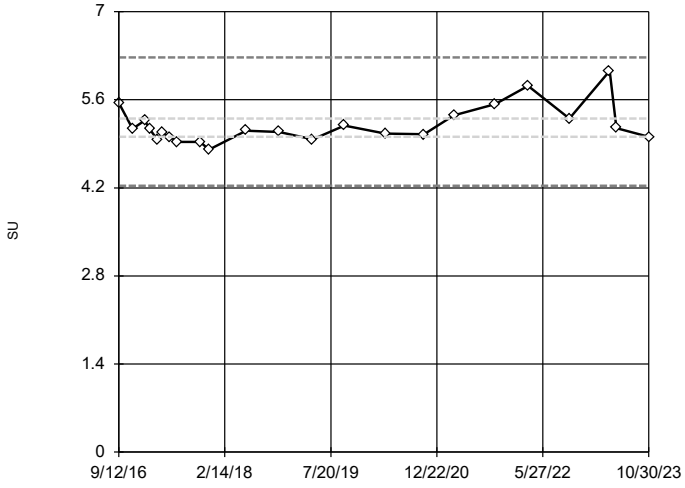
Tukey's Outlier Screening

MW-19



n = 23

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 6.275, low cutoff = 4.232, based on IQR multiplier of 3.

Constituent: pH Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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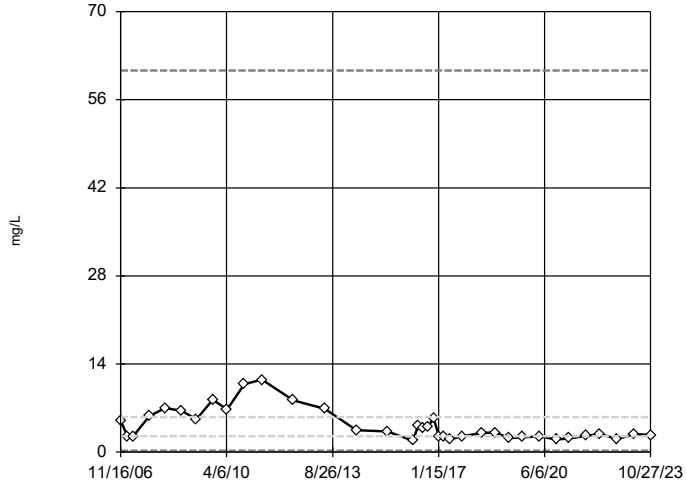
Tukey's Outlier Screening

MW-11 (bg)



n = 36

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 60.63, low cutoff = 0.2287, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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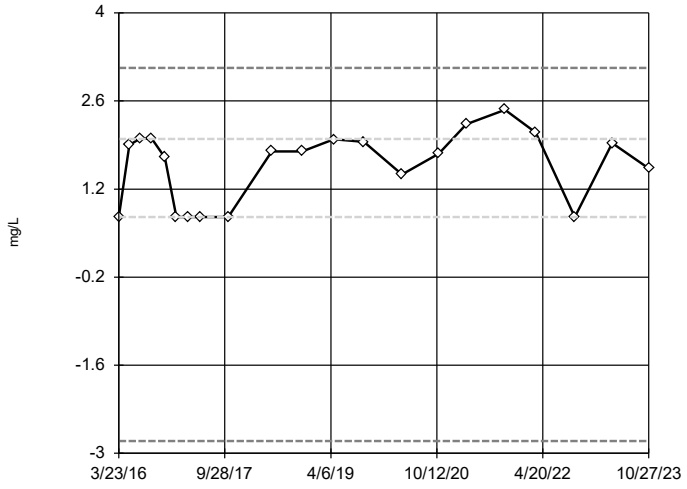
Tukey's Outlier Screening

MW-14 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.123, low cutoff = -2.806, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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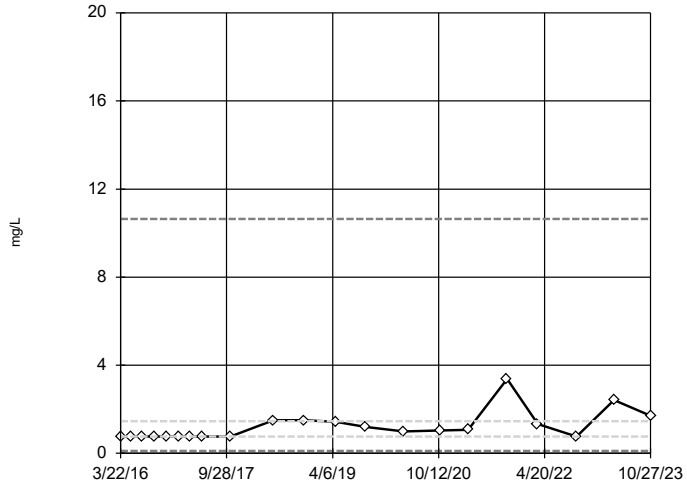
Tukey's Outlier Screening

MW-15



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 10.65, low cutoff = 0.104, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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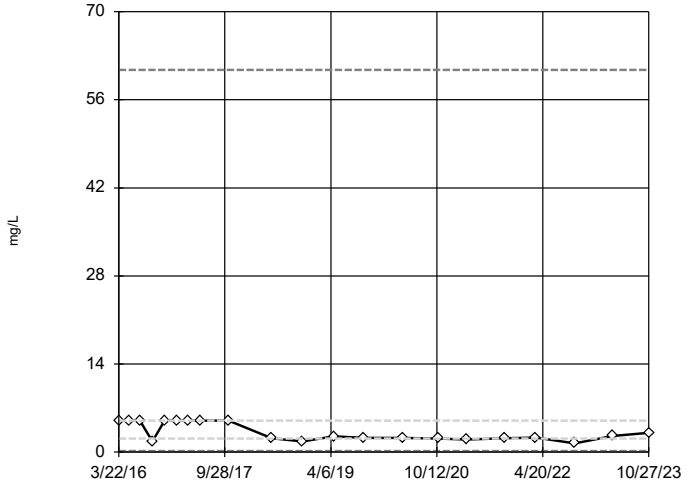
Tukey's Outlier Screening

MW-16



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 60.76, low cutoff = 0.179, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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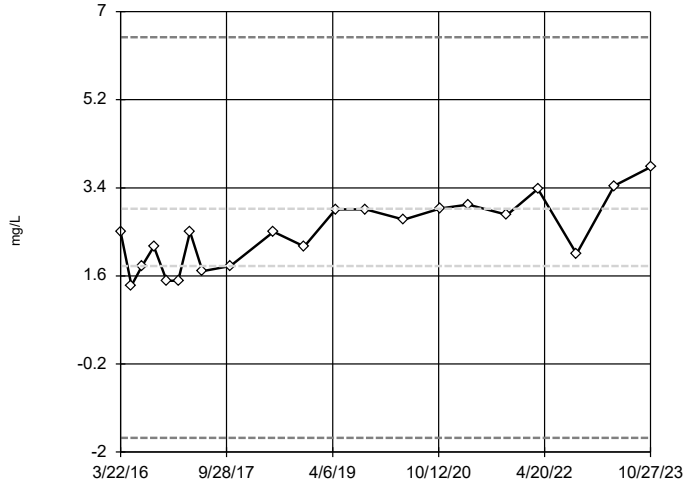
Tukey's Outlier Screening

MW-17



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 6.48, low cutoff = -1.71, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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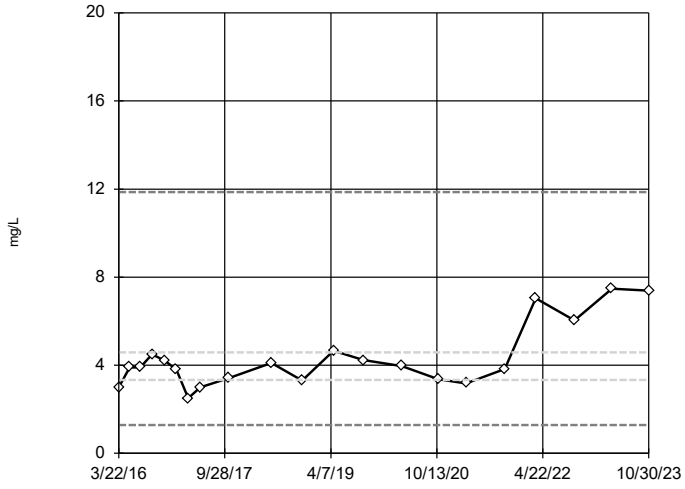
Tukey's Outlier Screening

MW-18 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 11.86, low cutoff = 1.288, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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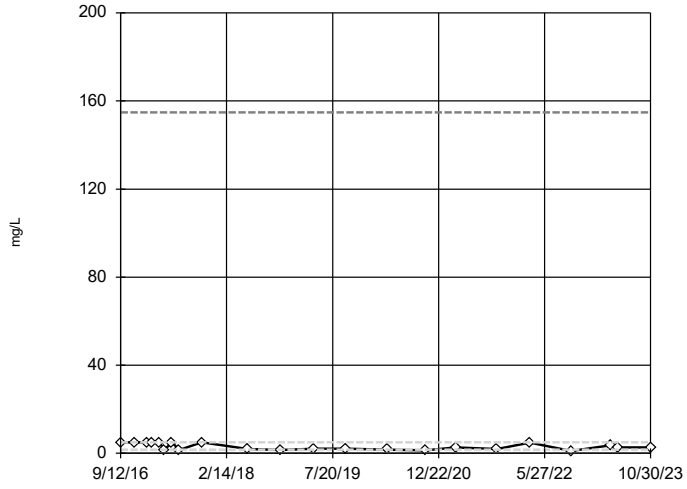
Tukey's Outlier Screening

MW-19



n = 22

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 154.9, low cutoff = 0.05141, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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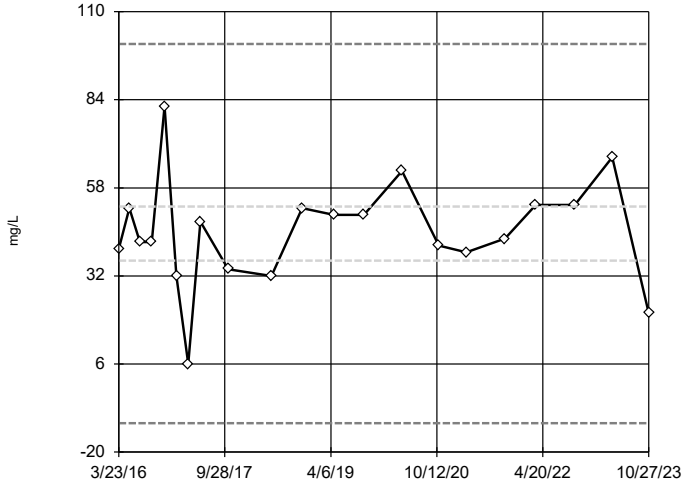
Tukey's Outlier Screening

MW-11 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 100.5, low cutoff = -11.5, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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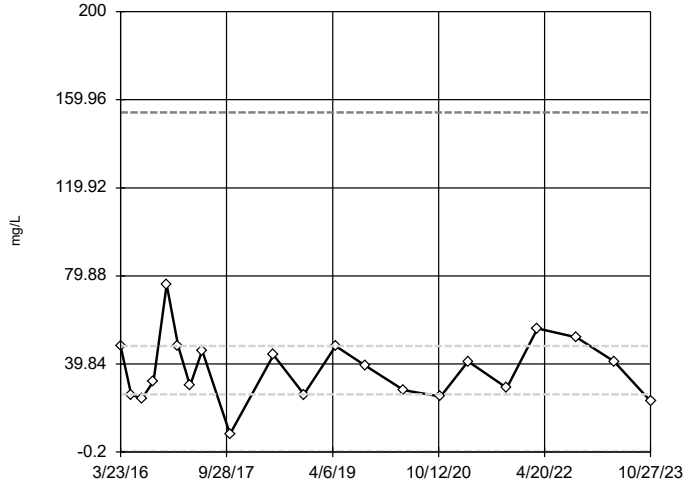
Tukey's Outlier Screening

MW-14 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 154.2, low cutoff = -0.151, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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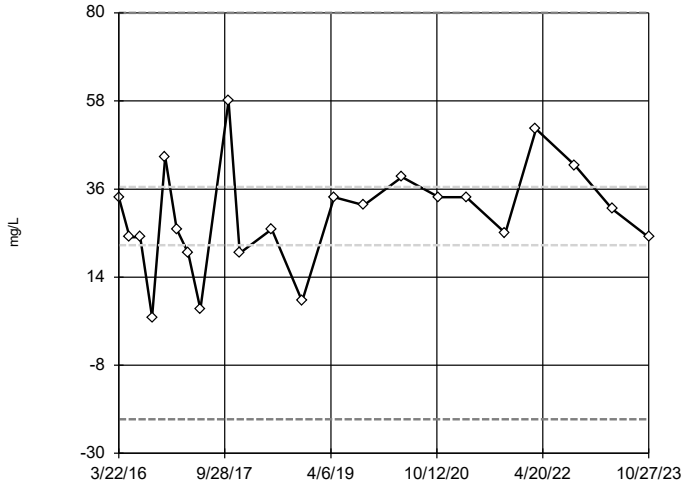
Tukey's Outlier Screening

MW-15



n = 22

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 80, low cutoff = -21.5, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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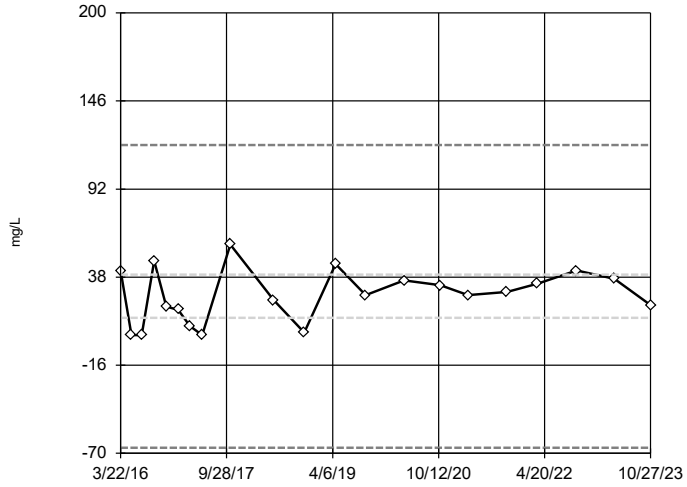
Tukey's Outlier Screening

MW-16



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 119, low cutoff = -66.5, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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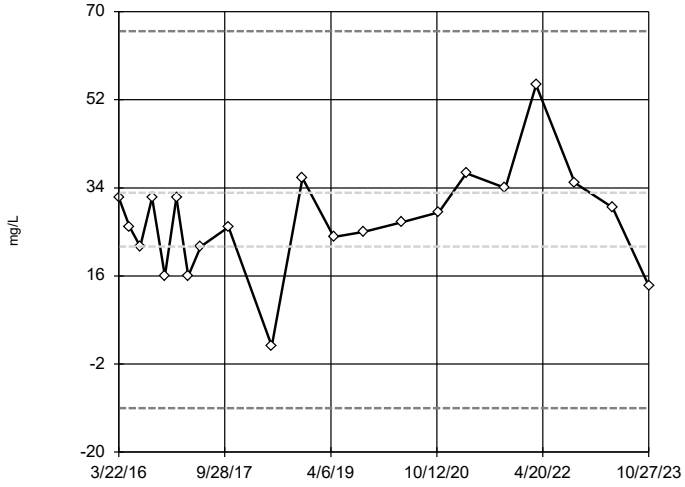
Tukey's Outlier Screening

MW-17



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 66, low cutoff = -11, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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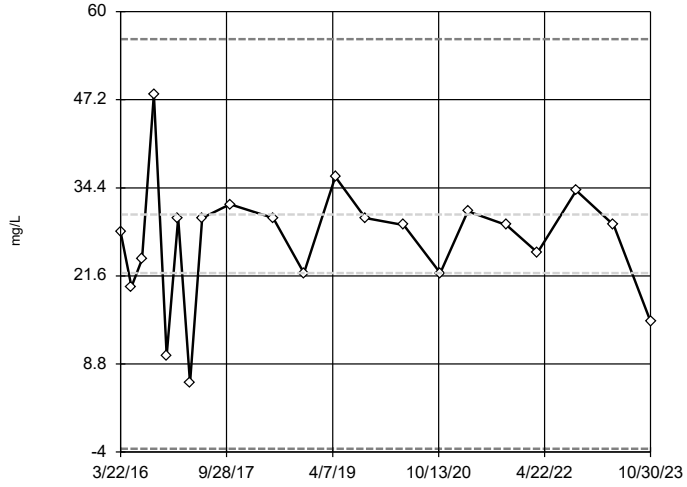
Tukey's Outlier Screening

MW-18 (bg)



n = 21

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 56, low cutoff = -3.5, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

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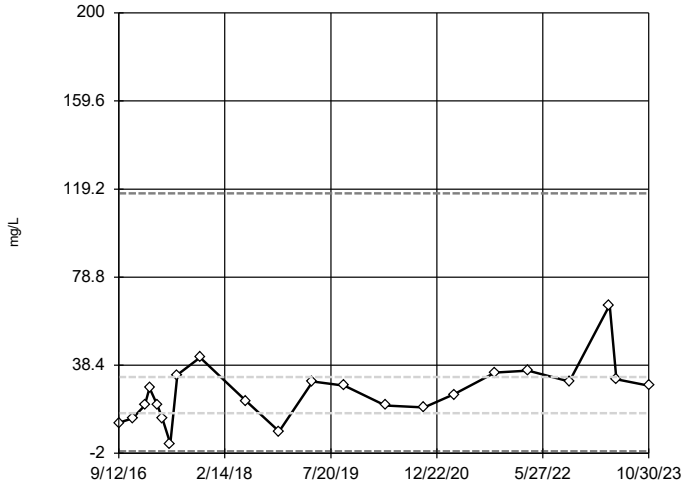
Tukey's Outlier Screening

MW-19



n = 22

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 117.2, low cutoff = -1.062, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:02 PM View: Outliers

Plant Daniel Data: NAMU CCR

Mann-Whitney

Welch's t-test/Mann-Whitney - Significant Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 1:22 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
Calcium (mg/L)	**MW-18 (bg)**	**-3.001**	**Yes**	**0.01**	**Yes**	**Mann-W**
Calcium (mg/L)	**MW-19**	**3.662**	**Yes**	**0.01**	**Yes**	**Mann-W**
Chloride (mg/L)	**MW-16**	**2.961**	**Yes**	**0.01**	**Yes**	**Mann-W**
Fluoride (mg/L)	**MW-19**	**3.032**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	**MW-18 (bg)**	**3.002**	**Yes**	**0.01**	**Yes**	**Mann-W**

Welch's t-test/Mann-Whitney - All Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 1:22 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
Boron (mg/L)	MW-11 (bg)	-1.324	No	0.01	No	Mann-W
Boron (mg/L)	MW-14 (bg)	0.3638	No	0.01	No	Mann-W
Boron (mg/L)	MW-15	-1.318	No	0.01	No	Mann-W
Boron (mg/L)	MW-18 (bg)	-0.1537	No	0.01	No	Mann-W
Boron (mg/L)	MW-19	-1.952	No	0.01	No	Mann-W
Calcium (mg/L)	MW-11 (bg)	-2.171	No	0.01	No	Mann-W
Calcium (mg/L)	MW-14 (bg)	-1.837	No	0.01	No	Mann-W
Calcium (mg/L)	MW-15	-1.665	No	0.01	No	Mann-W
Calcium (mg/L)	MW-16	2.513	No	0.01	No	Mann-W
Calcium (mg/L)	MW-17	-1.841	No	0.01	No	Mann-W
Calcium (mg/L)	**MW-18 (bg)**	**-3.001**	**Yes**	**0.01**	**Yes**	**Mann-W**
Calcium (mg/L)	**MW-19**	**3.662**	**Yes**	**0.01**	**Yes**	**Mann-W**
Chloride (mg/L)	MW-11 (bg)	-0.1765	No	0.01	No	Mann-W
Chloride (mg/L)	MW-14 (bg)	1.121	No	0.01	No	Mann-W
Chloride (mg/L)	MW-15	-1.076	No	0.01	No	Mann-W
Chloride (mg/L)	**MW-16**	**2.961**	**Yes**	**0.01**	**Yes**	**Mann-W**
Chloride (mg/L)	MW-17	-1.479	No	0.01	No	Mann-W
Chloride (mg/L)	MW-18 (bg)	-1.478	No	0.01	No	Mann-W
Chloride (mg/L)	MW-19	2.041	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-11 (bg)	-0.4621	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-14 (bg)	2.347	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-15	2.458	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-16	2.241	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-17	2.517	No	0.01	No	Mann-W
Fluoride (mg/L)	MW-18 (bg)	0	No	0.01	No	Mann-W
Fluoride (mg/L)	**MW-19**	**3.032**	**Yes**	**0.01**	**Yes**	**Mann-W**
pH (SU)	MW-11 (bg)	-0.7685	No	0.01	No	Mann-W
pH (SU)	MW-14 (bg)	-1.926	No	0.01	No	Mann-W
pH (SU)	MW-15	0.1346	No	0.01	No	Mann-W
pH (SU)	MW-16	-1.974	No	0.01	No	Mann-W
pH (SU)	MW-17	-1.753	No	0.01	No	Mann-W
pH (SU)	MW-18 (bg)	1.327	No	0.01	No	Mann-W
pH (SU)	MW-19	1.79	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-11 (bg)	-1.134	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-14 (bg)	0	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-15	1.422	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-16	-0.7832	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-17	2.02	No	0.01	No	Mann-W
Sulfate (mg/L)	**MW-18 (bg)**	**3.002**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	MW-19	-0.3188	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-11 (bg)	1.121	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-14 (bg)	0.8076	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-15	1.069	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-16	0.9871	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-17	0.8528	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-18 (bg)	-0.315	No	0.01	No	Mann-W
Total Dissolved Solids (mg/L)	MW-19	2.355	No	0.01	No	Mann-W

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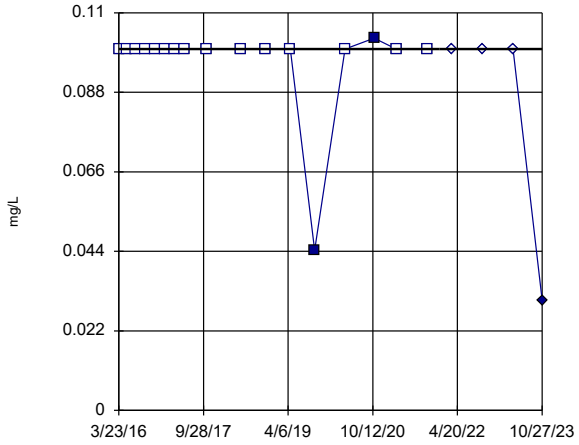
Mann-Whitney (Wilcoxon Rank Sum)

MW-11 (bg)



MW-11 background

MW-11 compliance

background median = 0.1

compliance median = 0.1

Z = -1.324 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Boron Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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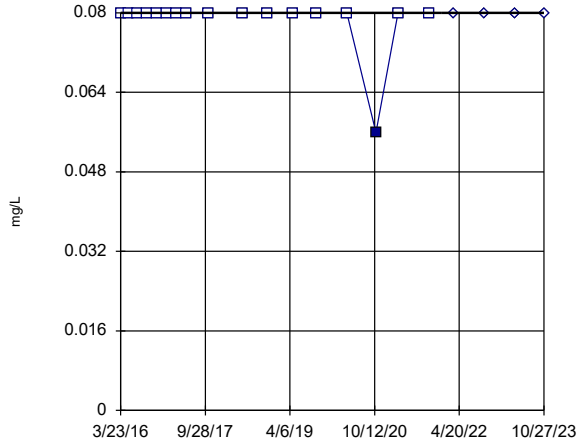
Mann-Whitney (Wilcoxon Rank Sum)

MW-14 (bg)



MW-14 background

MW-14 compliance

background median = 0.08

compliance median = 0.08

Z = 0.3638 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Boron Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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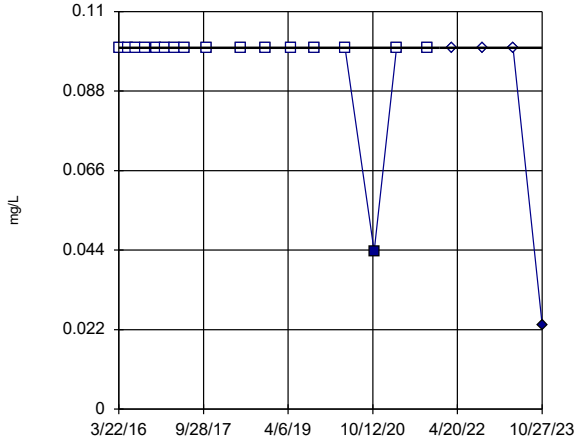
Mann-Whitney (Wilcoxon Rank Sum)

MW-15



MW-15 background

MW-15 compliance

background median = 0.1

compliance median = 0.1

Z = -1.318 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Boron Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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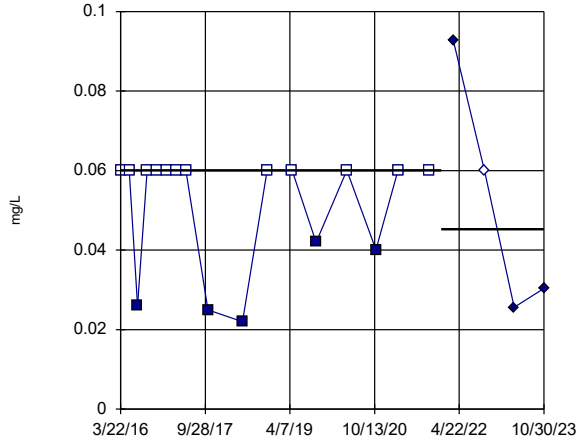
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-18 (bg)



MW-18 background

MW-18 compliance

background median = 0.0601

compliance median = 0.04525

Z = -0.1537 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Boron Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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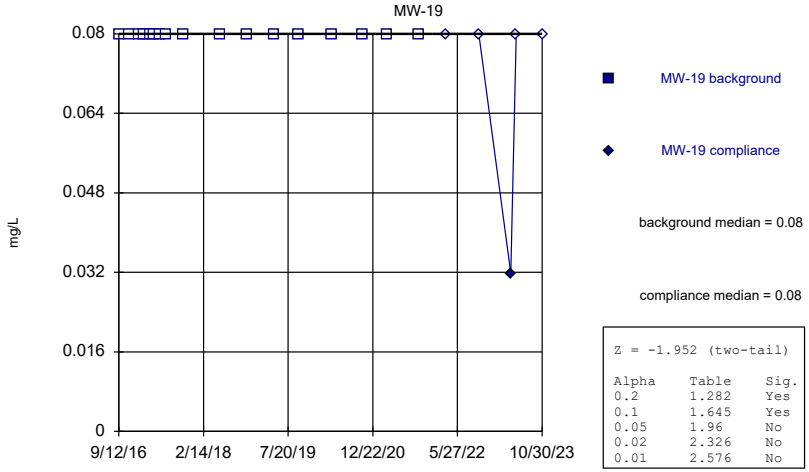
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.952 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Boron Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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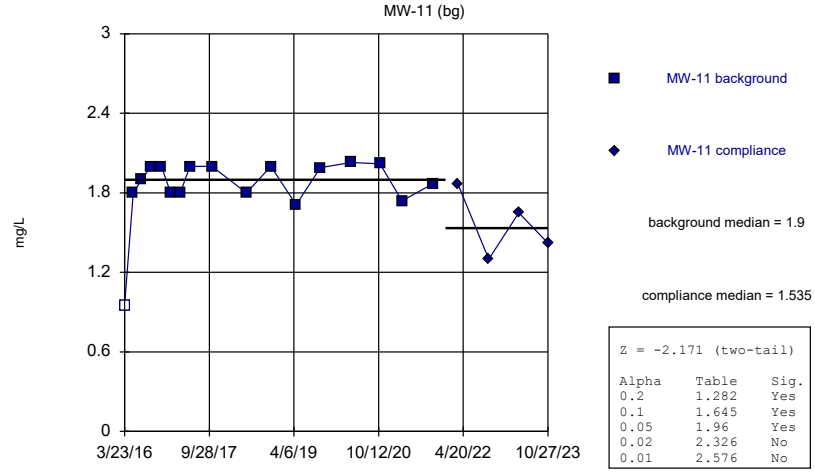
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.171 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: Calcium Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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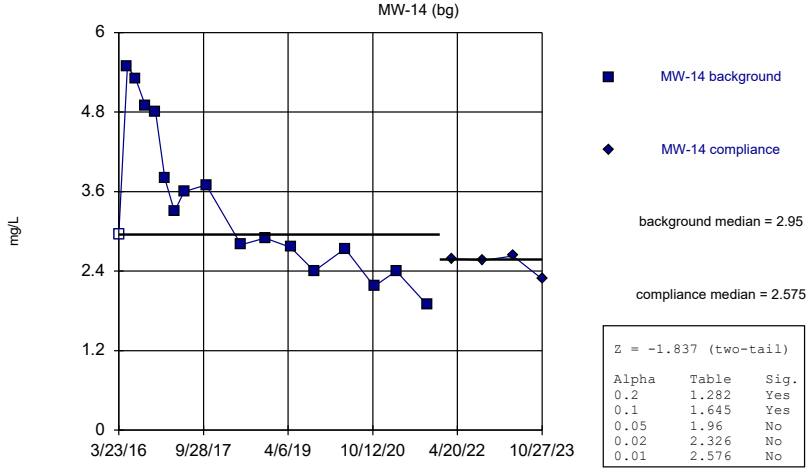
Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.837 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Calcium Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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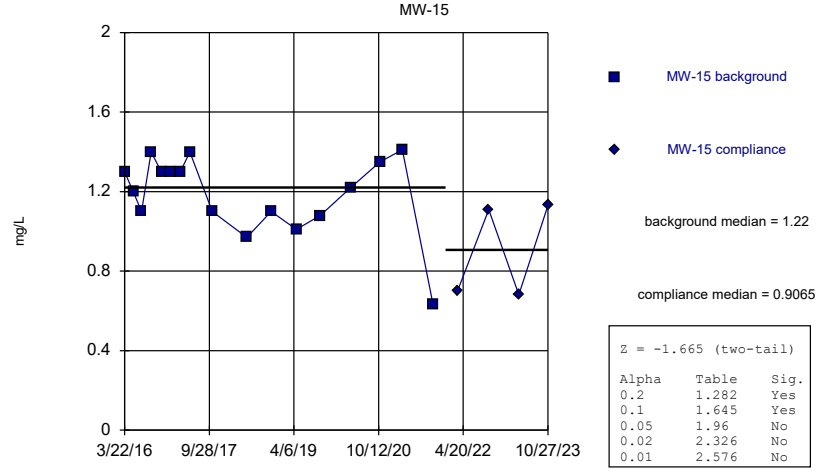
Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.665 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Calcium Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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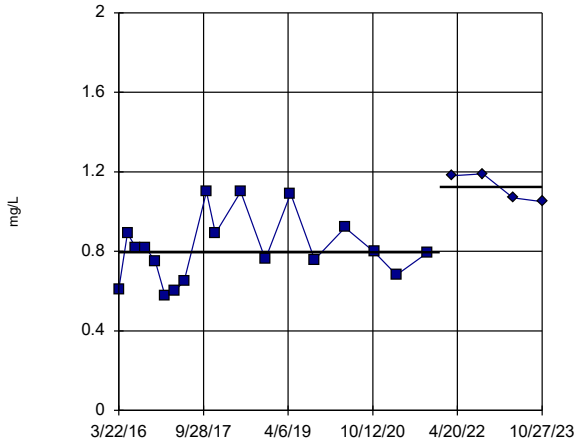
Mann-Whitney (Wilcoxon Rank Sum)

MW-16



MW-16 background

MW-16 compliance

background median = 0.7955

compliance median = 1.125

Z = 2.513 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: Calcium Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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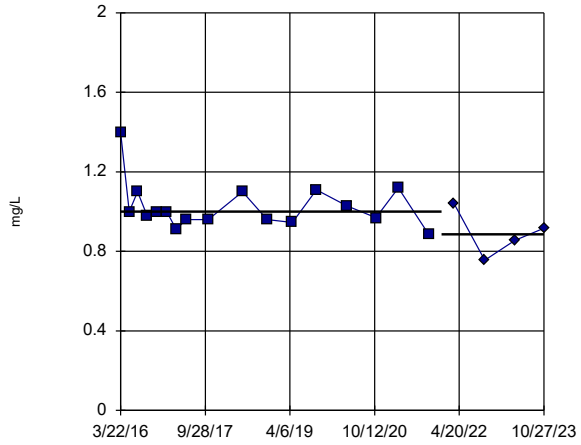
Mann-Whitney (Wilcoxon Rank Sum)

MW-17



MW-17 background

MW-17 compliance

background median = 1

compliance median = 0.8855

Z = -1.841 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Calcium Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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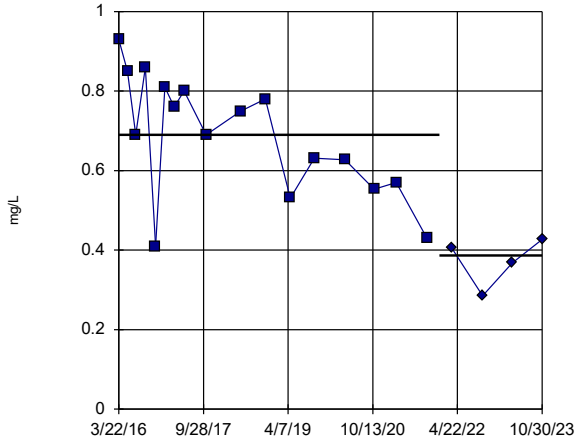
Mann-Whitney (Wilcoxon Rank Sum)

MW-18 (bg)



MW-18 background

MW-18 compliance

background median = 0.69

compliance median = 0.387

Z = -3.001 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Calcium Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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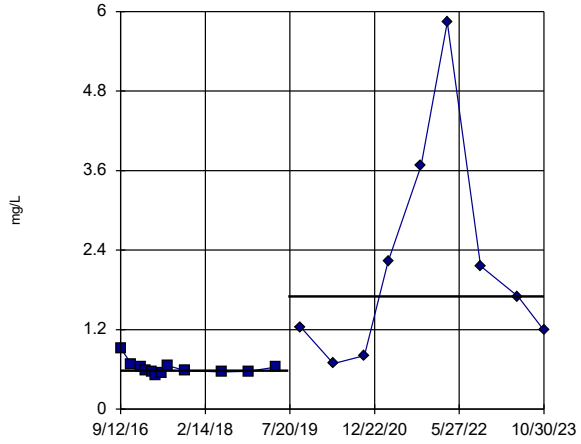
Mann-Whitney (Wilcoxon Rank Sum)

MW-19



MW-19 background

MW-19 compliance

background median = 0.58

compliance median = 1.7

Z = 3.662 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Calcium Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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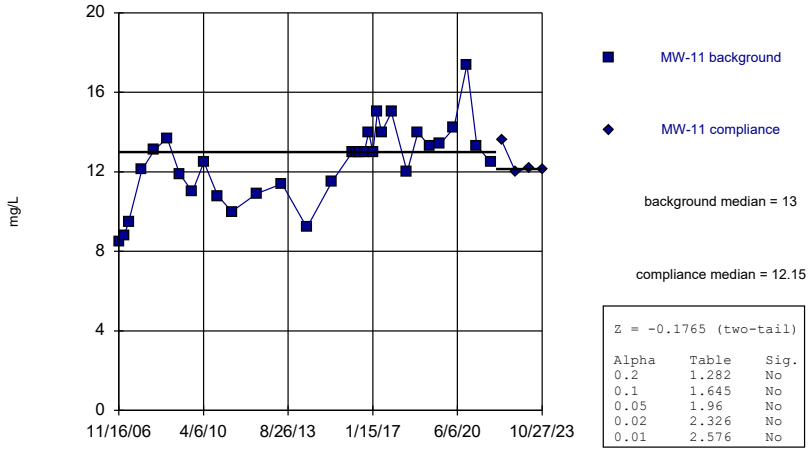
Mann-Whitney (Wilcoxon Rank Sum)

MW-11 (bg)



Z = -0.1765 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Chloride Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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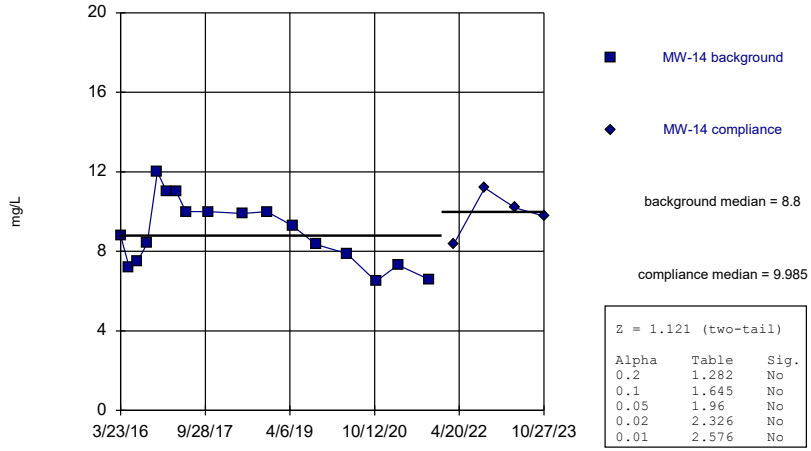
Mann-Whitney (Wilcoxon Rank Sum)

MW-14 (bg)



Z = 1.121 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Chloride Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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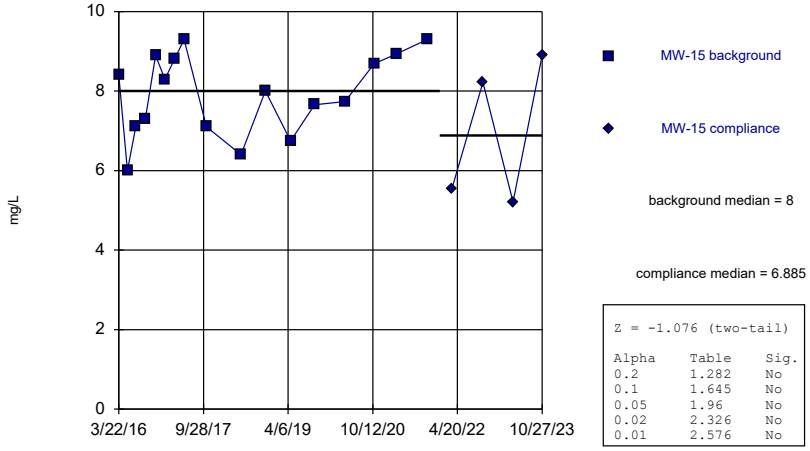
Mann-Whitney (Wilcoxon Rank Sum)

MW-15



Z = -1.076 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Chloride Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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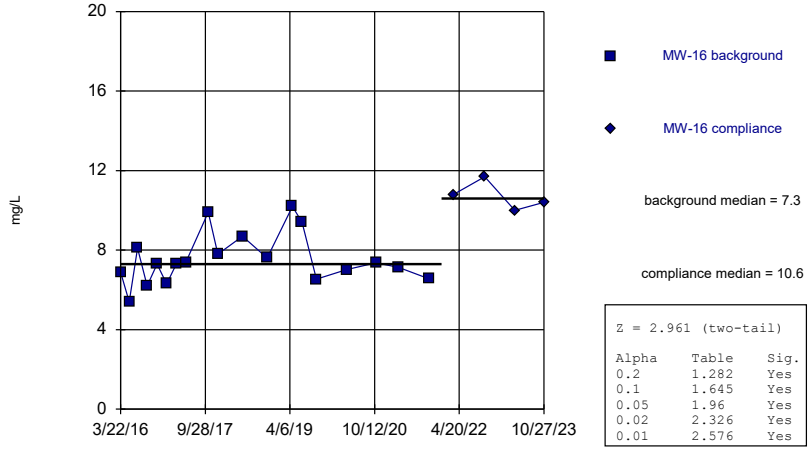
Mann-Whitney (Wilcoxon Rank Sum)

MW-16



Z = 2.961 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Chloride Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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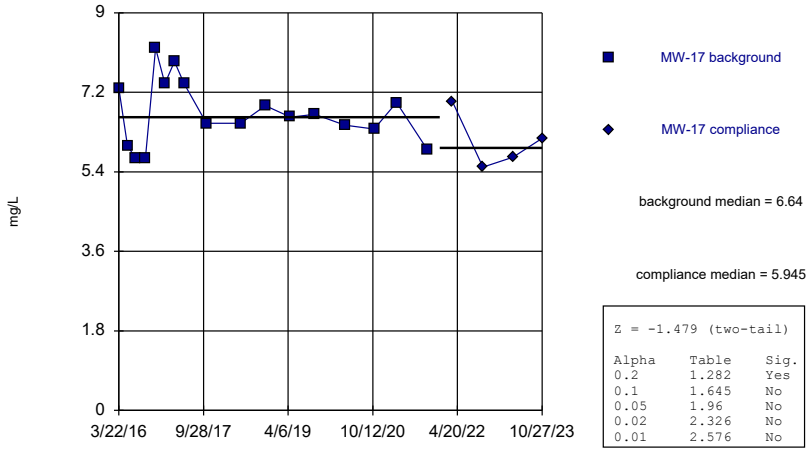
Mann-Whitney (Wilcoxon Rank Sum)

MW-17




```
Z = -1.479 (two-tail)

Alpha    Table    Sig.
0.2      1.282    Yes
0.1      1.645    No
0.05     1.96     No
0.02     2.326    No
0.01     2.576    No
```

Constituent: Chloride Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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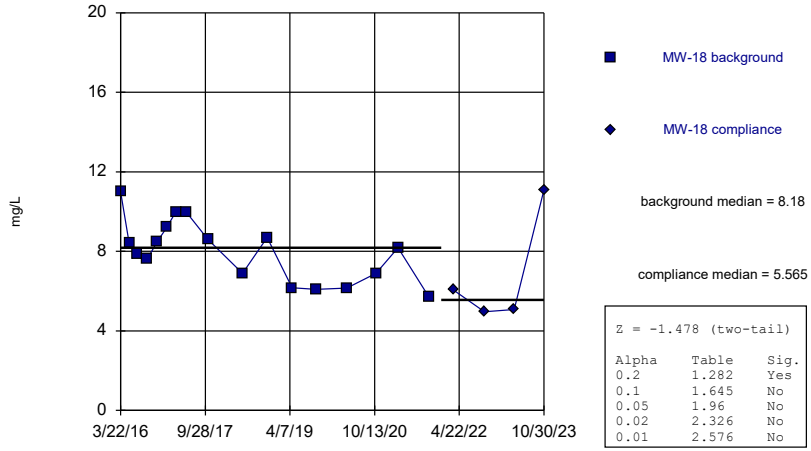
Mann-Whitney (Wilcoxon Rank Sum)

MW-18 (bg)




```
Z = -1.478 (two-tail)

Alpha    Table    Sig.
0.2      1.282    Yes
0.1      1.645    No
0.05     1.96     No
0.02     2.326    No
0.01     2.576    No
```

Constituent: Chloride Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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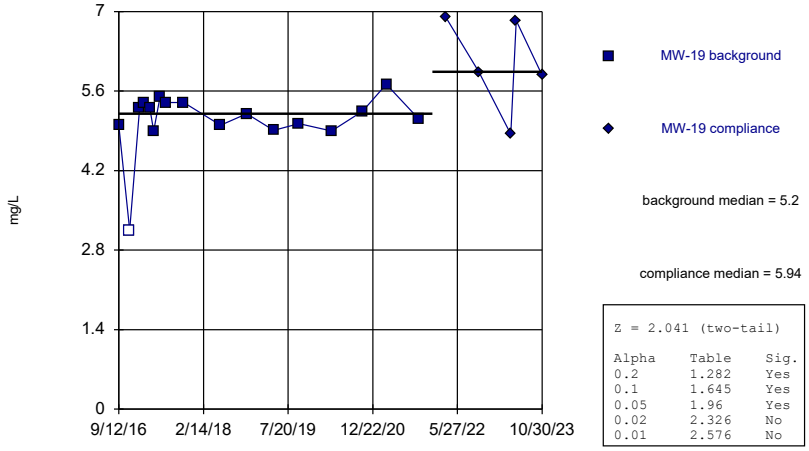
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-19




```
Z = 2.041 (two-tail)

Alpha    Table    Sig.
0.2      1.282    Yes
0.1      1.645    Yes
0.05     1.96     Yes
0.02     2.326    No
0.01     2.576    No
```

Constituent: Chloride Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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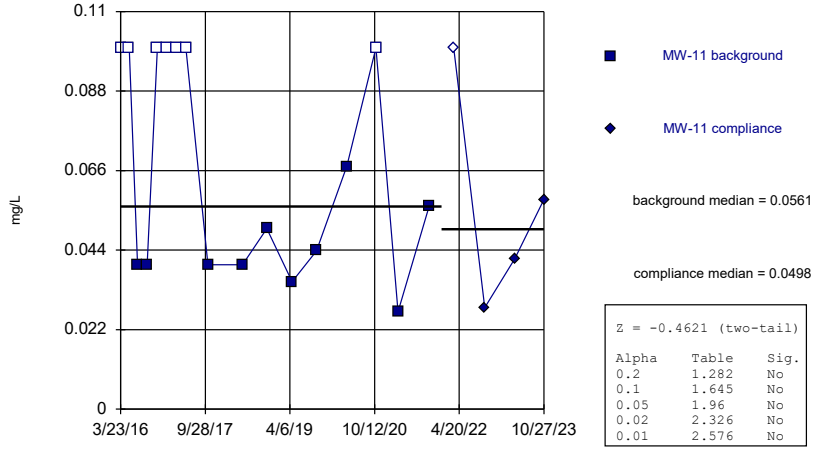
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-11 (bg)



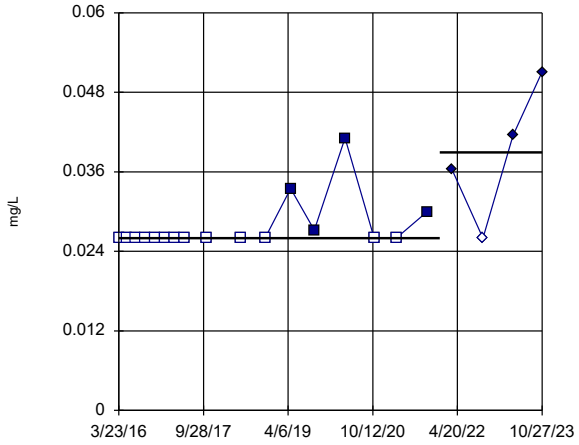

```
Z = -0.4621 (two-tail)

Alpha    Table    Sig.
0.2      1.282    No
0.1      1.645    No
0.05     1.96     No
0.02     2.326    No
0.01     2.576    No
```

Constituent: Fluoride Analysis Run 5/22/2024 1:15 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-14 (bg)



MW-14 background

MW-14 compliance

background median = 0.026

compliance median = 0.03895

Z = 2.347 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: Fluoride Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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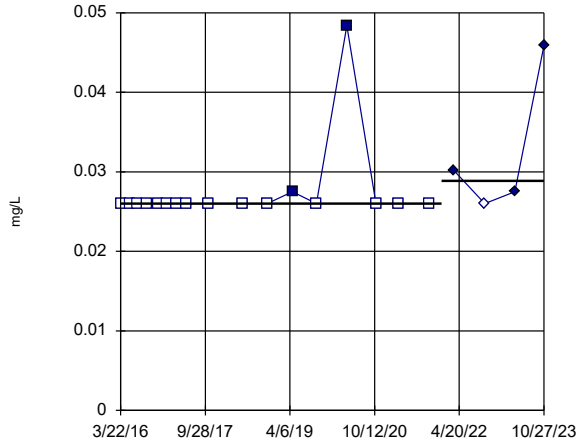
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-15



MW-15 background

MW-15 compliance

background median = 0.026

compliance median = 0.02885

Z = 2.458 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: Fluoride Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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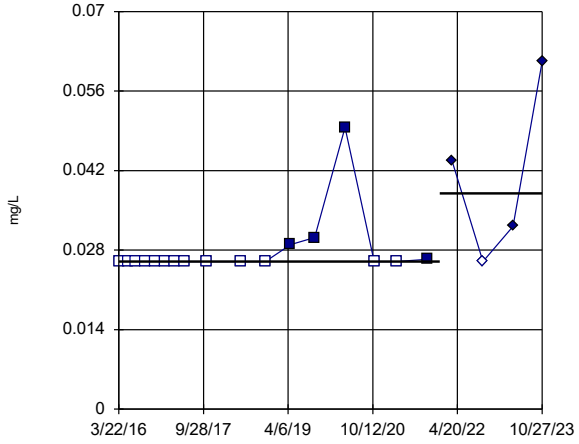
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-16



MW-16 background

MW-16 compliance

background median = 0.026

compliance median = 0.038

Z = 2.241 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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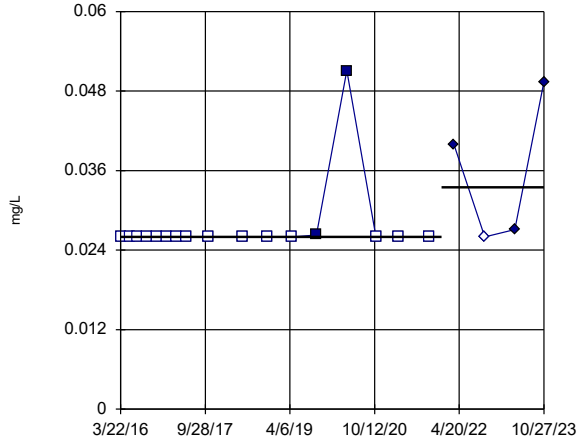
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-17



MW-17 background

MW-17 compliance

background median = 0.026

compliance median = 0.0335

Z = 2.517 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: Fluoride Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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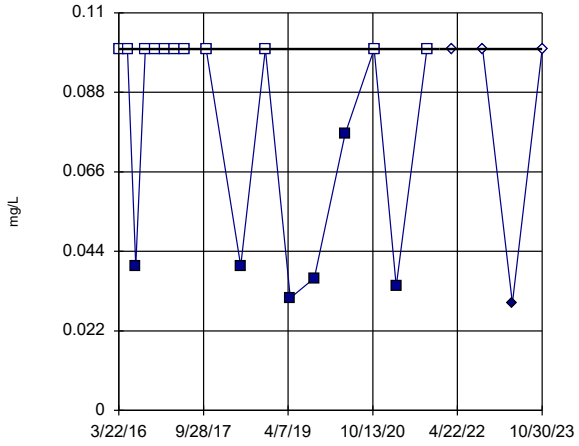
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-18 (bg)



MW-18 background

MW-18 compliance

background median = 0.1

compliance median = 0.1

Z = 0 (two-tail)

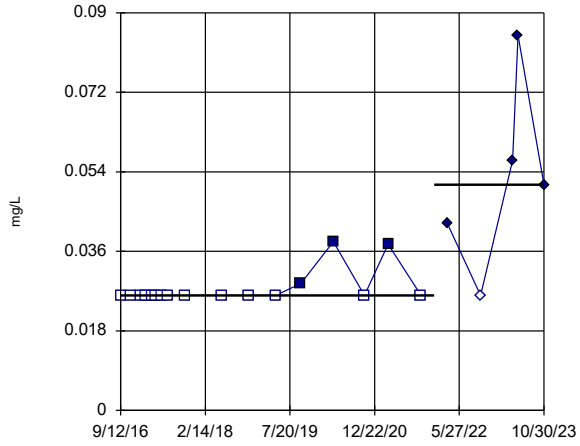
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-19



MW-19 background

MW-19 compliance

background median = 0.026

compliance median = 0.0511

Z = 3.032 (two-tail)

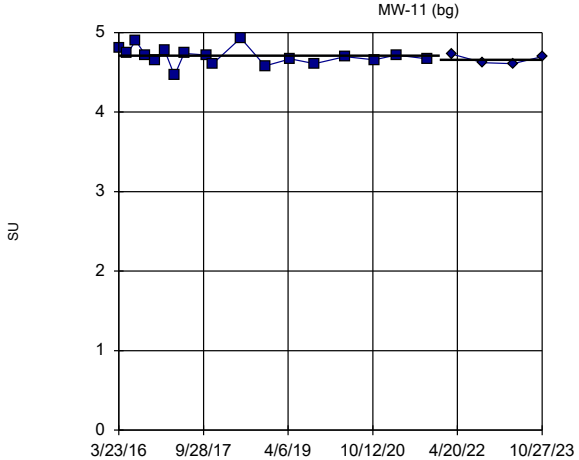
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Fluoride Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-11 (bg)



MW-11 background

MW-11 compliance

background median = 4.71

compliance median = 4.66

Z = -0.7685 (two-tail)

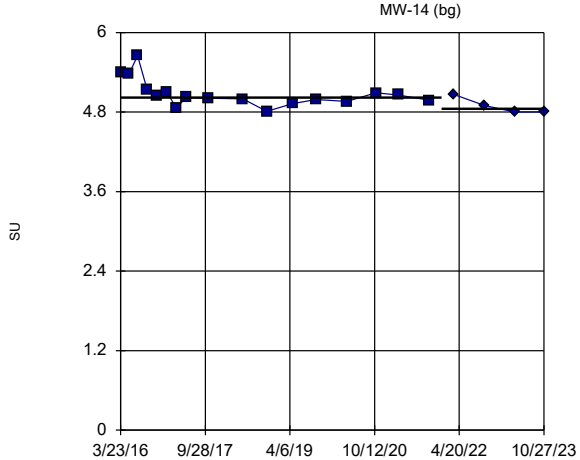
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-14 (bg)



MW-14 background

MW-14 compliance

background median = 5.02

compliance median = 4.85

Z = -1.926 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

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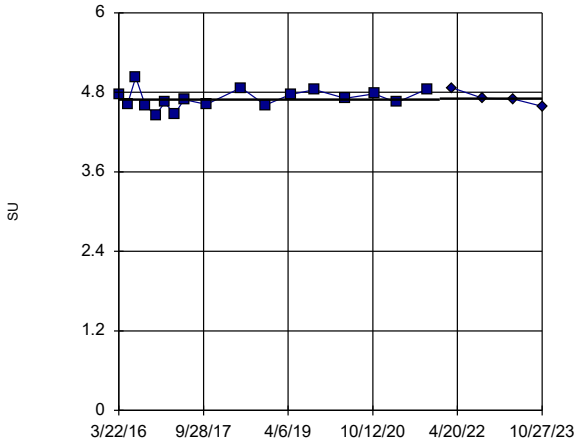
Mann-Whitney (Wilcoxon Rank Sum)

MW-15



MW-15 background

MW-15 compliance

background median = 4.69

compliance median = 4.705

Z = 0.1346 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

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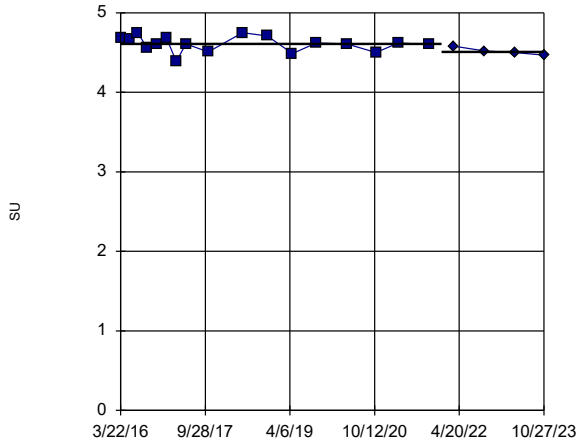
Mann-Whitney (Wilcoxon Rank Sum)

MW-16



MW-16 background

MW-16 compliance

background median = 4.61

compliance median = 4.51

Z = -1.974 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

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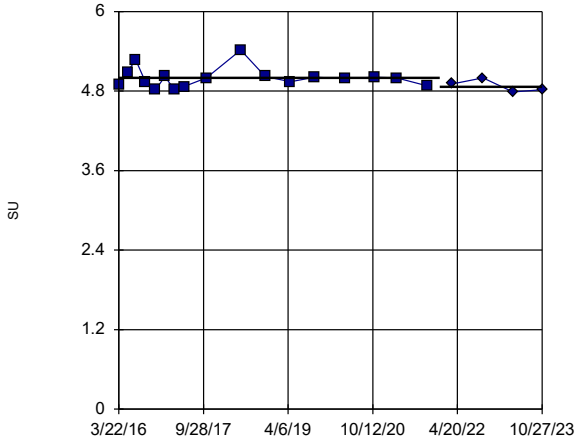
Mann-Whitney (Wilcoxon Rank Sum)

MW-17



MW-17 background

MW-17 compliance

background median = 5

compliance median = 4.865

Z = -1.753 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

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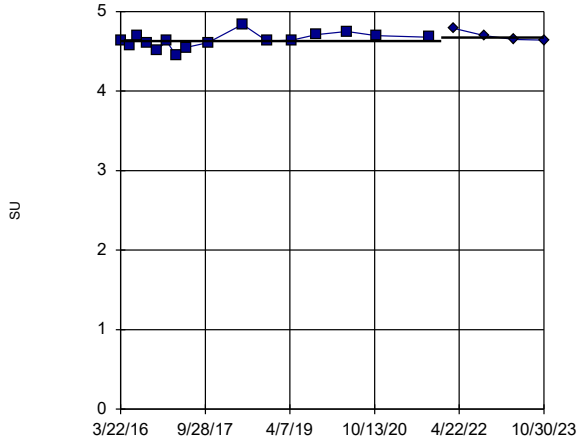
Mann-Whitney (Wilcoxon Rank Sum)

MW-18 (bg)



MW-18 background

MW-18 compliance

background median = 4.63

compliance median = 4.675

Z = 1.327 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

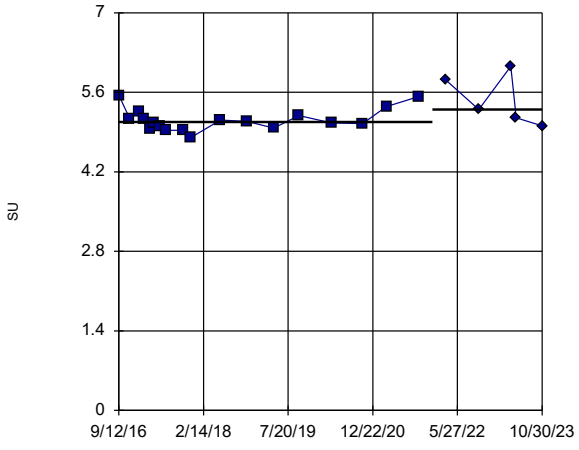
Constituent: pH Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-19



MW-19 background

MW-19 compliance

background median = 5.08

compliance median = 5.3

Z = 1.79 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney

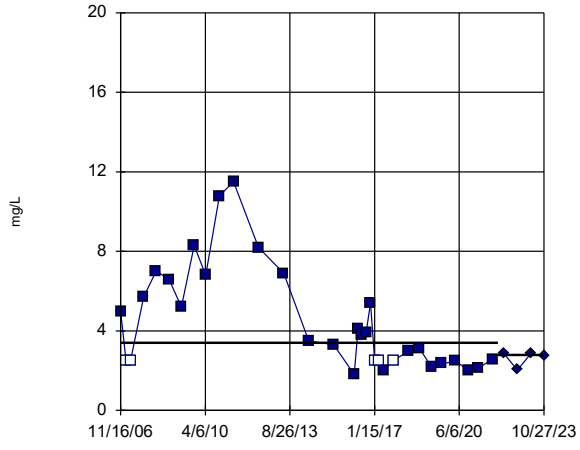
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-11 (bg)



MW-11 background

MW-11 compliance

background median = 3.4

compliance median = 2.785

Z = -1.134 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Sulfate Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney

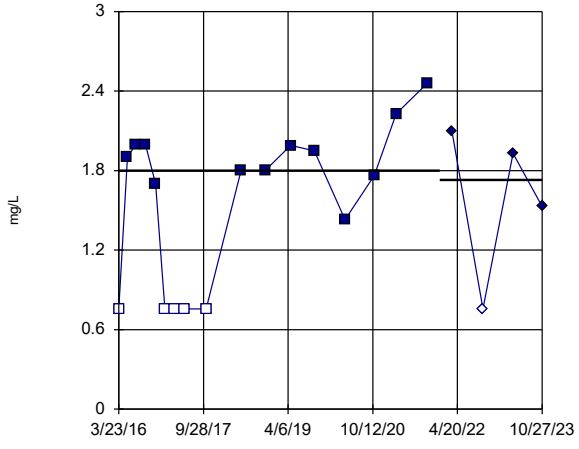
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-14 (bg)



MW-14 background

MW-14 compliance

background median = 1.8

compliance median = 1.73

Z = 0 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Sulfate Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney

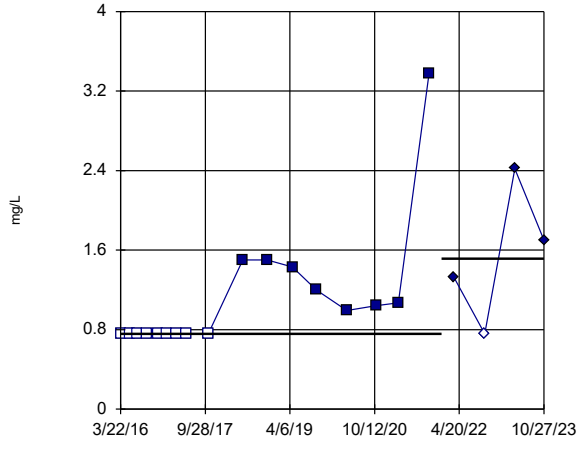
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-15



MW-15 background

MW-15 compliance

background median = 0.756

compliance median = 1.515

Z = 1.422 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

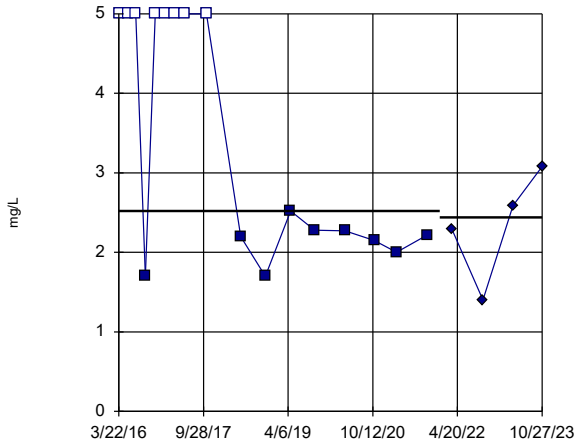
Constituent: Sulfate Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-16



MW-16 background

MW-16 compliance

background median = 2.52

compliance median = 2.44

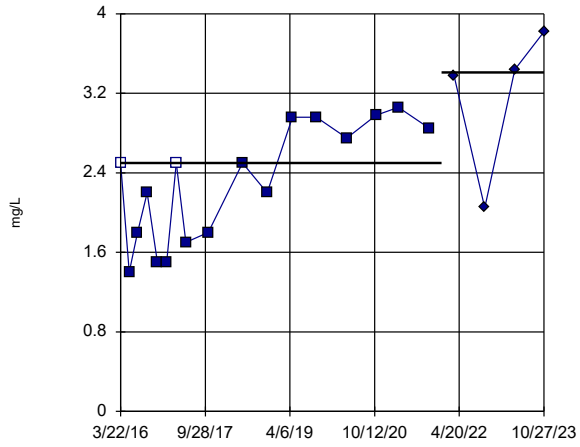
```
Z = -0.7832 (two-tail)

Alpha    Table    Sig.
0.2      1.282    No
0.1      1.645    No
0.05     1.96     No
0.02     2.326    No
0.01     2.576    No
```

Constituent: Sulfate Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-17



MW-17 background

MW-17 compliance

background median = 2.5

compliance median = 3.41

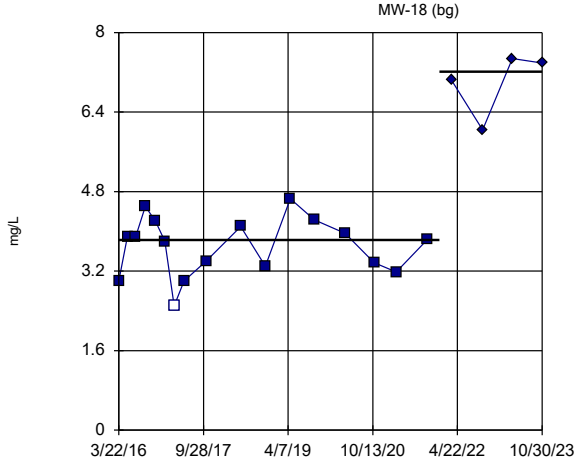
```
Z = 2.02 (two-tail)

Alpha    Table    Sig.
0.2      1.282    Yes
0.1      1.645    Yes
0.05     1.96     Yes
0.02     2.326    No
0.01     2.576    No
```

Constituent: Sulfate Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-18 (bg)



MW-18 background

MW-18 compliance

background median = 3.83

compliance median = 7.215

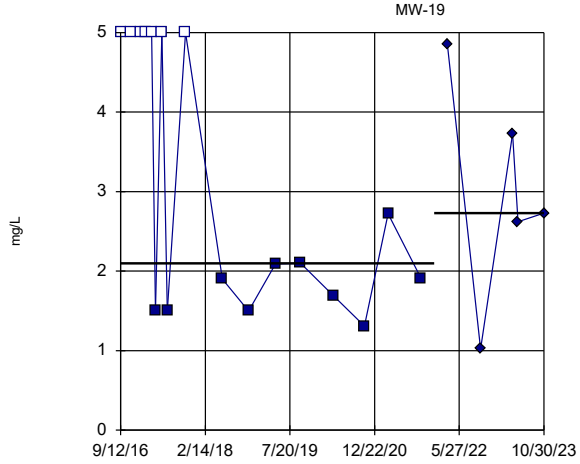
```
Z = 3.002 (two-tail)

Alpha    Table    Sig.
0.2      1.282    Yes
0.1      1.645    Yes
0.05     1.96     Yes
0.02     2.326    Yes
0.01     2.576    Yes
```

Constituent: Sulfate Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-19



MW-19 background

MW-19 compliance

background median = 2.1

compliance median = 2.73

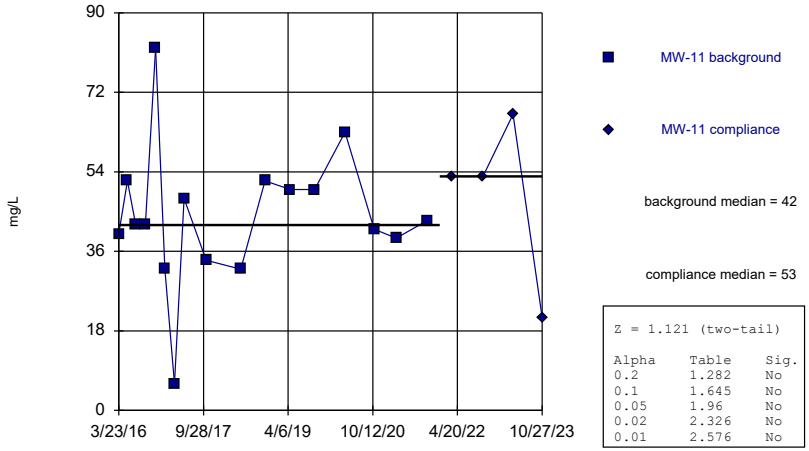
```
Z = -0.3188 (two-tail)

Alpha    Table    Sig.
0.2      1.282    No
0.1      1.645    No
0.05     1.96     No
0.02     2.326    No
0.01     2.576    No
```

Constituent: Sulfate Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-11 (bg)



Z = 1.121 (two-tail)

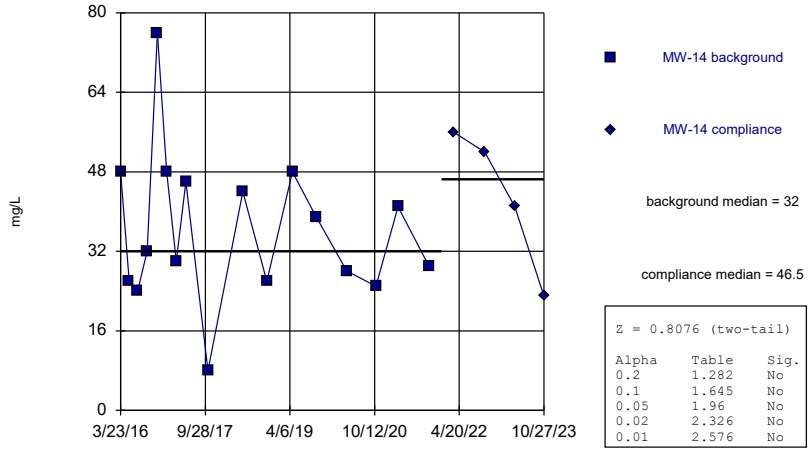
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-14 (bg)



Z = 0.8076 (two-tail)

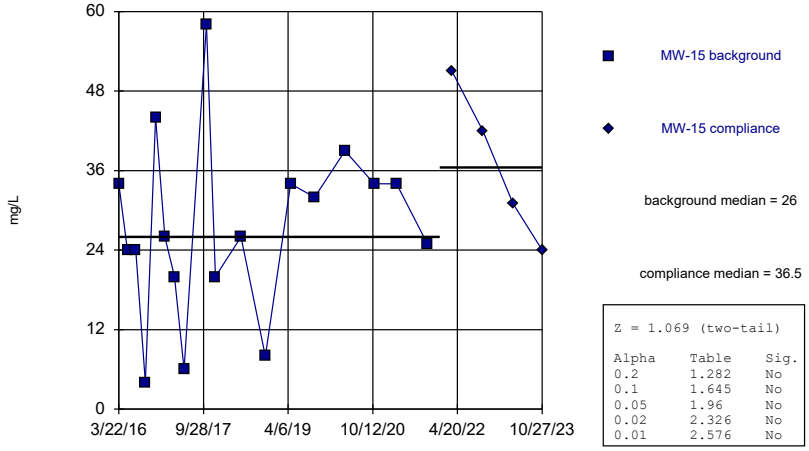
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-15



Z = 1.069 (two-tail)

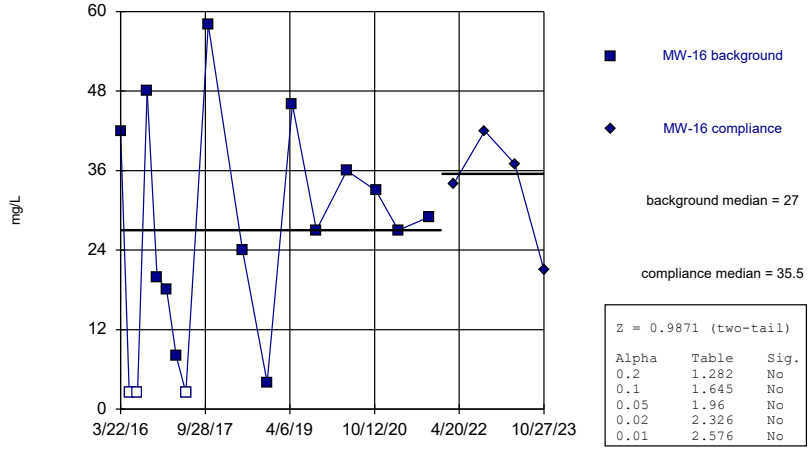
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-16



Z = 0.9871 (two-tail)

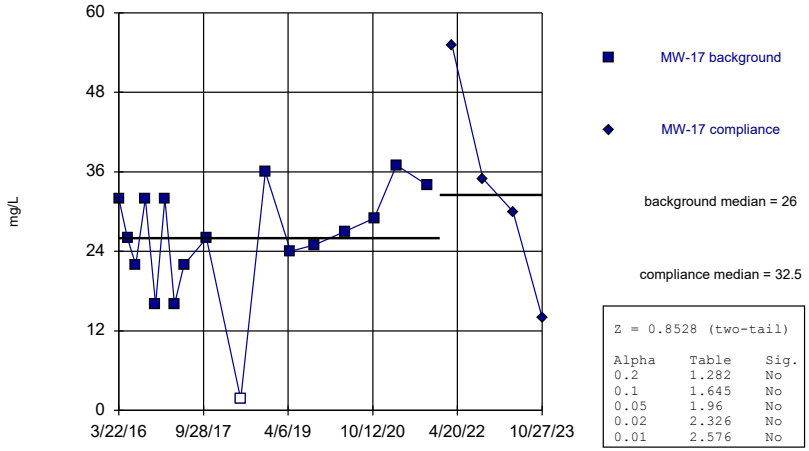
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-17



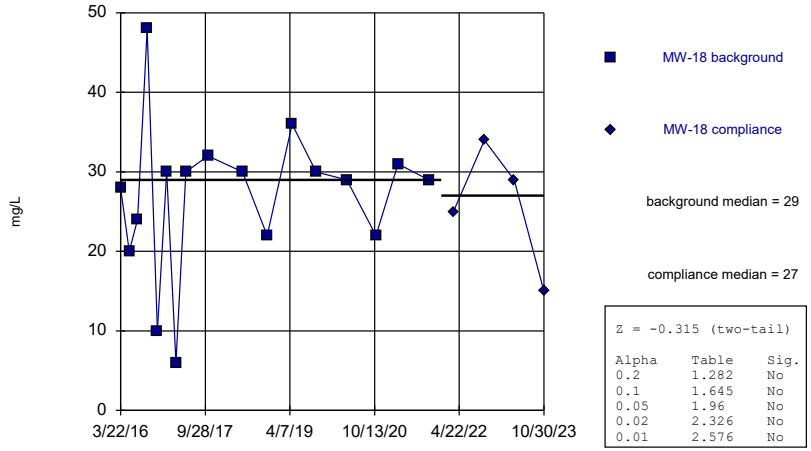

```
Z = 0.8528 (two-tail)

Alpha    Table    Sig.
0.2      1.282    No
0.1      1.645    No
0.05     1.96     No
0.02     2.326    No
0.01     2.576    No
```

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-18 (bg)



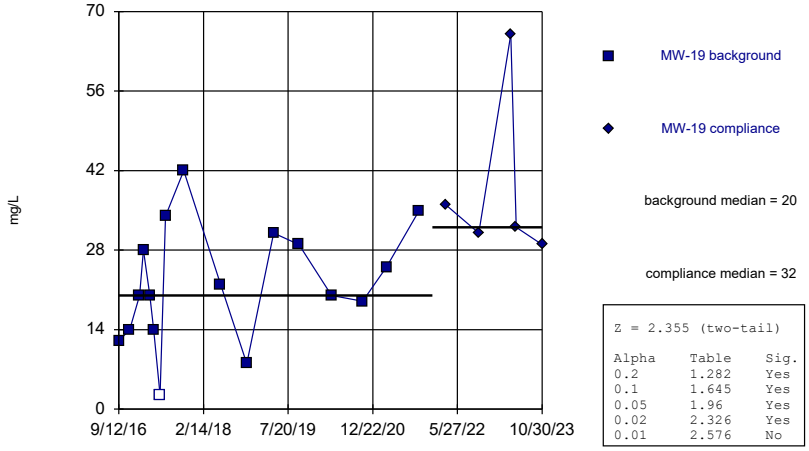

```
Z = -0.315 (two-tail)

Alpha    Table    Sig.
0.2      1.282    No
0.1      1.645    No
0.05     1.96     No
0.02     2.326    No
0.01     2.576    No
```

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

MW-19




```
Z = 2.355 (two-tail)

Alpha    Table    Sig.
0.2      1.282    Yes
0.1      1.645    Yes
0.05     1.96     Yes
0.02     2.326    Yes
0.01     2.576    No
```

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 1:16 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Boron (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/18/2016	<0.1	
1/19/2017	<0.1	
3/22/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	<0.1	
11/7/2018	<0.1	
4/22/2019	<0.1	
9/27/2019	0.0443 (J)	
4/13/2020	<0.1	
10/22/2020	0.103	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/15/2022		<0.1
10/4/2022		<0.1
4/19/2023		<0.1
10/27/2023		0.0305 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Boron (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	<0.08	
9/12/2016	<0.08	
11/19/2016	<0.08	
1/18/2017	<0.08	
3/22/2017	<0.08	
5/24/2017	<0.08	
10/17/2017	<0.08	
6/1/2018	<0.08	
11/7/2018	<0.08	
4/23/2019	<0.08	
9/26/2019	<0.08	
4/13/2020	<0.08	
10/22/2020	0.0559 (J)	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022		<0.08
10/4/2022		<0.08
4/19/2023		<0.08
10/27/2023		<0.08

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Boron (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/19/2016	<0.1	
1/19/2017	<0.1	
3/21/2017	<0.1	
5/23/2017	<0.1	
10/17/2017	<0.1	
6/1/2018	<0.1	
11/7/2018	<0.1	
4/23/2019	<0.1	
9/26/2019	<0.1	
4/13/2020	<0.1	
10/22/2020	0.0437 (J)	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/15/2022		<0.1
10/4/2022		<0.1
4/19/2023		<0.1
10/27/2023		0.0234 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Boron (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.0601 (B1)	
5/18/2016	<0.0601	
7/12/2016	0.026 (J)	
9/12/2016	<0.0601	
11/18/2016	<0.0601	
1/18/2017	<0.0601	
3/21/2017	<0.0601	
5/24/2017	<0.0601	
10/17/2017	0.025 (J)	
5/31/2018	0.022 (J)	
11/8/2018	<0.0601	
4/22/2019	<0.0601	
9/26/2019	0.042 (J)	
4/14/2020	<0.0601	
10/22/2020	0.0401 (J)	
3/16/2021	<0.0601	
10/5/2021	<0.0601	
3/16/2022		0.0927
10/5/2022		<0.0601
4/19/2023		0.0256 (J)
10/30/2023		0.0304 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Boron (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.08	
11/18/2016	<0.08	
1/18/2017	<0.08	
2/10/2017	<0.08	
3/21/2017	<0.08	
4/14/2017	<0.08	
5/23/2017	<0.08	
6/26/2017	<0.08	
10/17/2017	<0.08	
5/31/2018	<0.08	
11/8/2018	<0.08	
4/22/2019	<0.08	
9/26/2019	<0.08	
4/13/2020	<0.08	
10/21/2020	<0.08	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022		<0.08
10/5/2022		<0.08
4/20/2023		0.0318 (J)
5/24/2023		<0.08
10/30/2023		<0.08

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<1.9 (*)	
5/18/2016	1.8	
7/12/2016	1.9	
9/12/2016	2	
11/18/2016	2	
1/19/2017	1.8	
3/22/2017	1.8	
5/24/2017	2	
10/17/2017	2	
5/31/2018	1.8	
11/7/2018	2	
4/22/2019	1.71	
9/27/2019	1.99	
4/13/2020	2.03	
10/22/2020	2.02	
3/16/2021	1.74	
10/5/2021	1.87	
3/15/2022		1.87
10/4/2022		1.3
4/19/2023		1.65
10/27/2023		1.42

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<5.9 (*)	
5/18/2016	5.5	
7/12/2016	5.3	
9/12/2016	4.9	
11/19/2016	4.8	
1/18/2017	3.8	
3/22/2017	3.3	
5/24/2017	3.6	
10/17/2017	3.7	
6/1/2018	2.8	
11/7/2018	2.9	
4/23/2019	2.76	
9/26/2019	2.4	
4/13/2020	2.74	
10/22/2020	2.17	
3/16/2021	2.4	
10/5/2021	1.89	
3/15/2022		2.59
10/4/2022		2.56
4/19/2023		2.63
10/27/2023		2.28

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	1.3 (B1)	
5/18/2016	1.2	
7/12/2016	1.1	
9/12/2016	1.4	
11/19/2016	1.3	
1/19/2017	1.3	
3/21/2017	1.3	
5/23/2017	1.4	
10/17/2017	1.1	
6/1/2018	0.97	
11/7/2018	1.1	
4/23/2019	1.01	
9/26/2019	1.08	
4/13/2020	1.22	
10/22/2020	1.35	
3/16/2021	1.41	
10/5/2021	0.632	
3/15/2022		0.703
10/4/2022		1.11
4/19/2023		0.682
10/27/2023		1.13

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	0.61 (B1)	
5/18/2016	0.89	
7/11/2016	0.82	
9/13/2016	0.82	
11/17/2016	0.75	
1/18/2017	0.58	
3/21/2017	0.6	
5/23/2017	0.65	
10/17/2017	1.1	
12/15/2017	0.89 (RS)	
5/31/2018	1.1	
11/8/2018	0.76	
4/22/2019	1.09	
9/26/2019	0.758	
4/14/2020	0.92	
10/21/2020	0.798	
3/16/2021	0.681	
10/5/2021	0.793	
3/15/2022		1.18
10/5/2022		1.19
4/20/2023		1.07
10/27/2023		1.05

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-17	MW-17
3/22/2016	1.4 (B1)	
5/18/2016	1	
7/12/2016	1.1	
9/12/2016	0.98	
11/18/2016	1	
1/18/2017	1	
3/21/2017	0.91	
5/24/2017	0.96	
10/17/2017	0.96	
5/31/2018	1.1	
11/8/2018	0.96	
4/22/2019	0.946	
9/26/2019	1.11	
4/13/2020	1.03	
10/22/2020	0.969	
3/16/2021	1.12	
10/5/2021	0.883	
3/16/2022		1.04
10/5/2022		0.755
4/20/2023		0.855
10/27/2023		0.916

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	0.93 (B1)	
5/18/2016	0.85	
7/12/2016	0.69	
9/12/2016	0.86	
11/18/2016	0.41	
1/18/2017	0.81	
3/21/2017	0.76	
5/24/2017	0.8	
10/17/2017	0.69	
5/31/2018	0.75	
11/8/2018	0.78	
4/22/2019	0.531	
9/26/2019	0.631	
4/14/2020	0.627	
10/22/2020	0.553	
3/16/2021	0.57	
10/5/2021	0.43 (J)	
3/16/2022		0.406 (J)
10/5/2022		0.285 (J)
4/19/2023		0.368 (J)
10/30/2023		0.427 (J)

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	0.92	
11/18/2016	0.68	
1/18/2017	0.64	
2/10/2017	0.58	
3/21/2017	0.56	
4/14/2017	0.51	
5/23/2017	0.54	
6/26/2017	0.66	
10/17/2017	0.58	
5/31/2018	0.56	
11/8/2018	0.57	
4/22/2019	0.634	
9/26/2019		1.24
4/13/2020		0.687
10/21/2020		0.806
3/16/2021		2.23
10/5/2021		3.67
3/15/2022		5.84
10/5/2022		2.16
4/20/2023	15.4 (o)	
5/24/2023		1.7
10/30/2023		1.19

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
11/16/2006	8.5	
2/5/2007	8.8	
4/12/2007	9.5	
10/17/2007	12.1	
4/17/2008	13.1	
10/24/2008	13.7	
4/21/2009	11.9	
10/26/2009	11	
4/12/2010	12.5	
10/30/2010	10.8	
5/25/2011	10	
5/25/2012	10.9	
5/28/2013	11.4	
5/31/2014	9.2	
5/29/2015	11.5	
3/23/2016	13	
5/18/2016	13	
7/12/2016	13	
9/12/2016	13	
11/18/2016	14	
1/19/2017	13	
3/22/2017	15	
5/24/2017	14	
10/17/2017	15	
5/31/2018	12	
11/7/2018	14	
4/22/2019	13.3	
9/27/2019	13.4	
4/13/2020	14.2	
10/22/2020	17.4	
3/16/2021	13.3	
10/5/2021	12.5	
3/15/2022		13.6
10/4/2022		12
4/19/2023		12.2
10/27/2023		12.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	8.8 (B1)	
5/18/2016	7.2	
7/12/2016	7.5	
9/12/2016	8.4	
11/19/2016	12	
1/18/2017	11	
3/22/2017	11	
5/24/2017	10	
10/17/2017	10	
6/1/2018	9.9	
11/7/2018	10	
4/23/2019	9.3	
9/26/2019	8.35	
4/13/2020	7.9	
10/22/2020	6.5	
3/16/2021	7.32	
10/5/2021	6.59	
3/15/2022		8.36
10/4/2022		11.2
4/19/2023		10.2
10/27/2023		9.77

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel 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	
3/16/2021	8.94	
10/5/2021	9.3	
3/15/2022		5.55
10/4/2022		8.22
4/19/2023		5.21
10/27/2023		8.9

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	6.9 (B1)	
5/18/2016	5.4	
7/11/2016	8.1	
9/13/2016	6.2	
11/17/2016	7.3	
1/18/2017	6.3	
3/21/2017	7.3	
5/23/2017	7.4	
10/17/2017	9.9	
12/19/2017	7.8 (RS)	
5/31/2018	8.7	
11/8/2018	7.6	
4/22/2019	10.2	
6/25/2019	9.4	
9/26/2019	6.54	
4/14/2020	7.03	
10/21/2020	7.36	
3/16/2021	7.14	
10/5/2021	6.55	
3/15/2022		10.8
10/5/2022		11.7
4/20/2023		10
10/27/2023		10.4

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel 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	
10/22/2020	6.37	
3/16/2021	6.97	
10/5/2021	5.91	
3/16/2022		7
10/5/2022		5.51
4/20/2023		5.73
10/27/2023		6.16

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	11 (B1)	
5/18/2016	8.4	
7/12/2016	7.9	
9/12/2016	7.6	
11/18/2016	8.5	
1/18/2017	9.2	
3/21/2017	10	
5/24/2017	10	
10/17/2017	8.6	
5/31/2018	6.9	
11/8/2018	8.7	
4/22/2019	6.17	
9/26/2019	6.09	
4/14/2020	6.15	
10/22/2020	6.89	
3/16/2021	8.18	
10/5/2021	5.72	
3/16/2022		6.05
10/5/2022		4.97
4/19/2023		5.08
10/30/2023		11.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5	
11/18/2016	<6.3 (*)	
1/18/2017	5.3	
2/10/2017	5.4	
3/21/2017	5.3	
4/14/2017	4.9 (B)	
5/23/2017	5.5	
6/26/2017	5.4	
10/17/2017	5.4	
5/31/2018	5	
11/8/2018	5.2	
4/22/2019	4.91	
9/26/2019	5.03	
4/13/2020	4.9	
10/21/2020	5.25	
3/16/2021	5.72	
10/5/2021	5.1	
3/15/2022		6.91
10/5/2022		5.94
4/20/2023		4.84
5/24/2023		6.84
10/30/2023		5.88

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<0.1	
5/18/2016	<0.1	
7/12/2016	0.04 (J)	
9/12/2016	0.04 (J)	
11/18/2016	<0.1	
1/19/2017	<0.1	
3/22/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	0.04 (J)	
5/31/2018	0.04 (J)	
11/7/2018	0.05 (J)	
4/22/2019	0.0353 (J)	
9/27/2019	0.0438 (J)	
4/13/2020	0.0672 (J)	
10/22/2020	<0.1	
3/16/2021	0.0269 (J)	
10/5/2021	0.0561 (J)	
3/15/2022		<0.1
10/4/2022		0.0281 (J)
4/19/2023		0.0416 (J)
10/27/2023		0.058 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/18/2017	<0.026	
3/22/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0335 (J)	
9/26/2019	0.0272 (J)	
4/13/2020	0.0411 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.03 (J)	
3/15/2022		0.0364 (J)
10/4/2022		<0.026
4/19/2023		0.0415 (J)
10/27/2023		0.0511 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/19/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0275 (J)	
9/26/2019	<0.026	
4/13/2020	0.0484 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	<0.026	
3/15/2022		0.0302 (J)
10/4/2022		<0.026
4/19/2023		0.0275 (J)
10/27/2023		0.0459 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/11/2016	<0.026	
9/13/2016	<0.026	
11/17/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	0.029 (J)	
9/26/2019	0.0302 (J)	
4/14/2020	0.0496 (J)	
10/21/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.0264 (J)	
3/15/2022		0.0438 (J)
10/5/2022		<0.026
4/20/2023		0.0322 (J)
10/27/2023		0.0612 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-17	MW-17
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0263 (J)	
4/13/2020	0.0511 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	<0.026	
3/16/2022		0.0399 (J)
10/5/2022		<0.026
4/20/2023		0.0271 (J)
10/27/2023		0.0494 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	0.04 (J)	
9/12/2016	<0.1	
11/18/2016	<0.1	
1/18/2017	<0.1	
3/21/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	0.04 (J)	
11/8/2018	<0.1	
4/22/2019	0.0311 (J)	
9/26/2019	0.0366 (J)	
4/14/2020	0.0764 (J)	
10/22/2020	<0.1	
3/16/2021	0.0344 (J)	
10/5/2021	<0.1	
3/16/2022		<0.1
10/5/2022		<0.1
4/19/2023		0.0297 (J)
10/30/2023		<0.1

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
2/10/2017	<0.026	
3/21/2017	<0.026	
4/14/2017	<0.026	
5/23/2017	<0.026	
6/26/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0287 (J)	
4/13/2020	0.0382 (J)	
10/21/2020	<0.026	
3/16/2021	0.0376 (J)	
10/5/2021	<0.026	
3/15/2022		0.0423 (J)
10/5/2022		<0.026
4/20/2023		0.0566 (J)
5/24/2023		0.0849 (J)
10/30/2023		0.0511 (J)

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (SU) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	4.8	
5/18/2016	4.74	
7/12/2016	4.9	
9/12/2016	4.72	
11/18/2016	4.65	
1/19/2017	4.77	
3/22/2017	4.46	
5/24/2017	4.74	
10/17/2017	4.72	
11/30/2017	4.61	
5/31/2018	4.93	
11/7/2018	4.58	
4/22/2019	4.67	
9/27/2019	4.61	
4/13/2020	4.7	
10/22/2020	4.66	
3/16/2021	4.72	
10/5/2021	4.67	
3/15/2022		4.73
10/4/2022		4.62
4/19/2023		4.61
10/27/2023		4.7

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (SU) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	5.4	
5/18/2016	5.38	
7/12/2016	5.65	
9/12/2016	5.14	
11/19/2016	5.05	
1/18/2017	5.11	
3/22/2017	4.86	
5/24/2017	5.02	
10/17/2017	5.01	
6/1/2018	5	
11/7/2018	4.81	
4/23/2019	4.93	
9/26/2019	4.99	
4/13/2020	4.96	
10/22/2020	5.09	
3/16/2021	5.06	
10/5/2021	4.98	
3/15/2022		5.07
10/4/2022		4.9
4/19/2023		4.8
10/27/2023		4.8

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (SU) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	4.77	
5/18/2016	4.62	
7/12/2016	5.03	
9/12/2016	4.6	
11/19/2016	4.46	
1/19/2017	4.65	
3/21/2017	4.47	
5/23/2017	4.69	
10/17/2017	4.62	
6/1/2018	4.87	
11/7/2018	4.61	
4/23/2019	4.77	
9/26/2019	4.84	
4/13/2020	4.71	
10/22/2020	4.78	
3/16/2021	4.65	
10/5/2021	4.85	
3/15/2022		4.87
10/4/2022		4.71
4/19/2023		4.7
10/27/2023		4.59

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (SU) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	4.68	
5/18/2016	4.67	
7/11/2016	4.75	
9/13/2016	4.56	
11/17/2016	4.6	
1/18/2017	4.68	
3/21/2017	4.39	
5/23/2017	4.61	
10/17/2017	4.51	
5/31/2018	4.75	
11/8/2018	4.71	
4/22/2019	4.49	
9/26/2019	4.62	
4/14/2020	4.61	
10/21/2020	4.5	
3/16/2021	4.62	
10/5/2021	4.6	
3/15/2022		4.58
10/5/2022		4.52
4/20/2023		4.5
10/27/2023		4.47

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (SU) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney
Plant Daniel 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	
3/16/2021	5	
10/5/2021	4.88	
3/16/2022		4.91
10/5/2022		5
4/20/2023		4.79
10/27/2023		4.82

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (SU) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	4.63	
5/18/2016	4.58	
7/12/2016	4.7	
9/12/2016	4.6	
11/18/2016	4.52	
1/18/2017	4.63	
3/21/2017	4.45	
5/24/2017	4.55	
10/17/2017	4.61	
5/31/2018	4.84	
11/8/2018	4.63	
4/22/2019	4.64	
9/26/2019	4.71	
4/14/2020	4.75	
10/22/2020	4.7	
10/5/2021	4.68	
3/16/2022		4.79
10/5/2022		4.7
4/19/2023		4.65
10/30/2023		4.64

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (SU) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney
Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5.55	
11/18/2016	5.14	
1/18/2017	5.27	
2/10/2017	5.14	
3/21/2017	4.96	
4/14/2017	5.07	
5/23/2017	5.01	
6/26/2017	4.93	
10/17/2017	4.93	
11/30/2017	4.81	
5/31/2018	5.11	
11/8/2018	5.09	
4/22/2019	4.97	
9/26/2019	5.19	
4/13/2020	5.06	
10/21/2020	5.05	
3/16/2021	5.35	
10/5/2021	5.53	
3/15/2022		5.82
10/5/2022		5.3
4/20/2023		6.06
5/24/2023		5.15
10/30/2023		5.01

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
11/16/2006	5	
2/5/2007	<5	
4/12/2007	<5	
10/17/2007	5.7	
4/17/2008	7	
10/24/2008	6.6	
4/21/2009	5.2	
10/26/2009	8.3	
4/12/2010	6.8	
10/30/2010	10.8	
5/25/2011	11.5	
5/25/2012	8.2	
5/28/2013	6.9	
5/31/2014	3.5	
5/29/2015	3.3	
3/23/2016	1.8 (J)	
5/18/2016	4.1	
7/12/2016	3.8 (J)	
9/12/2016	3.9 (J)	
11/18/2016	5.4	
1/19/2017	<5	
3/22/2017	<5	
5/24/2017	2 (J)	
10/17/2017	<5	
5/31/2018	3 (J)	
11/7/2018	3.1 (J)	
4/22/2019	2.22	
9/27/2019	2.36	
4/13/2020	2.47	
10/22/2020	2.01	
3/16/2021	2.15	
10/5/2021	2.57	
3/15/2022		2.88
10/4/2022		2.04
4/19/2023		2.85
10/27/2023		2.72

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.756	
5/18/2016	1.9	
7/12/2016	2 (J)	
9/12/2016	2 (J)	
11/19/2016	1.7 (J)	
1/18/2017	<0.756	
3/22/2017	<0.756	
5/24/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.8 (J)	
11/7/2018	1.8 (J)	
4/23/2019	1.99	
9/26/2019	1.95	
4/13/2020	1.43	
10/22/2020	1.76	
3/16/2021	2.23	
10/5/2021	2.46	
3/15/2022		2.1
10/4/2022		<0.756
4/19/2023		1.93
10/27/2023		1.53

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.756	
5/18/2016	<0.756	
7/12/2016	<0.756	
9/12/2016	<0.756	
11/19/2016	<0.756	
1/19/2017	<0.756	
3/21/2017	<0.756	
5/23/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.5 (J)	
11/7/2018	1.5 (J)	
4/23/2019	1.43	
9/26/2019	1.2	
4/13/2020	0.992 (J)	
10/22/2020	1.04	
3/16/2021	1.07	
10/5/2021	3.38	
3/15/2022		1.33
10/4/2022		<0.756
4/19/2023		2.42
10/27/2023		1.7

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	<5	
5/18/2016	<5	
7/11/2016	<5	
9/13/2016	1.7 (J)	
11/17/2016	<5	
1/18/2017	<5	
3/21/2017	<5	
5/23/2017	<5	
10/17/2017	<5	
5/31/2018	2.2 (J)	
11/8/2018	1.7 (J)	
4/22/2019	2.52	
9/26/2019	2.28	
4/14/2020	2.27	
10/21/2020	2.15	
3/16/2021	2	
10/5/2021	2.22	
3/15/2022		2.29
10/5/2022		1.4
4/20/2023		2.59
10/27/2023		3.08

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-17	MW-17
3/22/2016	<5	
5/18/2016	1.4	
7/12/2016	1.8 (J)	
9/12/2016	2.2 (J)	
11/18/2016	1.5 (J)	
1/18/2017	1.5 (J)	
3/21/2017	<5	
5/24/2017	1.7 (J)	
10/17/2017	1.8 (J)	
5/31/2018	2.5 (J)	
11/8/2018	2.2 (J)	
4/22/2019	2.96	
9/26/2019	2.96	
4/13/2020	2.75	
10/22/2020	2.98	
3/16/2021	3.06	
10/5/2021	2.85	
3/16/2022		3.38
10/5/2022		2.05
4/20/2023		3.44
10/27/2023		3.82

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	3 (J)	
5/18/2016	3.9 (J)	
7/12/2016	3.9 (J)	
9/12/2016	4.5 (J)	
11/18/2016	4.2 (J)	
1/18/2017	3.8 (J)	
3/21/2017	<5 (*)	
5/24/2017	3 (J)	
10/17/2017	3.4 (J)	
5/31/2018	4.1 (J)	
11/8/2018	3.3 (J)	
4/22/2019	4.66	
9/26/2019	4.23	
4/14/2020	3.96	
10/22/2020	3.37	
3/16/2021	3.18	
10/5/2021	3.83	
3/16/2022		7.04
10/5/2022		6.04
4/19/2023		7.48
10/30/2023		7.39

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<5	
11/18/2016	<5	
1/18/2017	<5	
2/10/2017	<5	
3/21/2017	<5	
4/14/2017	1.5 (J)	
5/23/2017	<5	
6/26/2017	1.5 (J)	
10/17/2017	<5	
5/31/2018	1.9 (J)	
11/8/2018	1.5 (J)	
4/22/2019	2.09	
9/26/2019	2.1	
4/13/2020	1.69	
10/21/2020	1.31	
3/16/2021	2.72	
10/5/2021	1.91	
3/15/2022		4.86
10/5/2022		1.02
4/20/2023		3.73
5/24/2023		2.62
10/30/2023		2.73

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	40	
5/18/2016	52	
7/12/2016	42	
9/12/2016	42	
11/18/2016	82	
1/19/2017	32	
3/22/2017	6	
5/24/2017	48	
10/17/2017	34	
5/31/2018	32	
11/7/2018	52	
4/22/2019	50	
9/27/2019	50	
4/13/2020	63	
10/22/2020	41	
3/16/2021	39	
10/5/2021	43	
3/15/2022		53
10/4/2022		53
4/19/2023		67
10/27/2023		21

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	48 (B1)	
5/18/2016	26	
7/12/2016	24	
9/12/2016	32	
11/19/2016	76	
1/18/2017	48	
3/22/2017	30	
5/24/2017	46	
10/17/2017	8	
6/1/2018	44	
11/7/2018	26	
4/23/2019	48	
9/26/2019	39	
4/13/2020	28	
10/22/2020	25	
3/16/2021	41	
10/5/2021	29	
3/15/2022		56
10/4/2022		52
4/19/2023		41
10/27/2023		23

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel 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	
3/16/2021	34	
10/5/2021	25	
3/15/2022		51
10/4/2022		42
4/19/2023		31
10/27/2023		24

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	42 (B1)	
5/18/2016	<5	
7/11/2016	<5	
9/13/2016	48	
11/17/2016	20	
1/18/2017	18	
3/21/2017	8	
5/23/2017	<5	
10/17/2017	58	
5/31/2018	24	
11/8/2018	4 (J)	
4/22/2019	46	
9/26/2019	27	
4/14/2020	36	
10/21/2020	33	
3/16/2021	27	
10/5/2021	29	
3/15/2022		34
10/5/2022		42
4/20/2023		37
10/27/2023		21

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-17	MW-17
3/22/2016	32 (B1)	
5/18/2016	26	
7/12/2016	22	
9/12/2016	32	
11/18/2016	16	
1/18/2017	32	
3/21/2017	16	
5/24/2017	22	
10/17/2017	26	
5/31/2018	<3.4	
11/8/2018	36	
4/22/2019	24	
9/26/2019	25	
4/13/2020	27	
10/22/2020	29	
3/16/2021	37	
10/5/2021	34	
3/16/2022		55
10/5/2022		35
4/20/2023		30
10/27/2023		14

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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	28 (B1)	
5/18/2016	20	
7/12/2016	24	
9/12/2016	48	
11/18/2016	10	
1/18/2017	30	
3/21/2017	6	
5/24/2017	30	
10/17/2017	32	
5/31/2018	30	
11/8/2018	22	
4/22/2019	36	
9/26/2019	30	
4/14/2020	29	
10/22/2020	22	
3/16/2021	31	
10/5/2021	29	
3/16/2022		25
10/5/2022		34
4/19/2023		29
10/30/2023		15

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 1:22 PM View: Mann-Whitney

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	12	
11/18/2016	14	
1/18/2017	20	
2/10/2017	28	
3/21/2017	20	
4/14/2017	14	
5/23/2017	<5	
6/26/2017	34	
10/17/2017	42	
5/31/2018	22	
11/8/2018	8	
4/22/2019	31	
9/26/2019	29	
4/13/2020	20	
10/21/2020	19	
3/16/2021	25	
10/5/2021	35	
3/15/2022		36
10/5/2022		31
4/20/2023		66
5/24/2023		32
10/30/2023		29

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

Prediction Limits - Intrawell

Intrawell Prediction Limits - Significant Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 4:03 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	**MW-19**	**5.84**	**n/a**	**3/19/2024**	**6.05**	**Yes**	**21**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003999**	**NP Intra (normality) 1 of 2**

Intrawell Prediction Limits - All Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 4:03 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.103	n/a	3/18/2024	0.08ND	No	21	n/a	n/a	85.71	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.08	n/a	3/20/2024	0.08ND	No	21	n/a	n/a	95.24	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.08	n/a	3/19/2024	0.08ND	No	21	n/a	n/a	90.48	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.0927	n/a	3/20/2024	0.08ND	No	21	n/a	n/a	61.9	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-19	0.08	n/a	3/19/2024	0.08ND	No	22	n/a	n/a	95.45	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.14	n/a	3/18/2024	1.19	No	21	11.51	4.784	4.762	None	x^4	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	5.45	n/a	3/20/2024	1.7	No	21	1.778	0.2818	4.762	None	sqrt(x)	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.592	n/a	3/19/2024	1.16	No	21	1.133	0.2321	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.249	n/a	3/19/2024	0.87	No	22	0.8682	0.1942	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.253	n/a	3/19/2024	1.03	No	21	0.9997	0.1281	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-18	0.9961	n/a	3/20/2024	0.414J	No	21	0.6266	0.1871	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	**MW-19**	**5.84**	**n/a**	**3/19/2024**	**6.05**	**Yes**	**21**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.003999**	**NP Intra (normality) 1 of 2**
Chloride (mg/L)	MW-11	15.86	n/a	3/18/2024	8.82	No	36	12.44	1.847	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.24	n/a	3/20/2024	7.44	No	21	9.109	1.586	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.16	n/a	3/19/2024	8.42	No	21	7.741	1.227	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	11.41	n/a	3/19/2024	7.92	No	23	8.088	1.705	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.088	n/a	3/19/2024	7.06	No	21	6.617	0.745	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.41	n/a	3/20/2024	5.44	No	21	7.771	1.844	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	6.91	n/a	3/19/2024	5.59	No	22	n/a	n/a	4.545	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	3/18/2024	0.0518J	No	21	n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.0511	n/a	3/20/2024	0.0454J	No	21	n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.0484	n/a	3/19/2024	0.0428J	No	21	n/a	n/a	76.19	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.0612	n/a	3/19/2024	0.038J	No	21	n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.0511	n/a	3/19/2024	0.044J	No	21	n/a	n/a	76.19	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	3/20/2024	0.0417J	No	21	n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.0849	n/a	3/19/2024	0.0458J	No	22	n/a	n/a	68.18	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.897	4.494	3/18/2024	4.72	No	22	4.696	0.1027	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.464	4.648	3/20/2024	4.88	No	21	1.715	0.0234	0	None	x^(1/3)	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	4.981	4.434	3/19/2024	4.73	No	21	4.708	0.1383	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.781	4.402	3/19/2024	4.55	No	21	4.591	0.09588	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.42	4.79	3/19/2024	4.87	No	21	n/a	n/a	0	n/a	n/a	0.007998	NP Intra (normality) 1 of 2
pH (SU)	MW-18	4.83	4.47	3/20/2024	4.71	No	20	4.65	0.09032	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	6.06	4.81	3/19/2024	5.61	No	23	n/a	n/a	0	n/a	n/a	0.006831	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-11	11.5	n/a	3/18/2024	2.81	No	36	n/a	n/a	13.89	n/a	n/a	0.001429	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-14	2.435	n/a	3/20/2024	1.61	No	21	2.621	1.674	28.57	Kaplan-Meier	x^2	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-15	3.38	n/a	3/19/2024	1.35	No	21	n/a	n/a	47.62	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	3/19/2024	2.87	No	21	n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-17	3.848	n/a	3/19/2024	3.53	No	21	2.469	0.698	9.524	None	No	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-18	7.288	n/a	3/20/2024	6.1	No	21	2.055	0.3266	4.762	None	sqrt(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	3/19/2024	3.31	No	22	n/a	n/a	31.82	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	76.45	n/a	3/18/2024	33	No	21	44.86	15.99	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	67.05	n/a	3/20/2024	39	No	21	37.62	14.9	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	55.48	n/a	3/19/2024	17	No	22	29.09	13.45	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	59.04	n/a	3/19/2024	24	No	21	26.74	16.35	14.29	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	48.32	n/a	3/19/2024	20	No	21	27.22	10.68	4.762	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	44.58	n/a	3/20/2024	25	No	21	26.67	9.068	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	52.09	n/a	3/19/2024	31	No	22	25.89	13.35	4.545	None	No	0.00188	Param Intra 1 of 2

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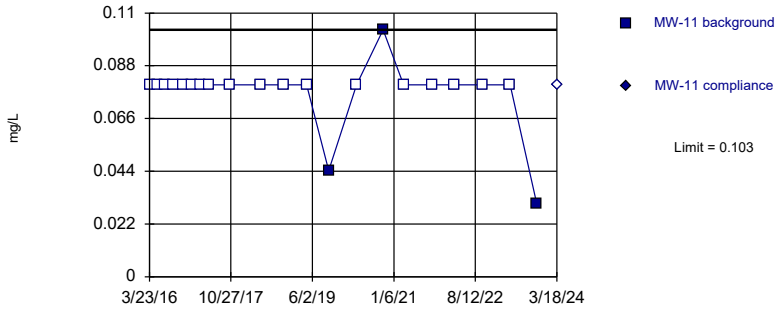
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Boron Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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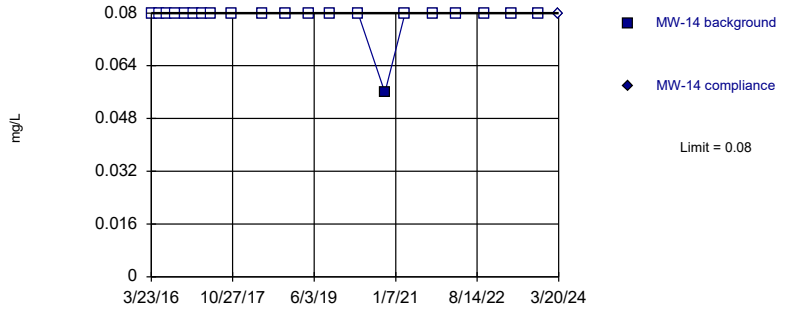
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 95.24% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

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Plant Daniel Data: NAMU CCR

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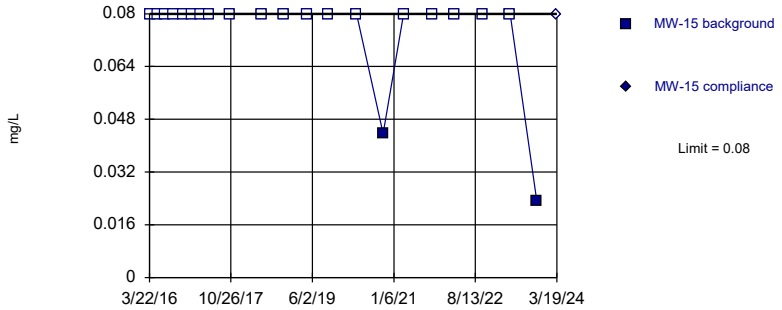
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 90.48% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

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Plant Daniel Data: NAMU CCR

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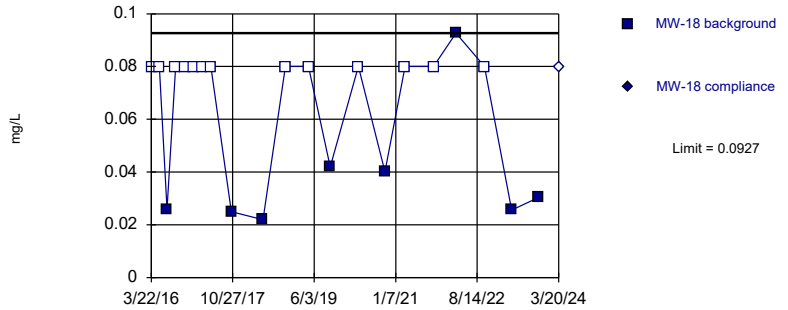
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 61.9% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

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Plant Daniel Data: NAMU CCR

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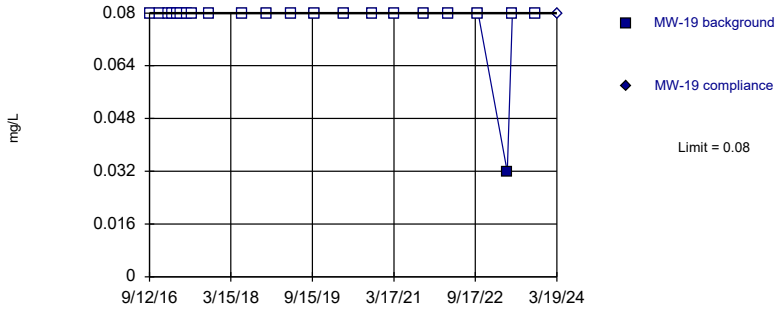
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 95.45% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Boron Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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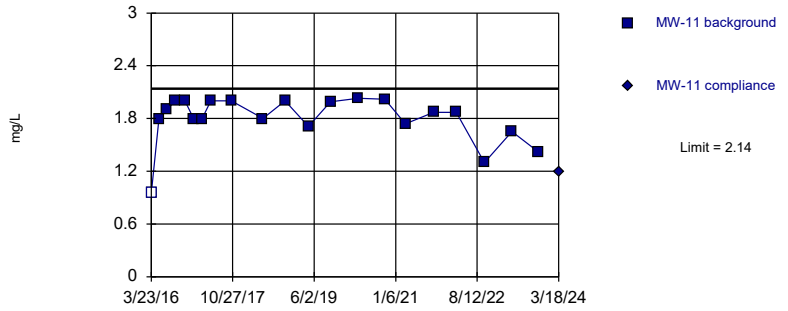
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^4 transformation): Mean=11.51, Std. Dev.=4.784, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8952, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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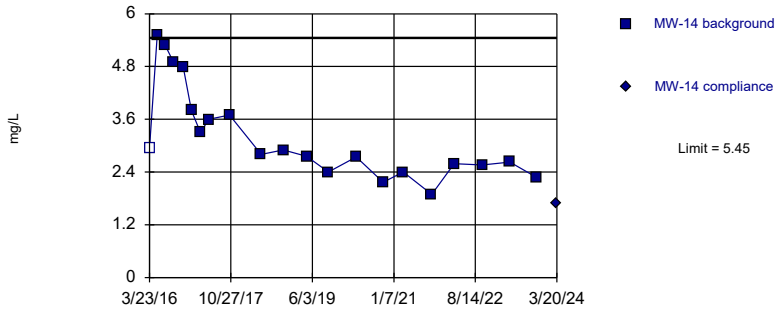
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.778, Std. Dev.=0.2818, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9038, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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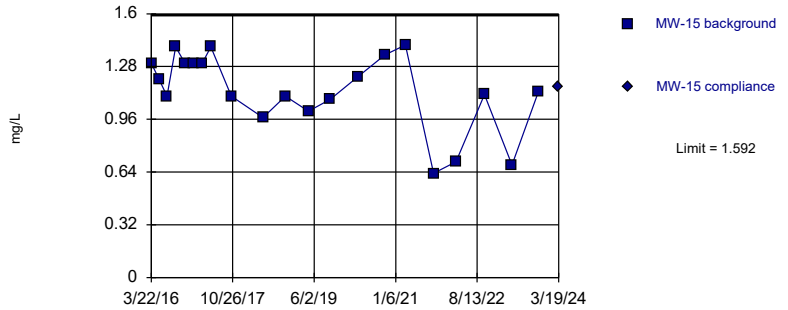
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.133, Std. Dev.=0.2321, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8874, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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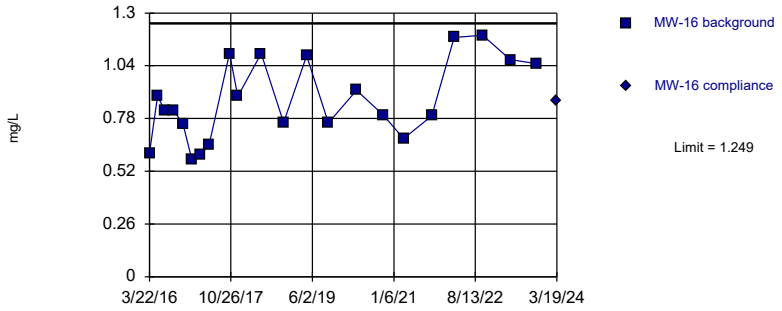
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.8682, Std. Dev.=0.1942, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9341, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 5/22/2024 4:00 PM View: Intrawell

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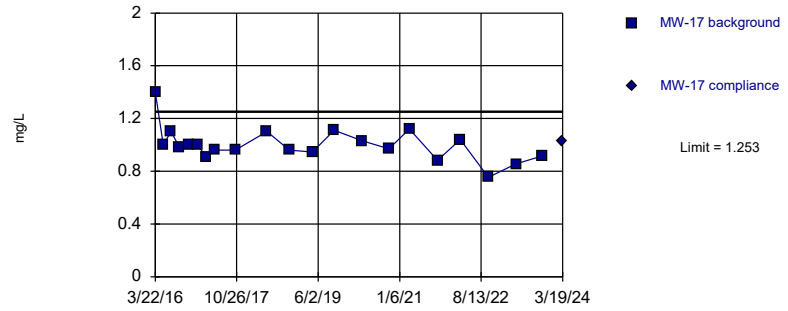
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.9997, Std. Dev.=0.1281, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8942, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

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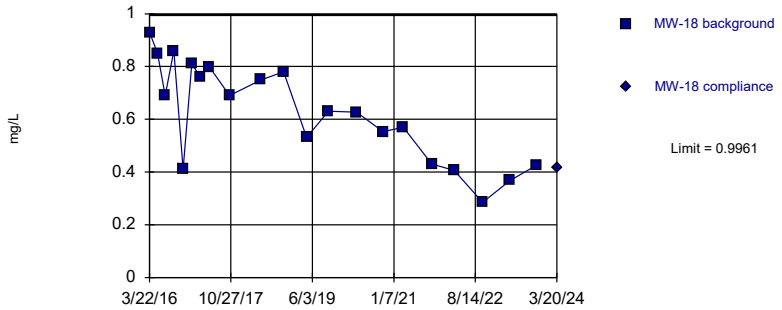
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.6266, Std. Dev.=0.1871, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9556, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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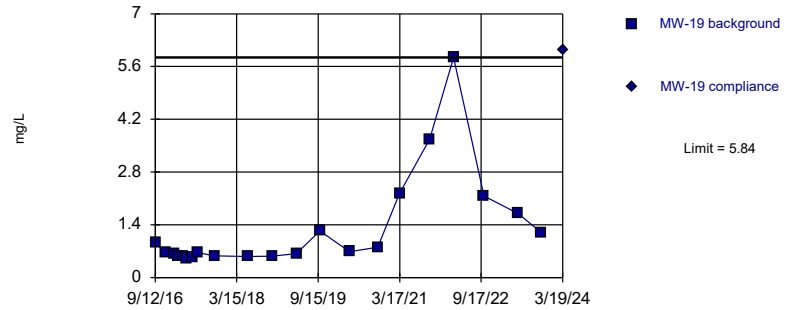
Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Calcium Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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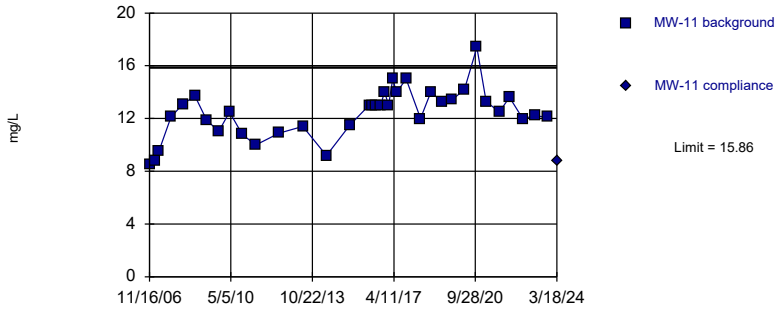
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=12.44, Std. Dev.=1.847, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9673, critical = 0.912. Kappa = 1.852 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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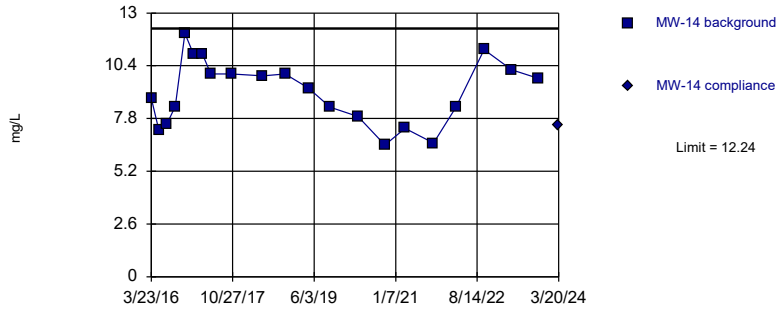
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=9.109, Std. Dev.=1.586, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9626, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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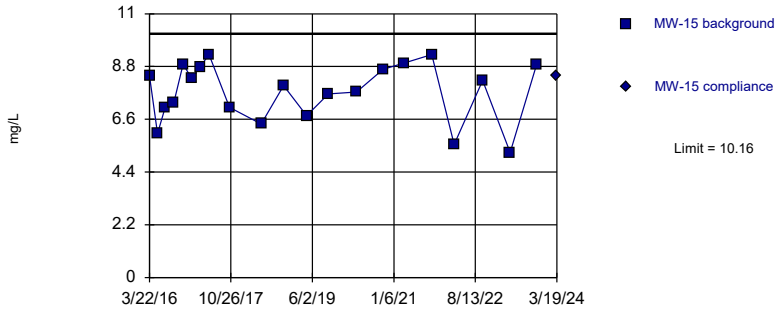
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.741, Std. Dev.=1.227, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9338, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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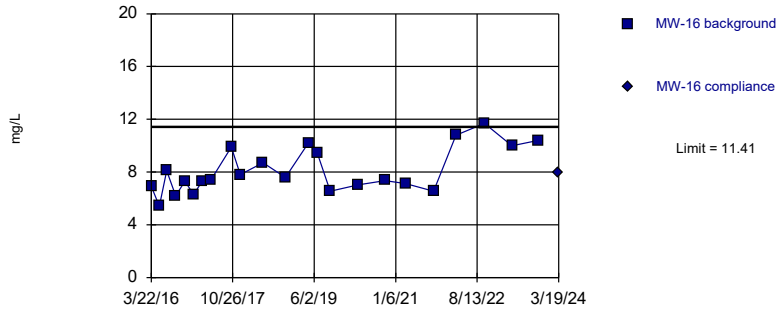
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.088, Std. Dev.=1.705, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9288, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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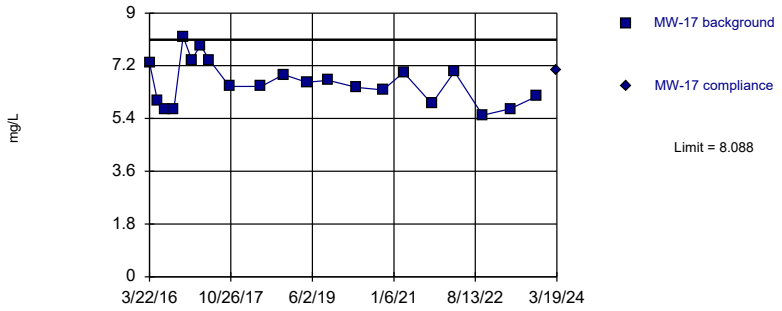
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.617, Std. Dev.=0.745, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9636, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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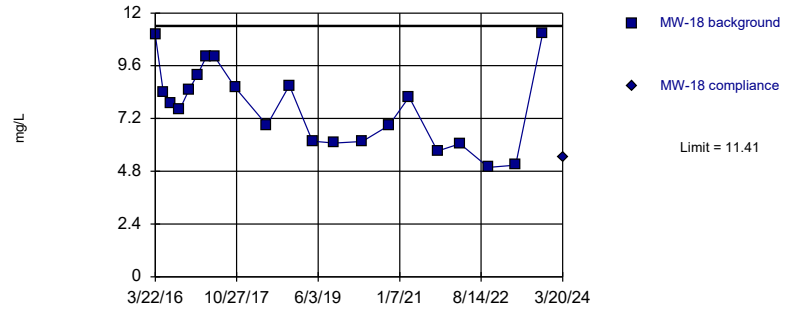
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.771, Std. Dev.=1.844, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9551, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 5/22/2024 4:00 PM View: Intrawell

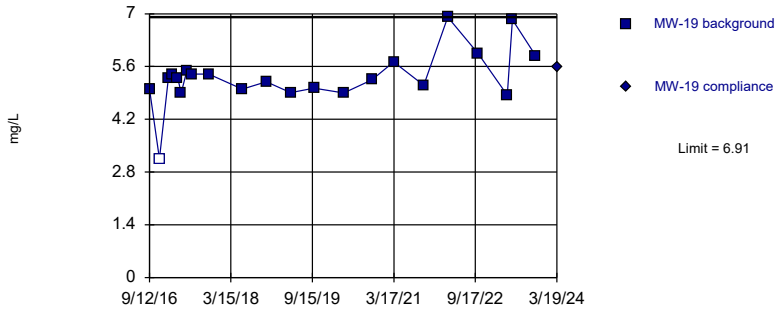
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. 4.545% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Chloride Analysis Run 5/22/2024 4:00 PM View: Intrawell

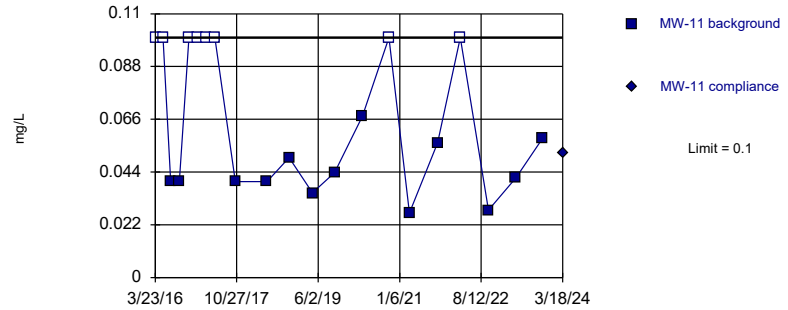
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 38.1% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

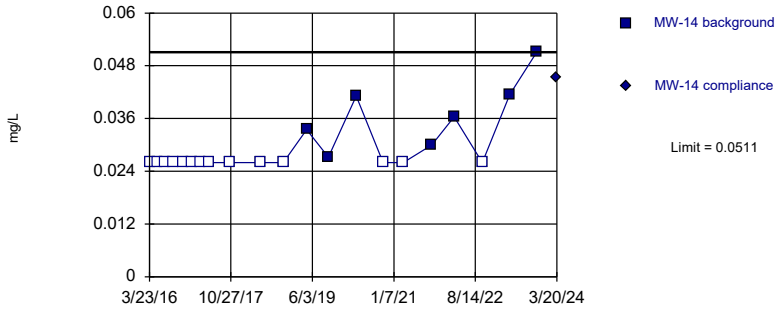
Constituent: Fluoride Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



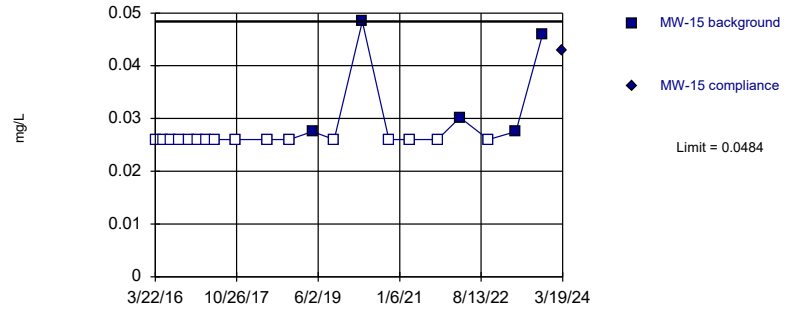
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



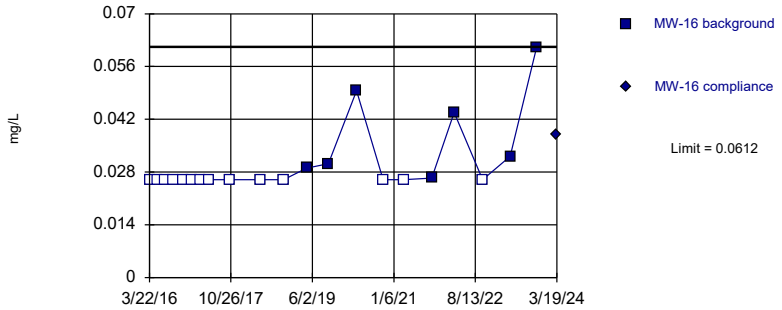
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 76.19% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



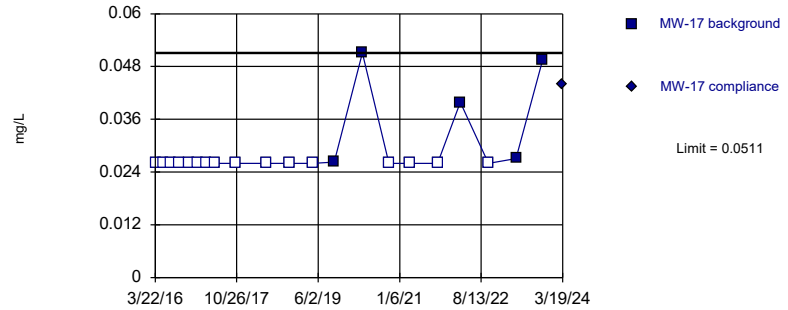
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



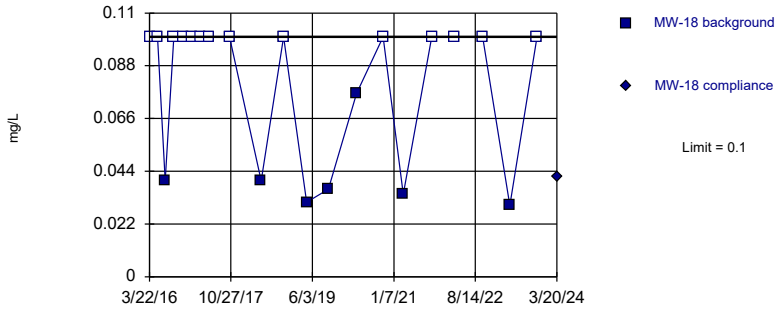
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 76.19% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



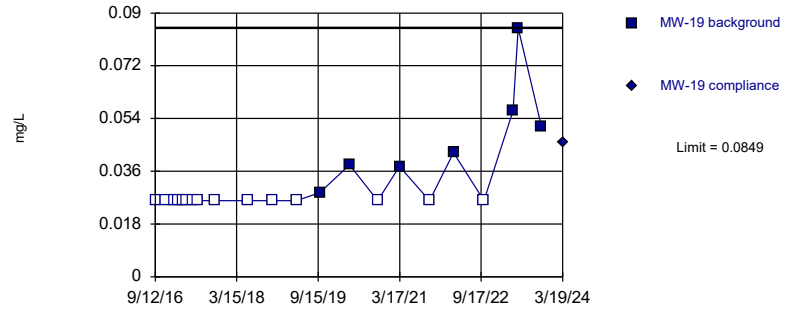
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



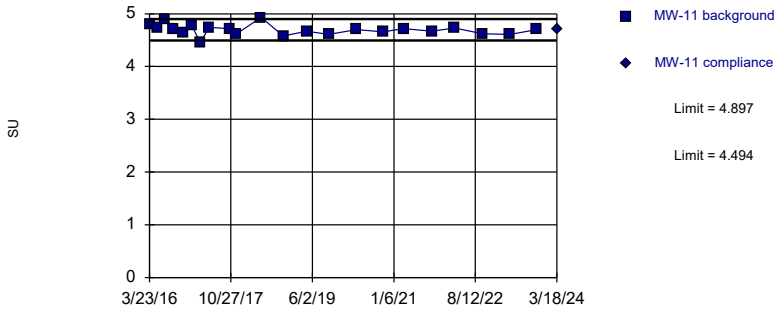
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 68.18% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Fluoride Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Within Limits

Prediction Limit

Intrawell Parametric



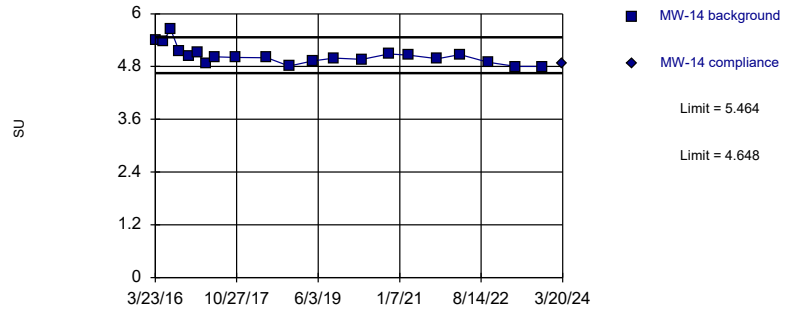
Background Data Summary: Mean=4.696, Std. Dev.=0.1027, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9532, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=1.715, Std. Dev.=0.0234, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8736, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

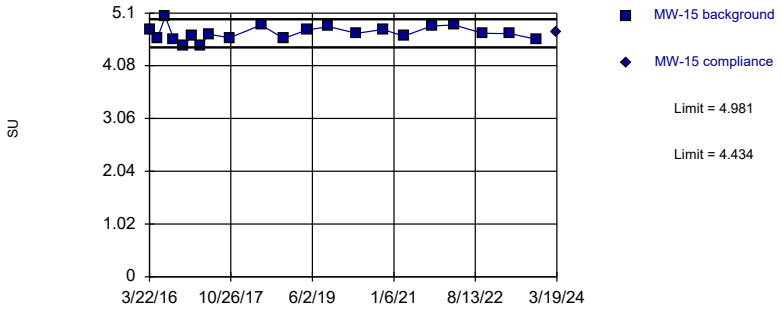
Constituent: pH Analysis Run 5/22/2024 4:00 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.708, Std. Dev.=0.1383, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9702, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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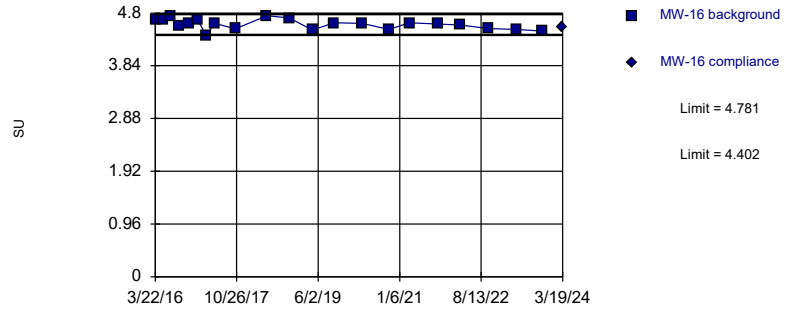
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.591, Std. Dev.=0.09588, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9705, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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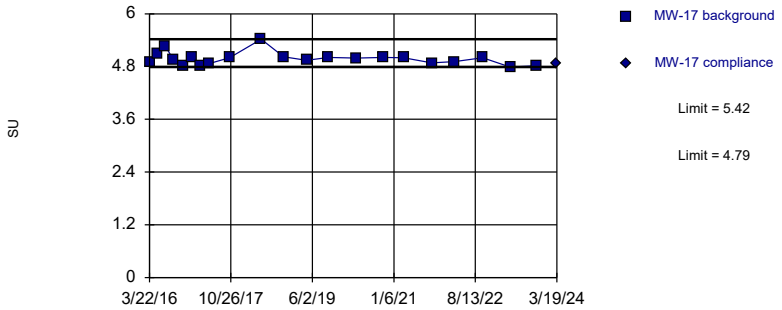
Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 21 background values. Well-constituent pair annual alpha = 0.01596. Individual comparison alpha = 0.007998 (1 of 2).

Constituent: pH Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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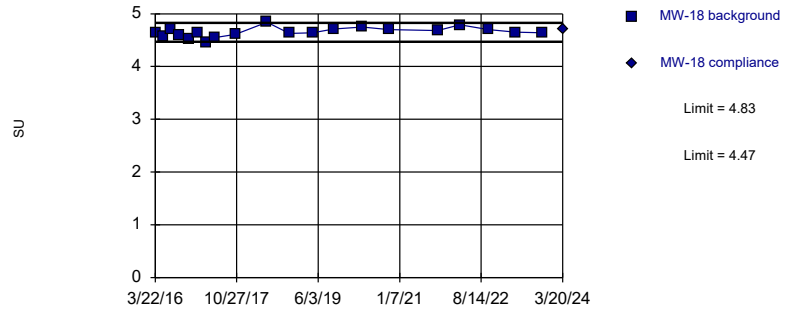
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.65, Std. Dev.=0.09032, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9817, critical = 0.868. Kappa = 1.988 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 5/22/2024 4:00 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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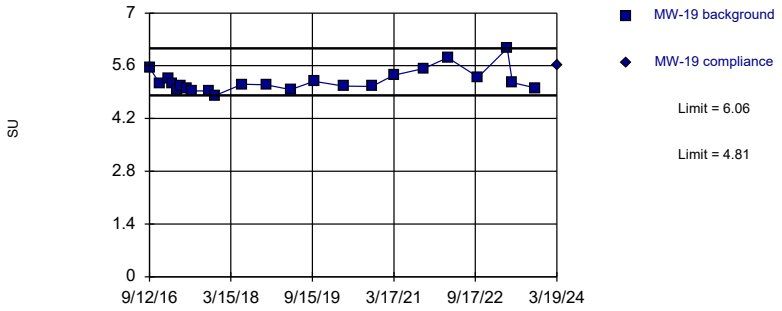
Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 23 background values. Well-constituent pair annual alpha = 0.01364. Individual comparison alpha = 0.006831 (1 of 2).

Constituent: pH Analysis Run 5/22/2024 4:01 PM View: Intrawell

Plant Daniel Data: NAMU CCR

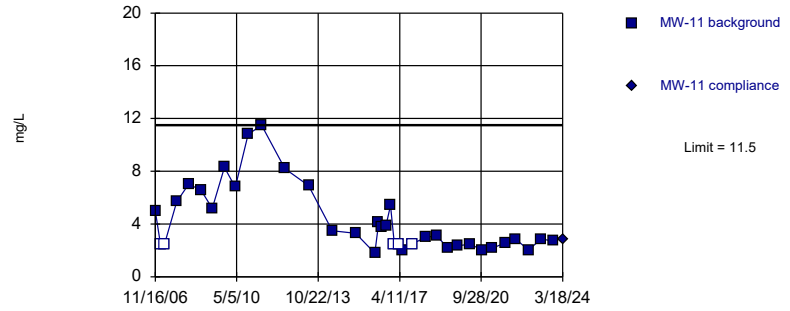
Sanitas™ v.10.0.16e Software licensed to . UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 13.89% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Sulfate Analysis Run 5/22/2024 4:01 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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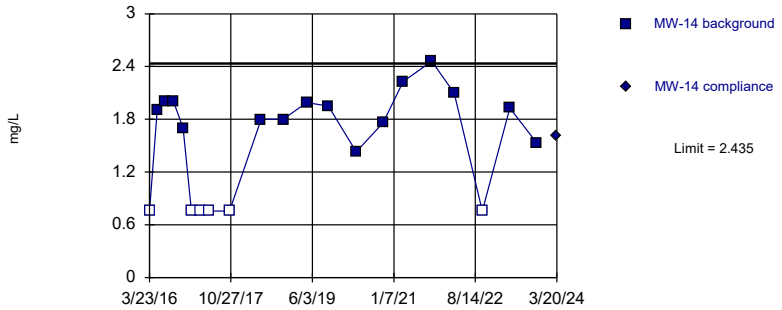
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation) (after Kaplan-Meier Adjustment): Mean=2.621, Std. Dev.=1.674, n=21, 28.57% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8992, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 5/22/2024 4:01 PM View: Intrawell

Plant Daniel Data: NAMU CCR

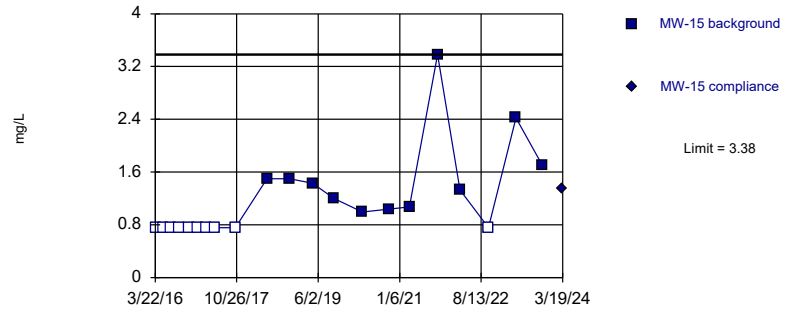
Sanitas™ v.10.0.16e Software licensed to . UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 47.62% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

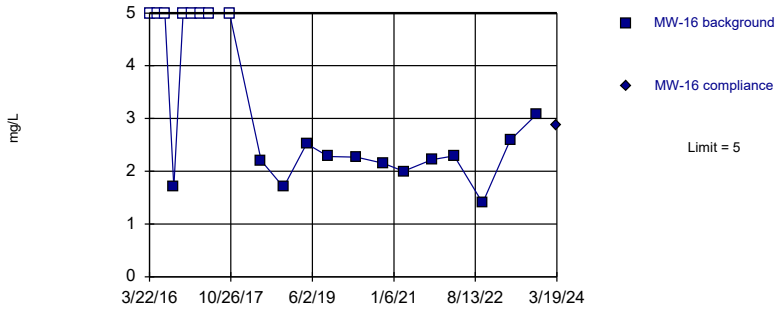
Constituent: Sulfate Analysis Run 5/22/2024 4:01 PM View: Intrawell

Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



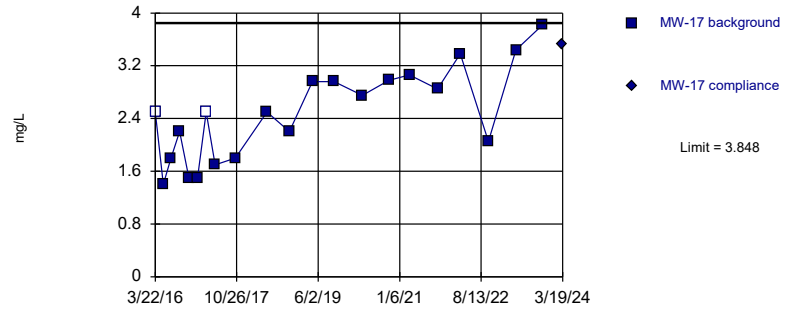
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 38.1% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Sulfate Analysis Run 5/22/2024 4:01 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



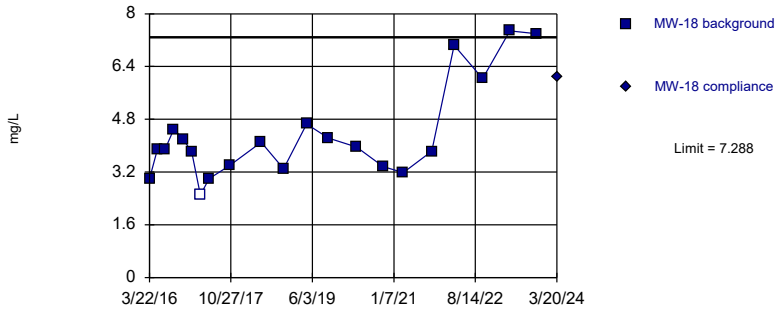
Background Data Summary: Mean=2.469, Std. Dev.=0.698, n=21, 9.524% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9623, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 5/22/2024 4:01 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



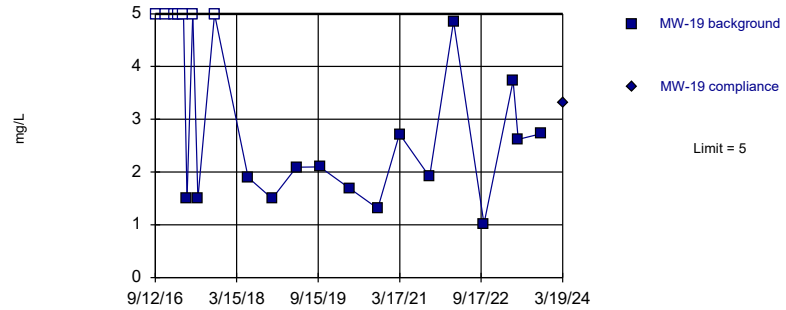
Background Data Summary (based on square root transformation): Mean=2.055, Std. Dev.=0.3266, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8734, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 5/22/2024 4:01 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. 31.82% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Sulfate Analysis Run 5/22/2024 4:01 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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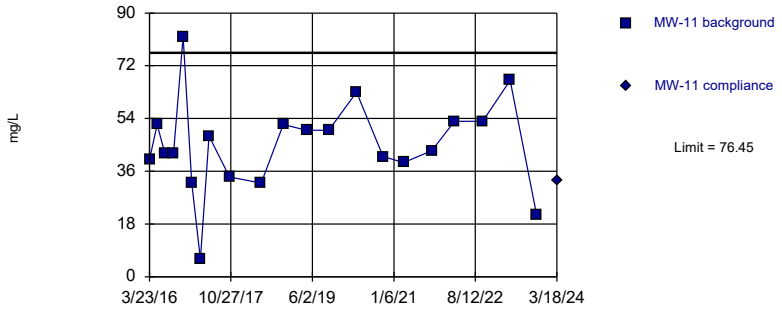
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=44.86, Std. Dev.=15.99, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9608, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 4:01 PM View: Intrawell

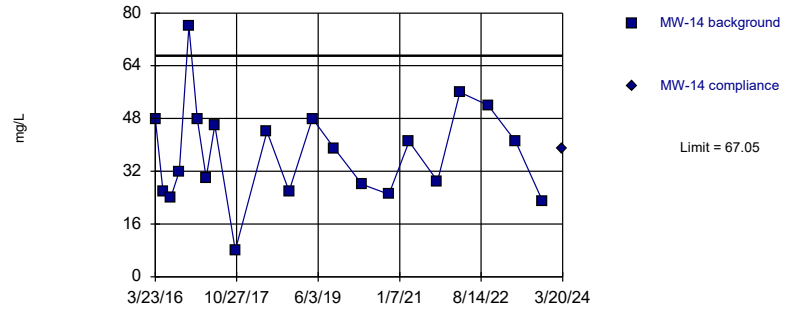
Plant Daniel Data: NAMU CCR

Sanitas™ v.10.0.16e Software licensed to . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=37.62, Std. Dev.=14.9, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9537, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 4:01 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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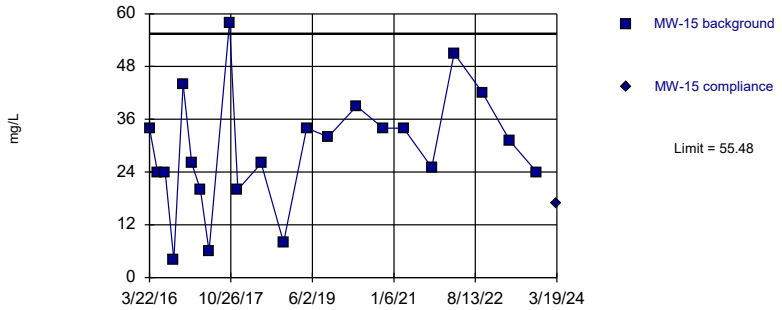
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=29.09, Std. Dev.=13.45, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9667, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 4:01 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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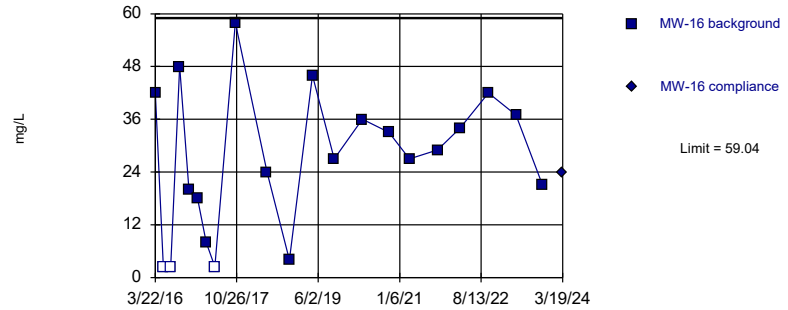
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=26.74, Std. Dev.=16.35, n=21, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9536, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 4:01 PM View: Intrawell

Plant Daniel Data: NAMU CCR

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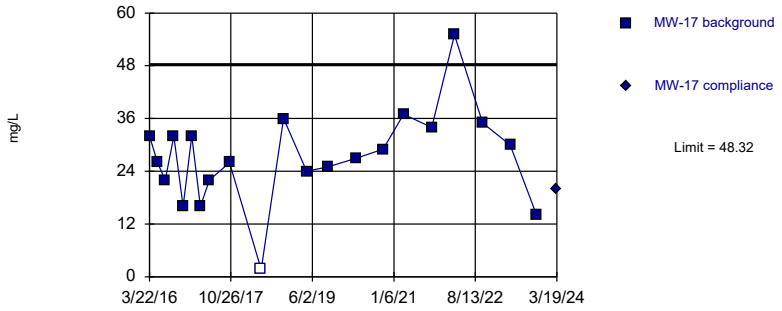
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=27.22, Std. Dev.=10.68, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9465, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 4:01 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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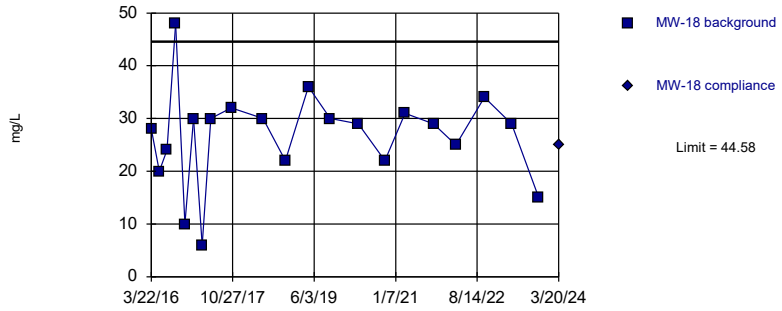
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=26.67, Std. Dev.=9.068, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.928, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 4:01 PM View: Intrawell
Plant Daniel Data: NAMU CCR

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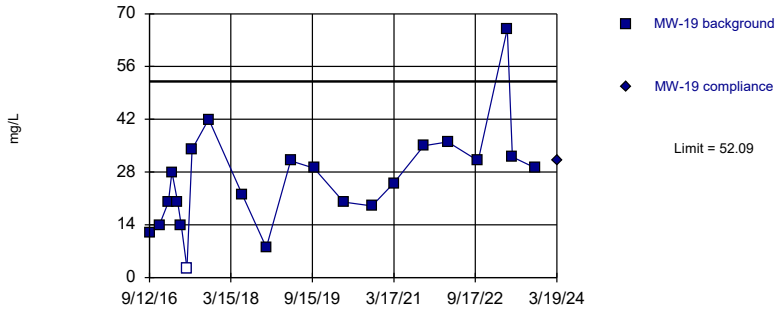
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=25.89, Std. Dev.=13.35, n=22, 4.545% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9302, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 5/22/2024 4:01 PM View: Intrawell
Plant Daniel Data: NAMU CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel 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	
10/22/2020	0.103	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022	<0.08	
10/4/2022	<0.08	
4/19/2023	<0.08	
10/27/2023	0.0305 (J)	
3/18/2024		<0.08

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.08 (B1)	
5/18/2016	<0.08	
7/12/2016	<0.08	
9/12/2016	<0.08	
11/19/2016	<0.08	
1/18/2017	<0.08	
3/22/2017	<0.08	
5/24/2017	<0.08	
10/17/2017	<0.08	
6/1/2018	<0.08	
11/7/2018	<0.08	
4/23/2019	<0.08	
9/26/2019	<0.08	
4/13/2020	<0.08	
10/22/2020	0.0559 (J)	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022	<0.08	
10/4/2022	<0.08	
4/19/2023	<0.08	
10/27/2023	<0.08	
3/20/2024		<0.08

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel 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	
10/22/2020	0.0437 (J)	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022	<0.08	
10/4/2022	<0.08	
4/19/2023	<0.08	
10/27/2023	0.0234 (J)	
3/19/2024		<0.08

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel 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)	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/16/2022	0.0927	
10/5/2022	<0.08	
4/19/2023	0.0256 (J)	
10/30/2023	0.0304 (J)	
3/20/2024		<0.08

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.08	
11/18/2016	<0.08	
1/18/2017	<0.08	
2/10/2017	<0.08	
3/21/2017	<0.08	
4/14/2017	<0.08	
5/23/2017	<0.08	
6/26/2017	<0.08	
10/17/2017	<0.08	
5/31/2018	<0.08	
11/8/2018	<0.08	
4/22/2019	<0.08	
9/26/2019	<0.08	
4/13/2020	<0.08	
10/21/2020	<0.08	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022	<0.08	
10/5/2022	<0.08	
4/20/2023	0.0318 (J)	
5/24/2023	<0.08	
10/30/2023	<0.08	
3/19/2024		<0.08

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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<1.9 (*)	
5/18/2016	1.8	
7/12/2016	1.9	
9/12/2016	2	
11/18/2016	2	
1/19/2017	1.8	
3/22/2017	1.8	
5/24/2017	2	
10/17/2017	2	
5/31/2018	1.8	
11/7/2018	2	
4/22/2019	1.71	
9/27/2019	1.99	
4/13/2020	2.03	
10/22/2020	2.02	
3/16/2021	1.74	
10/5/2021	1.87	
3/15/2022	1.87	
10/4/2022	1.3	
4/19/2023	1.65	
10/27/2023	1.42	
3/18/2024		1.19

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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<5.9 (*)	
5/18/2016	5.5	
7/12/2016	5.3	
9/12/2016	4.9	
11/19/2016	4.8	
1/18/2017	3.8	
3/22/2017	3.3	
5/24/2017	3.6	
10/17/2017	3.7	
6/1/2018	2.8	
11/7/2018	2.9	
4/23/2019	2.76	
9/26/2019	2.4	
4/13/2020	2.74	
10/22/2020	2.17	
3/16/2021	2.4	
10/5/2021	1.89	
3/15/2022	2.59	
10/4/2022	2.56	
4/19/2023	2.63	
10/27/2023	2.28	
3/20/2024		1.7

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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	1.3 (B1)	
5/18/2016	1.2	
7/12/2016	1.1	
9/12/2016	1.4	
11/19/2016	1.3	
1/19/2017	1.3	
3/21/2017	1.3	
5/23/2017	1.4	
10/17/2017	1.1	
6/1/2018	0.97	
11/7/2018	1.1	
4/23/2019	1.01	
9/26/2019	1.08	
4/13/2020	1.22	
10/22/2020	1.35	
3/16/2021	1.41	
10/5/2021	0.632	
3/15/2022	0.703	
10/4/2022	1.11	
4/19/2023	0.682	
10/27/2023	1.13	
3/19/2024		1.16

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	0.61 (B1)	
5/18/2016	0.89	
7/11/2016	0.82	
9/13/2016	0.82	
11/17/2016	0.75	
1/18/2017	0.58	
3/21/2017	0.6	
5/23/2017	0.65	
10/17/2017	1.1	
12/15/2017	0.89 (RS)	
5/31/2018	1.1	
11/8/2018	0.76	
4/22/2019	1.09	
9/26/2019	0.758	
4/14/2020	0.92	
10/21/2020	0.798	
3/16/2021	0.681	
10/5/2021	0.793	
3/15/2022	1.18	
10/5/2022	1.19	
4/20/2023	1.07	
10/27/2023	1.05	
3/19/2024		0.87

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-17	MW-17
3/22/2016	1.4 (B1)	
5/18/2016	1	
7/12/2016	1.1	
9/12/2016	0.98	
11/18/2016	1	
1/18/2017	1	
3/21/2017	0.91	
5/24/2017	0.96	
10/17/2017	0.96	
5/31/2018	1.1	
11/8/2018	0.96	
4/22/2019	0.946	
9/26/2019	1.11	
4/13/2020	1.03	
10/22/2020	0.969	
3/16/2021	1.12	
10/5/2021	0.883	
3/16/2022	1.04	
10/5/2022	0.755	
4/20/2023	0.855	
10/27/2023	0.916	
3/19/2024		1.03

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	0.93 (B1)	
5/18/2016	0.85	
7/12/2016	0.69	
9/12/2016	0.86	
11/18/2016	0.41	
1/18/2017	0.81	
3/21/2017	0.76	
5/24/2017	0.8	
10/17/2017	0.69	
5/31/2018	0.75	
11/8/2018	0.78	
4/22/2019	0.531	
9/26/2019	0.631	
4/14/2020	0.627	
10/22/2020	0.553	
3/16/2021	0.57	
10/5/2021	0.43 (J)	
3/16/2022	0.406 (J)	
10/5/2022	0.285 (J)	
4/19/2023	0.368 (J)	
10/30/2023	0.427 (J)	
3/20/2024		0.414 (J)

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	0.92	
11/18/2016	0.68	
1/18/2017	0.64	
2/10/2017	0.58	
3/21/2017	0.56	
4/14/2017	0.51	
5/23/2017	0.54	
6/26/2017	0.66	
10/17/2017	0.58	
5/31/2018	0.56	
11/8/2018	0.57	
4/22/2019	0.634	
9/26/2019	1.24	
4/13/2020	0.687	
10/21/2020	0.806	
3/16/2021	2.23	
10/5/2021	3.67	
3/15/2022	5.84	
10/5/2022	2.16	
4/20/2023	15.4 (o)	
5/24/2023	1.7	
10/30/2023	1.19	
3/19/2024		6.05

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
11/16/2006	8.5	
2/5/2007	8.8	
4/12/2007	9.5	
10/17/2007	12.1	
4/17/2008	13.1	
10/24/2008	13.7	
4/21/2009	11.9	
10/26/2009	11	
4/12/2010	12.5	
10/30/2010	10.8	
5/25/2011	10	
5/25/2012	10.9	
5/28/2013	11.4	
5/31/2014	9.2	
5/29/2015	11.5	
3/23/2016	13	
5/18/2016	13	
7/12/2016	13	
9/12/2016	13	
11/18/2016	14	
1/19/2017	13	
3/22/2017	15	
5/24/2017	14	
10/17/2017	15	
5/31/2018	12	
11/7/2018	14	
4/22/2019	13.3	
9/27/2019	13.4	
4/13/2020	14.2	
10/22/2020	17.4	
3/16/2021	13.3	
10/5/2021	12.5	
3/15/2022	13.6	
10/4/2022	12	
4/19/2023	12.2	
10/27/2023	12.1	
3/18/2024		8.82

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	8.8 (B1)	
5/18/2016	7.2	
7/12/2016	7.5	
9/12/2016	8.4	
11/19/2016	12	
1/18/2017	11	
3/22/2017	11	
5/24/2017	10	
10/17/2017	10	
6/1/2018	9.9	
11/7/2018	10	
4/23/2019	9.3	
9/26/2019	8.35	
4/13/2020	7.9	
10/22/2020	6.5	
3/16/2021	7.32	
10/5/2021	6.59	
3/15/2022	8.36	
10/4/2022	11.2	
4/19/2023	10.2	
10/27/2023	9.77	
3/20/2024		7.44

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel 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	
3/16/2021	8.94	
10/5/2021	9.3	
3/15/2022	5.55	
10/4/2022	8.22	
4/19/2023	5.21	
10/27/2023	8.9	
3/19/2024		8.42

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	6.9 (B1)	
5/18/2016	5.4	
7/11/2016	8.1	
9/13/2016	6.2	
11/17/2016	7.3	
1/18/2017	6.3	
3/21/2017	7.3	
5/23/2017	7.4	
10/17/2017	9.9	
12/19/2017	7.8 (RS)	
5/31/2018	8.7	
11/8/2018	7.6	
4/22/2019	10.2	
6/25/2019	9.4	
9/26/2019	6.54	
4/14/2020	7.03	
10/21/2020	7.36	
3/16/2021	7.14	
10/5/2021	6.55	
3/15/2022	10.8	
10/5/2022	11.7	
4/20/2023	10	
10/27/2023	10.4	
3/19/2024		7.92

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel 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	
10/22/2020	6.37	
3/16/2021	6.97	
10/5/2021	5.91	
3/16/2022	7	
10/5/2022	5.51	
4/20/2023	5.73	
10/27/2023	6.16	
3/19/2024		7.06

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	11 (B1)	
5/18/2016	8.4	
7/12/2016	7.9	
9/12/2016	7.6	
11/18/2016	8.5	
1/18/2017	9.2	
3/21/2017	10	
5/24/2017	10	
10/17/2017	8.6	
5/31/2018	6.9	
11/8/2018	8.7	
4/22/2019	6.17	
9/26/2019	6.09	
4/14/2020	6.15	
10/22/2020	6.89	
3/16/2021	8.18	
10/5/2021	5.72	
3/16/2022	6.05	
10/5/2022	4.97	
4/19/2023	5.08	
10/30/2023	11.1	
3/20/2024		5.44

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5	
11/18/2016	<6.3 (*)	
1/18/2017	5.3	
2/10/2017	5.4	
3/21/2017	5.3	
4/14/2017	4.9 (B)	
5/23/2017	5.5	
6/26/2017	5.4	
10/17/2017	5.4	
5/31/2018	5	
11/8/2018	5.2	
4/22/2019	4.91	
9/26/2019	5.03	
4/13/2020	4.9	
10/21/2020	5.25	
3/16/2021	5.72	
10/5/2021	5.1	
3/15/2022	6.91	
10/5/2022	5.94	
4/20/2023	4.84	
5/24/2023	6.84	
10/30/2023	5.88	
3/19/2024		5.59

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	<0.1	
5/18/2016	<0.1	
7/12/2016	0.04 (J)	
9/12/2016	0.04 (J)	
11/18/2016	<0.1	
1/19/2017	<0.1	
3/22/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	0.04 (J)	
5/31/2018	0.04 (J)	
11/7/2018	0.05 (J)	
4/22/2019	0.0353 (J)	
9/27/2019	0.0438 (J)	
4/13/2020	0.0672 (J)	
10/22/2020	<0.1	
3/16/2021	0.0269 (J)	
10/5/2021	0.0561 (J)	
3/15/2022	<0.1	
10/4/2022	0.0281 (J)	
4/19/2023	0.0416 (J)	
10/27/2023	0.058 (J)	
3/18/2024		0.0518 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/18/2017	<0.026	
3/22/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0335 (J)	
9/26/2019	0.0272 (J)	
4/13/2020	0.0411 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.03 (J)	
3/15/2022	0.0364 (J)	
10/4/2022	<0.026	
4/19/2023	0.0415 (J)	
10/27/2023	0.0511 (J)	
3/20/2024		0.0454 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/19/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0275 (J)	
9/26/2019	<0.026	
4/13/2020	0.0484 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	<0.026	
3/15/2022	0.0302 (J)	
10/4/2022	<0.026	
4/19/2023	0.0275 (J)	
10/27/2023	0.0459 (J)	
3/19/2024		0.0428 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/11/2016	<0.026	
9/13/2016	<0.026	
11/17/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	0.029 (J)	
9/26/2019	0.0302 (J)	
4/14/2020	0.0496 (J)	
10/21/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.0264 (J)	
3/15/2022	0.0438 (J)	
10/5/2022	<0.026	
4/20/2023	0.0322 (J)	
10/27/2023	0.0612 (J)	
3/19/2024		0.038 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-17	MW-17
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0263 (J)	
4/13/2020	0.0511 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	<0.026	
3/16/2022	0.0399 (J)	
10/5/2022	<0.026	
4/20/2023	0.0271 (J)	
10/27/2023	0.0494 (J)	
3/19/2024		0.044 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	0.04 (J)	
9/12/2016	<0.1	
11/18/2016	<0.1	
1/18/2017	<0.1	
3/21/2017	<0.1	
5/24/2017	<0.1	
10/17/2017	<0.1	
5/31/2018	0.04 (J)	
11/8/2018	<0.1	
4/22/2019	0.0311 (J)	
9/26/2019	0.0366 (J)	
4/14/2020	0.0764 (J)	
10/22/2020	<0.1	
3/16/2021	0.0344 (J)	
10/5/2021	<0.1	
3/16/2022	<0.1	
10/5/2022	<0.1	
4/19/2023	0.0297 (J)	
10/30/2023	<0.1	
3/20/2024		0.0417 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
2/10/2017	<0.026	
3/21/2017	<0.026	
4/14/2017	<0.026	
5/23/2017	<0.026	
6/26/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0287 (J)	
4/13/2020	0.0382 (J)	
10/21/2020	<0.026	
3/16/2021	0.0376 (J)	
10/5/2021	<0.026	
3/15/2022	0.0423 (J)	
10/5/2022	<0.026	
4/20/2023	0.0566 (J)	
5/24/2023	0.0849 (J)	
10/30/2023	0.0511 (J)	
3/19/2024		0.0458 (J)

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

Prediction Limit

Constituent: pH (SU) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	4.8	
5/18/2016	4.74	
7/12/2016	4.9	
9/12/2016	4.72	
11/18/2016	4.65	
1/19/2017	4.77	
3/22/2017	4.46	
5/24/2017	4.74	
10/17/2017	4.72	
11/30/2017	4.61	
5/31/2018	4.93	
11/7/2018	4.58	
4/22/2019	4.67	
9/27/2019	4.61	
4/13/2020	4.7	
10/22/2020	4.66	
3/16/2021	4.72	
10/5/2021	4.67	
3/15/2022	4.73	
10/4/2022	4.62	
4/19/2023	4.61	
10/27/2023	4.7	
3/18/2024		4.72

Prediction Limit

Constituent: pH (SU) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	5.4	
5/18/2016	5.38	
7/12/2016	5.65	
9/12/2016	5.14	
11/19/2016	5.05	
1/18/2017	5.11	
3/22/2017	4.86	
5/24/2017	5.02	
10/17/2017	5.01	
6/1/2018	5	
11/7/2018	4.81	
4/23/2019	4.93	
9/26/2019	4.99	
4/13/2020	4.96	
10/22/2020	5.09	
3/16/2021	5.06	
10/5/2021	4.98	
3/15/2022	5.07	
10/4/2022	4.9	
4/19/2023	4.8	
10/27/2023	4.8	
3/20/2024		4.88

Prediction Limit

Constituent: pH (SU) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	4.77	
5/18/2016	4.62	
7/12/2016	5.03	
9/12/2016	4.6	
11/19/2016	4.46	
1/19/2017	4.65	
3/21/2017	4.47	
5/23/2017	4.69	
10/17/2017	4.62	
6/1/2018	4.87	
11/7/2018	4.61	
4/23/2019	4.77	
9/26/2019	4.84	
4/13/2020	4.71	
10/22/2020	4.78	
3/16/2021	4.65	
10/5/2021	4.85	
3/15/2022	4.87	
10/4/2022	4.71	
4/19/2023	4.7	
10/27/2023	4.59	
3/19/2024		4.73

Prediction Limit

Constituent: pH (SU) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	4.68	
5/18/2016	4.67	
7/11/2016	4.75	
9/13/2016	4.56	
11/17/2016	4.6	
1/18/2017	4.68	
3/21/2017	4.39	
5/23/2017	4.61	
10/17/2017	4.51	
5/31/2018	4.75	
11/8/2018	4.71	
4/22/2019	4.49	
9/26/2019	4.62	
4/14/2020	4.61	
10/21/2020	4.5	
3/16/2021	4.62	
10/5/2021	4.6	
3/15/2022	4.58	
10/5/2022	4.52	
4/20/2023	4.5	
10/27/2023	4.47	
3/19/2024		4.55

Prediction Limit

Constituent: pH (SU) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel 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	
3/16/2021	5	
10/5/2021	4.88	
3/16/2022	4.91	
10/5/2022	5	
4/20/2023	4.79	
10/27/2023	4.82	
3/19/2024		4.87

Prediction Limit

Constituent: pH (SU) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	4.63	
5/18/2016	4.58	
7/12/2016	4.7	
9/12/2016	4.6	
11/18/2016	4.52	
1/18/2017	4.63	
3/21/2017	4.45	
5/24/2017	4.55	
10/17/2017	4.61	
5/31/2018	4.84	
11/8/2018	4.63	
4/22/2019	4.64	
9/26/2019	4.71	
4/14/2020	4.75	
10/22/2020	4.7	
10/5/2021	4.68	
3/16/2022	4.79	
10/5/2022	4.7	
4/19/2023	4.65	
10/30/2023	4.64	
3/20/2024		4.71

Prediction Limit

Constituent: pH (SU) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5.55	
11/18/2016	5.14	
1/18/2017	5.27	
2/10/2017	5.14	
3/21/2017	4.96	
4/14/2017	5.07	
5/23/2017	5.01	
6/26/2017	4.93	
10/17/2017	4.93	
11/30/2017	4.81	
5/31/2018	5.11	
11/8/2018	5.09	
4/22/2019	4.97	
9/26/2019	5.19	
4/13/2020	5.06	
10/21/2020	5.05	
3/16/2021	5.35	
10/5/2021	5.53	
3/15/2022	5.82	
10/5/2022	5.3	
4/20/2023	6.06	
5/24/2023	5.15	
10/30/2023	5.01	
3/19/2024		5.61

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
11/16/2006	5	
2/5/2007	<5	
4/12/2007	<5	
10/17/2007	5.7	
4/17/2008	7	
10/24/2008	6.6	
4/21/2009	5.2	
10/26/2009	8.3	
4/12/2010	6.8	
10/30/2010	10.8	
5/25/2011	11.5	
5/25/2012	8.2	
5/28/2013	6.9	
5/31/2014	3.5	
5/29/2015	3.3	
3/23/2016	1.8 (J)	
5/18/2016	4.1	
7/12/2016	3.8 (J)	
9/12/2016	3.9 (J)	
11/18/2016	5.4	
1/19/2017	<5	
3/22/2017	<5	
5/24/2017	2 (J)	
10/17/2017	<5	
5/31/2018	3 (J)	
11/7/2018	3.1 (J)	
4/22/2019	2.22	
9/27/2019	2.36	
4/13/2020	2.47	
10/22/2020	2.01	
3/16/2021	2.15	
10/5/2021	2.57	
3/15/2022	2.88	
10/4/2022	2.04	
4/19/2023	2.85	
10/27/2023	2.72	
3/18/2024		2.81

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.756	
5/18/2016	1.9	
7/12/2016	2 (J)	
9/12/2016	2 (J)	
11/19/2016	1.7 (J)	
1/18/2017	<0.756	
3/22/2017	<0.756	
5/24/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.8 (J)	
11/7/2018	1.8 (J)	
4/23/2019	1.99	
9/26/2019	1.95	
4/13/2020	1.43	
10/22/2020	1.76	
3/16/2021	2.23	
10/5/2021	2.46	
3/15/2022	2.1	
10/4/2022	<0.756	
4/19/2023	1.93	
10/27/2023	1.53	
3/20/2024		1.61

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.756	
5/18/2016	<0.756	
7/12/2016	<0.756	
9/12/2016	<0.756	
11/19/2016	<0.756	
1/19/2017	<0.756	
3/21/2017	<0.756	
5/23/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.5 (J)	
11/7/2018	1.5 (J)	
4/23/2019	1.43	
9/26/2019	1.2	
4/13/2020	0.992 (J)	
10/22/2020	1.04	
3/16/2021	1.07	
10/5/2021	3.38	
3/15/2022	1.33	
10/4/2022	<0.756	
4/19/2023	2.42	
10/27/2023	1.7	
3/19/2024		1.35

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	<5	
5/18/2016	<5	
7/11/2016	<5	
9/13/2016	1.7 (J)	
11/17/2016	<5	
1/18/2017	<5	
3/21/2017	<5	
5/23/2017	<5	
10/17/2017	<5	
5/31/2018	2.2 (J)	
11/8/2018	1.7 (J)	
4/22/2019	2.52	
9/26/2019	2.28	
4/14/2020	2.27	
10/21/2020	2.15	
3/16/2021	2	
10/5/2021	2.22	
3/15/2022	2.29	
10/5/2022	1.4	
4/20/2023	2.59	
10/27/2023	3.08	
3/19/2024		2.87

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-17	MW-17
3/22/2016	<5	
5/18/2016	1.4	
7/12/2016	1.8 (J)	
9/12/2016	2.2 (J)	
11/18/2016	1.5 (J)	
1/18/2017	1.5 (J)	
3/21/2017	<5	
5/24/2017	1.7 (J)	
10/17/2017	1.8 (J)	
5/31/2018	2.5 (J)	
11/8/2018	2.2 (J)	
4/22/2019	2.96	
9/26/2019	2.96	
4/13/2020	2.75	
10/22/2020	2.98	
3/16/2021	3.06	
10/5/2021	2.85	
3/16/2022	3.38	
10/5/2022	2.05	
4/20/2023	3.44	
10/27/2023	3.82	
3/19/2024		3.53

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	3 (J)	
5/18/2016	3.9 (J)	
7/12/2016	3.9 (J)	
9/12/2016	4.5 (J)	
11/18/2016	4.2 (J)	
1/18/2017	3.8 (J)	
3/21/2017	<5 (*)	
5/24/2017	3 (J)	
10/17/2017	3.4 (J)	
5/31/2018	4.1 (J)	
11/8/2018	3.3 (J)	
4/22/2019	4.66	
9/26/2019	4.23	
4/14/2020	3.96	
10/22/2020	3.37	
3/16/2021	3.18	
10/5/2021	3.83	
3/16/2022	7.04	
10/5/2022	6.04	
4/19/2023	7.48	
10/30/2023	7.39	
3/20/2024		6.1

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<5	
11/18/2016	<5	
1/18/2017	<5	
2/10/2017	<5	
3/21/2017	<5	
4/14/2017	1.5 (J)	
5/23/2017	<5	
6/26/2017	1.5 (J)	
10/17/2017	<5	
5/31/2018	1.9 (J)	
11/8/2018	1.5 (J)	
4/22/2019	2.09	
9/26/2019	2.1	
4/13/2020	1.69	
10/21/2020	1.31	
3/16/2021	2.72	
10/5/2021	1.91	
3/15/2022	4.86	
10/5/2022	1.02	
4/20/2023	3.73	
5/24/2023	2.62	
10/30/2023	2.73	
3/19/2024		3.31

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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-11	MW-11
3/23/2016	40	
5/18/2016	52	
7/12/2016	42	
9/12/2016	42	
11/18/2016	82	
1/19/2017	32	
3/22/2017	6	
5/24/2017	48	
10/17/2017	34	
5/31/2018	32	
11/7/2018	52	
4/22/2019	50	
9/27/2019	50	
4/13/2020	63	
10/22/2020	41	
3/16/2021	39	
10/5/2021	43	
3/15/2022	53	
10/4/2022	53	
4/19/2023	67	
10/27/2023	21	
3/18/2024		33

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-14	MW-14
3/23/2016	48 (B1)	
5/18/2016	26	
7/12/2016	24	
9/12/2016	32	
11/19/2016	76	
1/18/2017	48	
3/22/2017	30	
5/24/2017	46	
10/17/2017	8	
6/1/2018	44	
11/7/2018	26	
4/23/2019	48	
9/26/2019	39	
4/13/2020	28	
10/22/2020	25	
3/16/2021	41	
10/5/2021	29	
3/15/2022	56	
10/4/2022	52	
4/19/2023	41	
10/27/2023	23	
3/20/2024		39

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel 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	
3/16/2021	34	
10/5/2021	25	
3/15/2022	51	
10/4/2022	42	
4/19/2023	31	
10/27/2023	24	
3/19/2024		17

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-16	MW-16
3/22/2016	42 (B1)	
5/18/2016	<5	
7/11/2016	<5	
9/13/2016	48	
11/17/2016	20	
1/18/2017	18	
3/21/2017	8	
5/23/2017	<5	
10/17/2017	58	
5/31/2018	24	
11/8/2018	4 (J)	
4/22/2019	46	
9/26/2019	27	
4/14/2020	36	
10/21/2020	33	
3/16/2021	27	
10/5/2021	29	
3/15/2022	34	
10/5/2022	42	
4/20/2023	37	
10/27/2023	21	
3/19/2024		24

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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-17	MW-17
3/22/2016	32 (B1)	
5/18/2016	26	
7/12/2016	22	
9/12/2016	32	
11/18/2016	16	
1/18/2017	32	
3/21/2017	16	
5/24/2017	22	
10/17/2017	26	
5/31/2018	<3.4	
11/8/2018	36	
4/22/2019	24	
9/26/2019	25	
4/13/2020	27	
10/22/2020	29	
3/16/2021	37	
10/5/2021	34	
3/16/2022	55	
10/5/2022	35	
4/20/2023	30	
10/27/2023	14	
3/19/2024		20

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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-18	MW-18
3/22/2016	28 (B1)	
5/18/2016	20	
7/12/2016	24	
9/12/2016	48	
11/18/2016	10	
1/18/2017	30	
3/21/2017	6	
5/24/2017	30	
10/17/2017	32	
5/31/2018	30	
11/8/2018	22	
4/22/2019	36	
9/26/2019	30	
4/14/2020	29	
10/22/2020	22	
3/16/2021	31	
10/5/2021	29	
3/16/2022	25	
10/5/2022	34	
4/19/2023	29	
10/30/2023	15	
3/20/2024		25

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/22/2024 4:03 PM View: Intrawell

Plant Daniel Data: NAMU CCR

	MW-19	MW-19
9/12/2016	12	
11/18/2016	14	
1/18/2017	20	
2/10/2017	28	
3/21/2017	20	
4/14/2017	14	
5/23/2017	<5	
6/26/2017	34	
10/17/2017	42	
5/31/2018	22	
11/8/2018	8	
4/22/2019	31	
9/26/2019	29	
4/13/2020	20	
10/21/2020	19	
3/16/2021	25	
10/5/2021	35	
3/15/2022	36	
10/5/2022	31	
4/20/2023	66	
5/24/2023	32	
10/30/2023	29	
3/19/2024		31

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

Prediction Limits - Interwell (Two-Step)

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

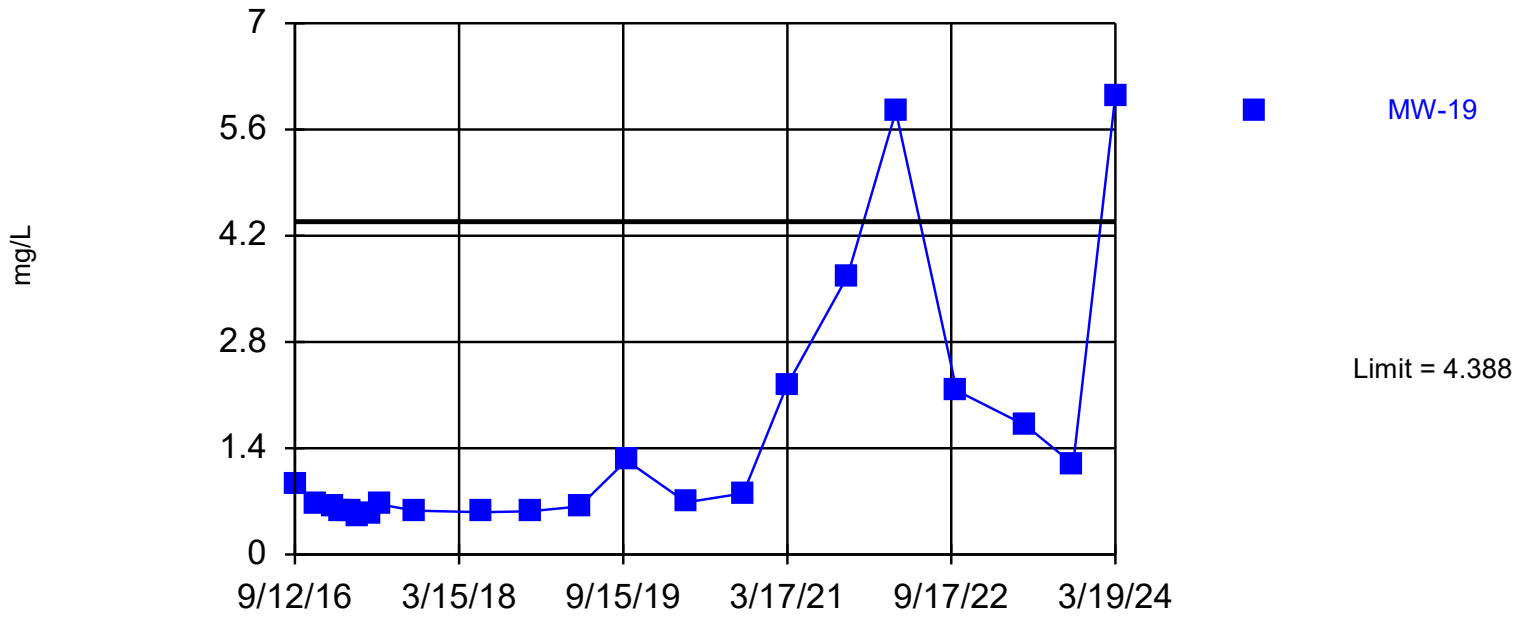
Plant Daniel Data: NAMU CCR Printed 5/22/2024, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	**MW-19**	**4.388**	**n/a**	**3/19/2024**	**6.05**	**Yes**	**66**	**1.297**	**0.4494**	**3.03**	**None**	**sqrt(x)**	**0.00188**	**Param Inter 1 of 2**

Exceeds Limit: MW-19

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=1.297, Std. Dev.=0.4494, n=66, 3.03% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9655, critical = 0.948. Kappa = 1.776 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Assumes 3 future values.

Constituent: Calcium Analysis Run 5/22/2024 3:52 PM View: Interwell - Two-Step

Plant Daniel Data: NAMU CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/22/2024 3:53 PM View: Interwell - Two-Step

Plant Daniel Data: NAMU CCR

	MW-18 (bg)	MW-14 (bg)	MW-11 (bg)	MW-19
3/22/2016	0.93 (B1)			
3/23/2016		<5.9 (*)	<5.9 (*)	
5/18/2016	0.85	5.5	1.8	
7/12/2016	0.69	5.3	1.9	
9/12/2016	0.86	4.9	2	0.92
11/18/2016	0.41		2	0.68
11/19/2016		4.8		
1/18/2017	0.81	3.8		0.64
1/19/2017			1.8	
2/10/2017				0.58
3/21/2017	0.76			0.56
3/22/2017		3.3	1.8	
4/14/2017				0.51
5/23/2017				0.54
5/24/2017	0.8	3.6	2	
6/26/2017				0.66
10/17/2017	0.69	3.7	2	0.58
5/31/2018	0.75		1.8	0.56
6/1/2018		2.8		
11/7/2018		2.9	2	
11/8/2018	0.78			0.57
4/22/2019	0.531		1.71	0.634
4/23/2019		2.76		
9/26/2019	0.631	2.4		1.24
9/27/2019			1.99	
4/13/2020		2.74	2.03	0.687
4/14/2020	0.627			
10/21/2020				0.806
10/22/2020	0.553	2.17	2.02	
3/16/2021	0.57	2.4	1.74	2.23
10/5/2021	0.43 (J)	1.89	1.87	3.67
3/15/2022		2.59	1.87	5.84
3/16/2022	0.406 (J)			
10/4/2022		2.56	1.3	
10/5/2022	0.285 (J)			2.16
4/19/2023	0.368 (J)	2.63	1.65	
4/20/2023				15.4 (o)
5/24/2023				1.7
10/27/2023		2.28	1.42	
10/30/2023	0.427 (J)			1.19
3/18/2024			1.19	
3/19/2024				6.05
3/20/2024	0.414 (J)	1.7		

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

Trend Tests - Prediction Limit Exceedances

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 3:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	**MW-14 (bg)**	**-0.3148**	**-170**	**-92**	**Yes**	**22**	**4.545**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.06414**	**-154**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.1374**	**111**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Daniel Data: NAMU CCR Printed 5/22/2024, 3:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	MW-11 (bg)	-0.02361	-46	-92	No	22	4.545	n/a	0.01	NP
Calcium (mg/L)	**MW-14 (bg)**	**-0.3148**	**-170**	**-92**	**Yes**	**22**	**4.545**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-18 (bg)**	**-0.06414**	**-154**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-19**	**0.1374**	**111**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**

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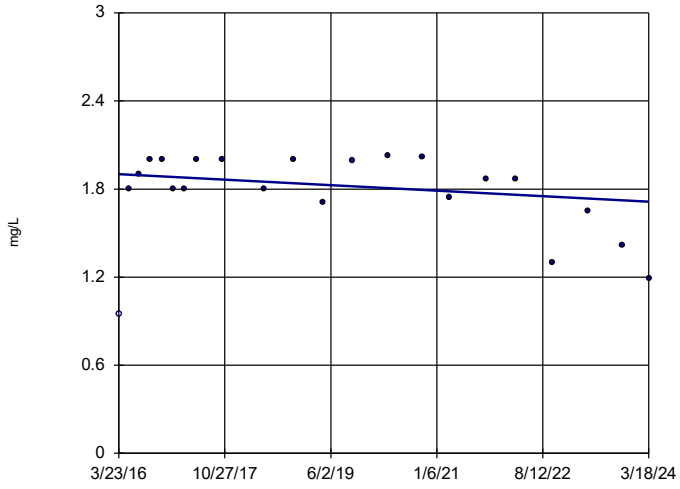
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-11 (bg)



n = 22

Slope = -0.02361 units per year.

Mann-Kendall statistic = -46
critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/22/2024 3:54 PM View: Trend Tests
Plant Daniel Data: NAMU CCR

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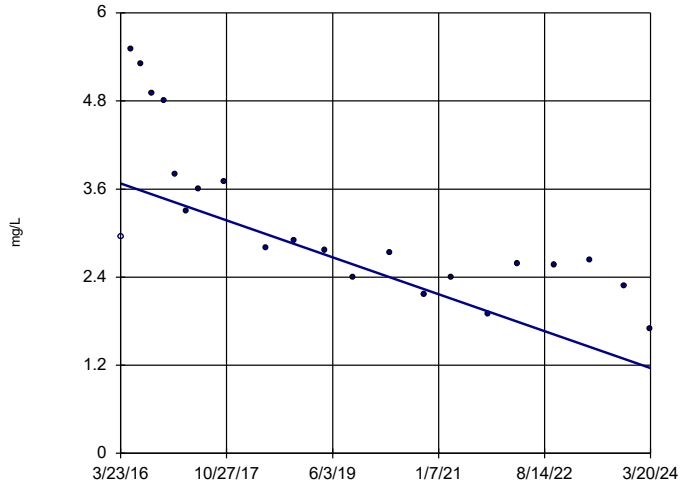
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-14 (bg)



n = 22

Slope = -0.3148 units per year.

Mann-Kendall statistic = -170
critical = -92

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/22/2024 3:54 PM View: Trend Tests
Plant Daniel Data: NAMU CCR

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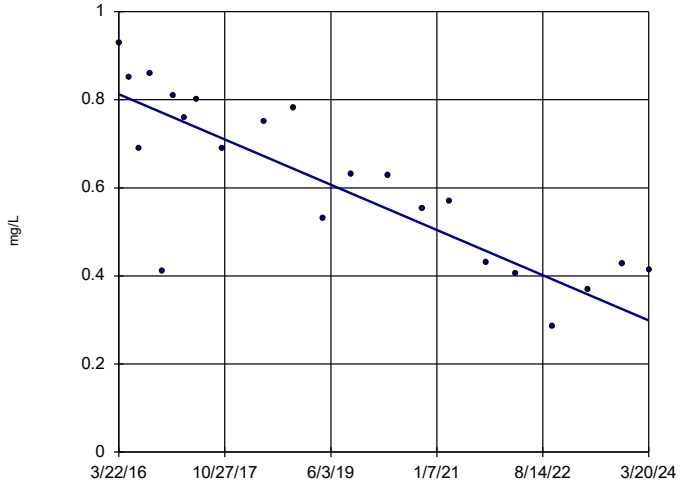
Sen's Slope Estimator

MW-18 (bg)



n = 22

Slope = -0.06414 units per year.

Mann-Kendall statistic = -154
critical = -92

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/22/2024 3:54 PM View: Trend Tests
Plant Daniel Data: NAMU CCR

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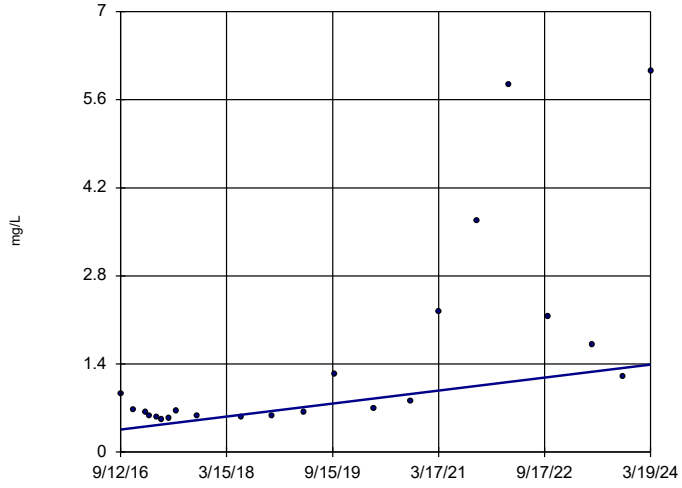
Sen's Slope Estimator

MW-19



n = 22

Slope = 0.1374 units per year.

Mann-Kendall statistic = 111
critical = 92

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/22/2024 3:54 PM View: Trend Tests
Plant Daniel Data: NAMU CCR

GROUNDWATER STATS
CONSULTING

January, 2 2025

Southern Company Services
Attn: Mr. Trey Singleton
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Daniel North Ash Management Unit (NAMU)
Background Update and Statistical Analysis – September/October 2024

Dear Mr. Singleton,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the 2024 Groundwater Monitoring Annual report for Mississippi Power Company's Plant Daniel NAMU. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

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

- **Upgradient wells:** MW-11, MW-14, and MW-18
- **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, Senior Statistician and Founder of Groundwater Stats Consulting.

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

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

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of well/constituent pairs containing 100% non-detects follow this letter.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. For calculating intrawell prediction limits, the substitution is performed for individual wells and may differ across wells. This generally gives the most conservative limit in each case.

Time series plots for Appendix III parameters are provided for all wells and are used to evaluate concentrations over time as well as for the purpose of updating statistical limits. Additionally, box plots are included for all constituents at upgradient and downgradient wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graph. 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 initial screening, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods were recommended. Power curves were provided with the screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance recommendations as discussed below.

Summary of Statistical Methods

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

- Intrawell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the

nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

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

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents are re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Two-Step Statistical Analysis

Intrawell statistical methods, combined with a 1-of-2 resample plan, may be used as a conservative first step for identifying potential facility impacts in downgradient wells. Intrawell methods use background data for individual wells and may be overly sensitive to spatial variation. In particular for nonparametric limits with small background sample sizes, the probability of a false positive is much higher than the desired annual sitewide rate of 10%. Therefore, a large number of exceedances may occur as a result of spatial variation rather than facility impacts. A second step can be used to further evaluate those exceedances and reduce the overall number of SSIs that result from spatial variation. In instances where intrawell statistical methods identify an apparent SSI, a second step of

interwell statistical evaluation may be used to determine whether the measurement exceeds the sitewide background limit based on pooled upgradient well data. This is similar in concept to the procedure used in compliance monitoring programs where an interwell statistical limit is used to determine "background" (USEPA Unified Guidance (2009), Chapter 7, Section 7.5). For the detection monitoring program, if the result does not exceed sitewide (interwell) background, an SSI is not declared.

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

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

Summary of Background Screening – Conducted in October 2017

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

No suspected outliers were observed in any of the data sets for Appendix III parameters. When any values are identified as outliers, they are plotted in a lighter font on the time series graph.

Seasonality

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

Trend Test Evaluation

While trends may be visual, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed a few statistically significant decreasing and increasing trends. All trends noted were relatively low in magnitude when compared to average concentrations; therefore, no adjustments were made to any of the data sets.

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

Summary of Background Update – Appendix III Parameters – May 2024

Outlier Analysis

Prior to updating background records, data were re-evaluated for Appendix III constituents at all wells using Tukey's outlier test and visual screening on all historical data through the October 2023 sample event. A few values were noted by Tukey's as potential outliers; however, these values were not drastically different than concentrations within the respective wells and were not flagged as outliers. Additionally, when Tukey's outlier test detects an outlier for the most recent sample, it often will not be flagged in the event that the reported concentration precedes a trend that is more representative of current concentrations. Although not identified by Tukey's test, the highest value for calcium in downgradient well MW-19 was flagged in order to construct a statistical limit that is conservative (i.e., lower) from a regulatory perspective. A full list of outliers and Tukey's test results were included with the update.

Mann-Whitney Test of Medians

The Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through October 2021 to the new compliance samples at each well through October 2023 to evaluate whether the groups are statistically different at the 99%

confidence level for each of the Appendix III parameters. Any records that used a truncated portion of the dataset from previous updates retained the curtailed portion of their record for the Mann-Whitney test. Note that the Mann-Whitney was not performed for boron at downgradient wells MW-16 and MW-17 as these records contain 100% non-detects. When no differences are identified by the Mann-Whitney test, background data sets may be updated to include newer data for construction of prediction limits. This results in statistical limits that are representative of present-day conditions. Statistically significant differences were found between the two groups for the following well/constituent pairs:

Increase:

- Calcium: MW-19
- Chloride: MW-16
- Fluoride: MW-19
- Sulfate: MW-18 (upgradient)

Decrease:

- Calcium: MW-18 (upgradient)

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data sets are not updated to include the newer data but will be reconsidered in the future. Although calcium at upgradient well MW-18 was identified with a statistically significant decreasing median, this record was updated since reported concentrations are similar to those reported historically.

Regarding well/constituent pairs with statistically significant increases in medians, the more recent concentrations for chloride at downgradient well MW-16 were similar to concentrations in background. For fluoride at downgradient well MW-19, although more recent concentrations were slightly higher than historic detected measurements, the compliance measurements remained below the most recent reporting limit of 0.1 mg/L. Compliance observations for sulfate at upgradient well MW-18 were above existing concentrations in background; however, all more recent data are relatively stable and are assumed to represent groundwater quality unrelated to the facility. Regarding calcium at downgradient well MW-19, while the more recent median was higher than the background median, the concentrations are similar to those reported historically in upgradient well MW-14. Therefore, this record, along with all other records, was updated through October 2023.

Statistical Analysis of Appendix III Parameters – September/October 2024

Intrawell Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample strategy, were established for each of the Appendix III parameters at each well using historical data through October 2023 for comparison of the September/October 2024 samples. Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at the same well. The September/October 2024 samples from each well were compared to the prediction limits to determine whether initial exceedances are present. Note that due to an increase in the reporting limit for fluoride, the intrawell prediction limits for downgradient wells MW-15 and MW-17 increased during this analysis to the reporting limit of 0.1 mg/L. No significant changes occurred as a result of the reporting limit increase.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary. Complete graphical results of the prediction limits may be found following this letter. An exceedance was identified for the following well/constituent pair:

- Sulfate: MW-17

Two-Step Analysis

Following the two-step analysis procedure, an interwell prediction limit was then constructed using pooled upgradient well data through October 2024 to evaluate the apparent intrawell prediction limit exceedance among any downgradient wells. No exceedance was identified.

Trend Test Evaluation

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level. Upgradient wells are included in the trend analyses for all parameters found to

exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of variability in groundwater that is unrelated to practices at the site. Statistically significant trends were identified for the following well/constituent pairs which is an indication of changing groundwater quality:

Increasing:

- Sulfate: MW-17

Decreasing:

- Sulfate: MW-11 (upgradient)

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

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina L. Rayner
Senior Statistician

100% Non-Detects

Analysis Run 12/4/2024 11:45 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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

Intrawell Prediction Limits - Significant Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:47 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**MW-17**	**3.848**	**n/a**	**10/1/2024**	**4.89**	**Yes**	**21**	**2.469**	**0.698**	**9.524**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**

Intrawell Prediction Limits - All Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:47 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	NBg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.103	n/a	9/30/2024	0.08ND	No	21		n/a	n/a	85.71	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.08	n/a	9/30/2024	0.08ND	No	21		n/a	n/a	95.24	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.08	n/a	9/30/2024	0.08ND	No	21		n/a	n/a	90.48	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.0927	n/a	10/1/2024	0.0257J	No	21		n/a	n/a	61.9	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-19	0.08	n/a	10/1/2024	0.08ND	No	22		n/a	n/a	95.45	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.14	n/a	9/30/2024	1.58	No	21		11.51	4.784	4.762	None	x^4	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	5.45	n/a	9/30/2024	2.69	No	21		1.778	0.2818	4.762	None	sqrt(x)	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.592	n/a	9/30/2024	0.896	No	21		1.133	0.2321	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.249	n/a	10/1/2024	0.988	No	22		0.8682	0.1942	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.253	n/a	10/1/2024	0.939	No	21		0.9997	0.1281	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-18	0.9961	n/a	10/1/2024	0.647	No	21		0.6266	0.1871	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-19	5.84	n/a	10/1/2024	2.61	No	21		n/a	n/a	0	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Chloride (mg/L)	MW-11	15.86	n/a	9/30/2024	12.3	No	36		12.44	1.847	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.24	n/a	9/30/2024	10.5	No	21		9.109	1.586	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.16	n/a	9/30/2024	7.42	No	21		7.741	1.227	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	11.41	n/a	10/1/2024	7.89	No	23		8.088	1.705	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.088	n/a	10/1/2024	5.72	No	21		6.617	0.745	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.41	n/a	10/1/2024	7.15	No	21		7.771	1.844	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	6.91	n/a	10/1/2024	5.78	No	22		n/a	n/a	4.545	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	9/30/2024	0.0367J	No	21		n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.0511	n/a	9/30/2024	0.0312J	No	21		n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.1	n/a	9/30/2024	0.1ND	No	21		n/a	n/a	76.19	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.0612	n/a	10/1/2024	0.0282J	No	21		n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.1	n/a	10/1/2024	0.1ND	No	21		n/a	n/a	76.19	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	10/1/2024	0.0283J	No	21		n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.0849	n/a	10/1/2024	0.027J	No	22		n/a	n/a	68.18	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.897	4.494	9/30/2024	4.59	No	22		4.696	0.1027	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.464	4.648	9/30/2024	5.24	No	21		1.715	0.0234	0	None	x^(1/3)	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	4.981	4.434	9/30/2024	4.7	No	21		4.708	0.1383	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.781	4.402	10/1/2024	4.49	No	21		4.591	0.09588	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.42	4.79	10/1/2024	4.97	No	21		n/a	n/a	0	n/a	n/a	0.007998	NP Intra (normality) 1 of 2
pH (SU)	MW-18	4.83	4.47	10/1/2024	4.61	No	20		4.65	0.09032	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	6.06	4.81	10/1/2024	5.29	No	23		n/a	n/a	0	n/a	n/a	0.006831	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-11	11.5	n/a	9/30/2024	2.69	No	36		n/a	n/a	13.89	n/a	n/a	0.001429	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-14	2.435	n/a	9/30/2024	1.41	No	21		2.621	1.674	28.57	Kaplan-Meier	x^2	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-15	3.38	n/a	9/30/2024	1.58	No	21		n/a	n/a	47.62	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	10/1/2024	3.36	No	21		n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Sulfate (mg/L)	**MW-17**	**3.848**	**n/a**	**10/1/2024**	**4.89**	**Yes**	**21**		**2.469**	**0.698**	**9.524**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Sulfate (mg/L)	MW-18	7.288	n/a	10/1/2024	5.43	No	21		2.055	0.3266	4.762	None	sqrt(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	10/1/2024	2.77	No	22		n/a	n/a	31.82	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	76.45	n/a	9/30/2024	33	No	21		44.86	15.99	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	67.05	n/a	9/30/2024	37	No	21		37.62	14.9	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	55.48	n/a	9/30/2024	28	No	22		29.09	13.45	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	59.04	n/a	10/1/2024	33	No	21		26.74	16.35	14.29	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	48.32	n/a	10/1/2024	33	No	21		27.22	10.68	4.762	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	44.58	n/a	10/1/2024	35	No	21		26.67	9.068	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	52.09	n/a	10/1/2024	30	No	22		25.89	13.35	4.545	None	No	0.00188	Param Intra 1 of 2

Interwell Prediction Limits - Two-Step - All Results (No Significant)

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:51 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	MW-17	8.216	n/a	10/1/2024	4.89	No	84	1.711	0.6564	14.29	None	sqrt(x)	0.00188	Param Inter 1 of 2

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Sulfate (mg/L)	**MW-11 (bg)**	**-0.1991**	**-273**	**-206**	**Yes**	**38**	**13.16**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-17**	**0.2693**	**170**	**98**	**Yes**	**23**	**8.696**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Sulfate (mg/L)	**MW-11 (bg)**	**-0.1991**	**-273**	**-206**	**Yes**	**38**	**13.16**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-14 (bg)	0.004333	18	98	No	23	26.09	n/a	0.01	NP
Sulfate (mg/L)	**MW-17**	**0.2693**	**170**	**98**	**Yes**	**23**	**8.696**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-18 (bg)	0.286	97	98	No	23	4.348	n/a	0.01	NP

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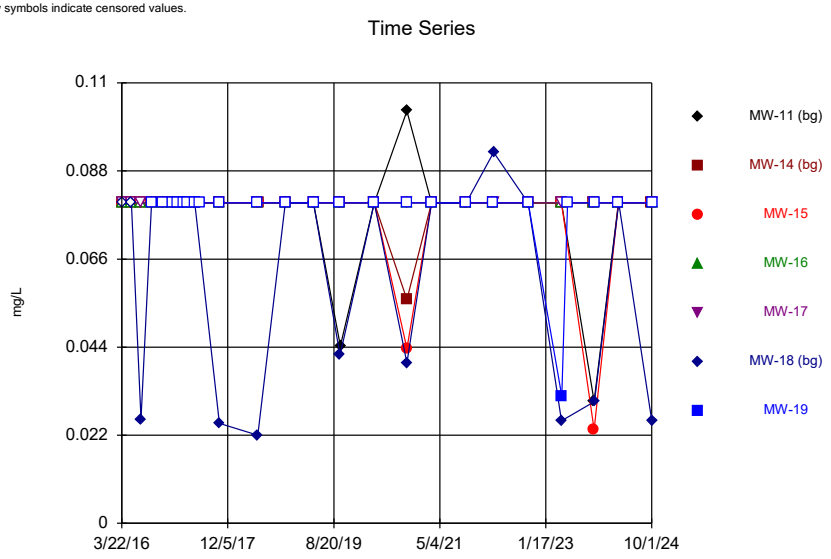
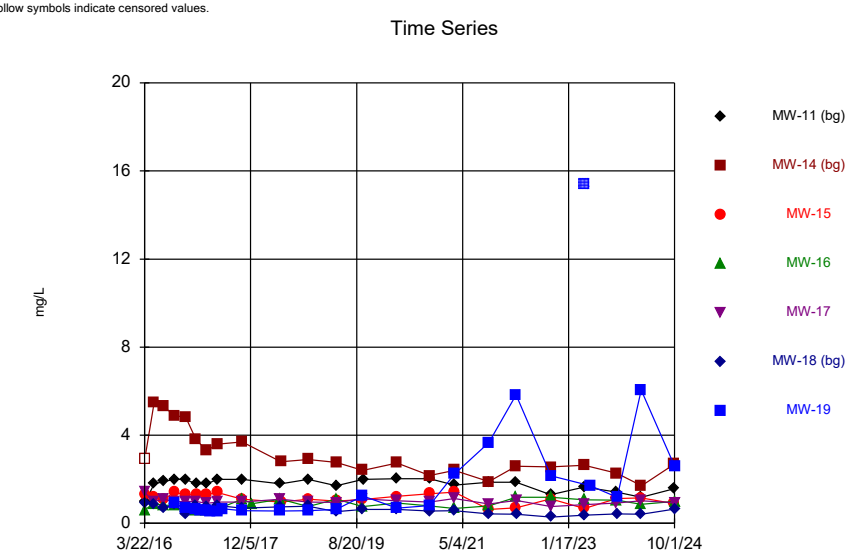
Time Series

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Boron Analysis Run 12/4/2024 11:33 AM
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Calcium Analysis Run 12/4/2024 11:33 AM
Plant Daniel Client: Southern Company Data: NAMU CCR

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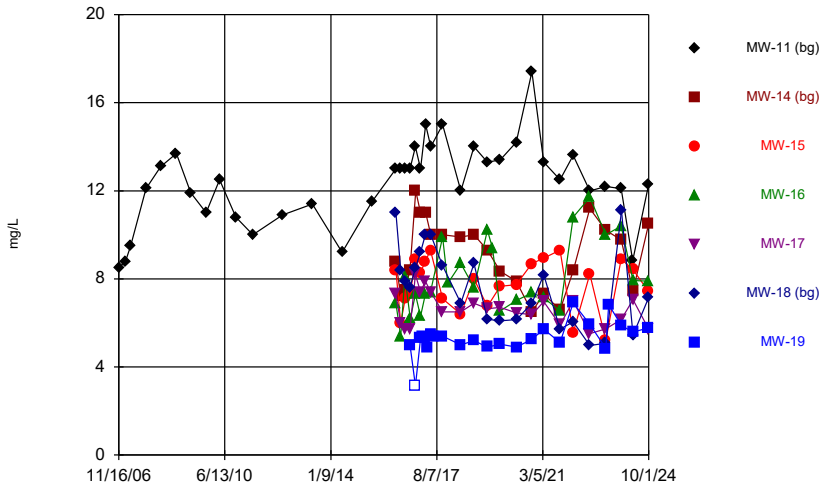
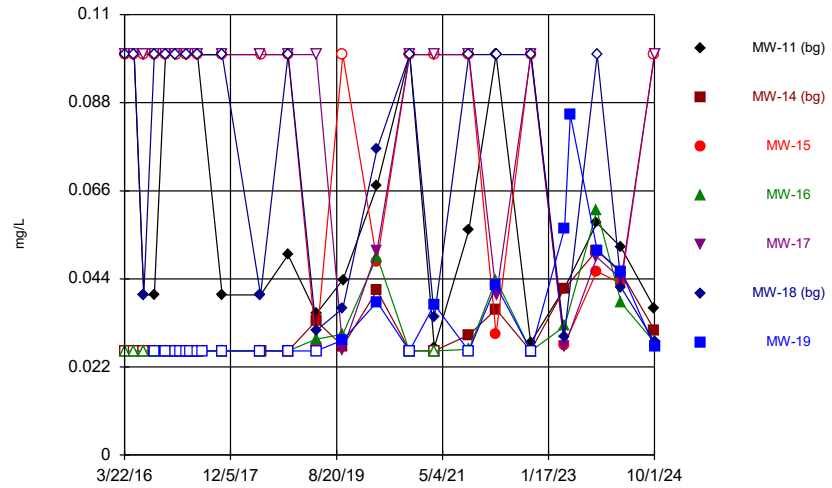


Constituent: Chloride Analysis Run 12/4/2024 11:33 AM
Plant Daniel Client: Southern Company Data: NAMU CCR

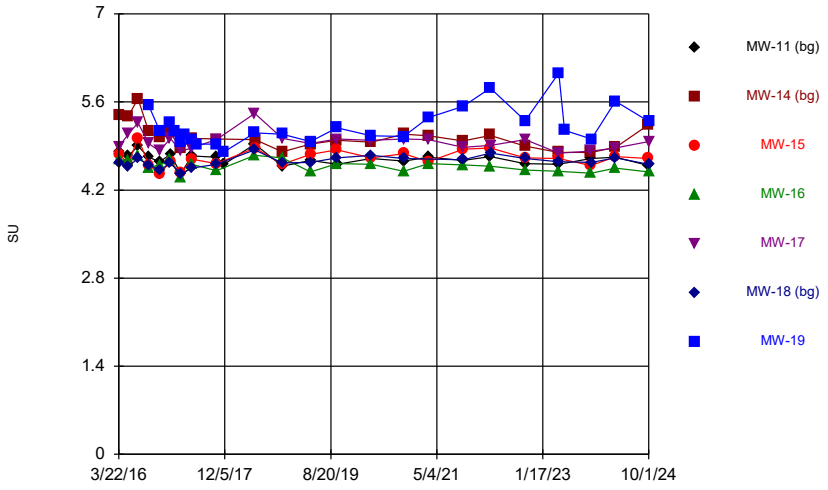
Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Fluoride Analysis Run 12/4/2024 11:33 AM
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Time Series



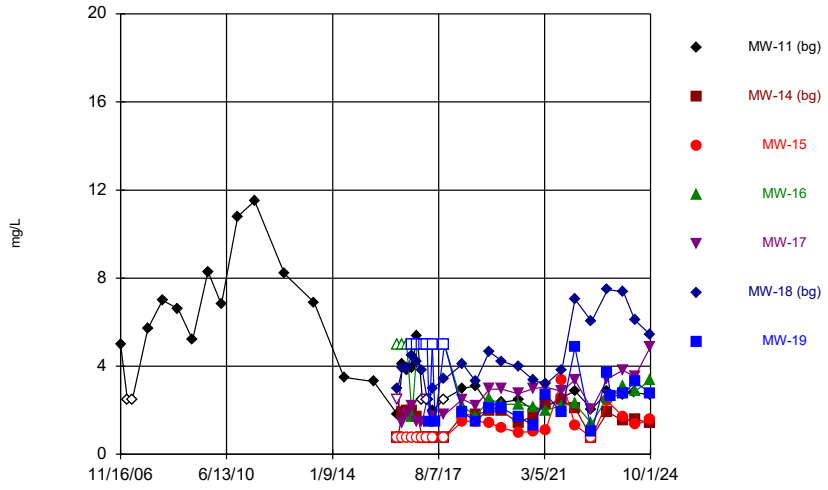
Constituent: pH Analysis Run 12/4/2024 11:33 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



Constituent: Sulfate Analysis Run 12/4/2024 11:33 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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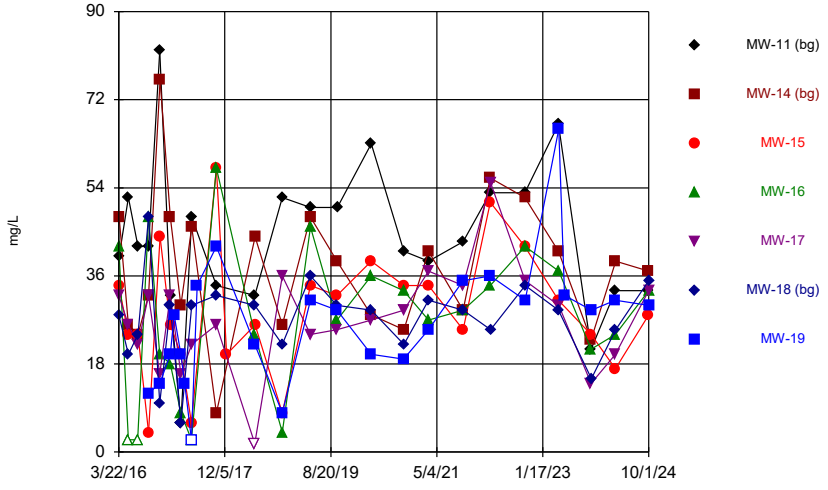
Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:33 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

Time Series

Constituent: Boron (mg/L) Analysis Run 12/4/2024 11:34 AM

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)	
3/16/2021	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
10/5/2021	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
3/15/2022	<0.08	<0.08	<0.08	<0.08			<0.08
3/16/2022					<0.08	0.0927	
10/4/2022	<0.08	<0.08	<0.08				
10/5/2022				<0.08	<0.08	<0.08	<0.08
4/19/2023	<0.08	<0.08	<0.08			0.0256 (J)	
4/20/2023				<0.08	<0.08		0.0318 (J)
5/24/2023							<0.08
10/27/2023	0.0305 (J)	<0.08	0.0234 (J)	<0.08	<0.08		
10/30/2023						0.0304 (J)	<0.08
3/18/2024	<0.08						
3/19/2024			<0.08	<0.08	<0.08		<0.08
3/20/2024		<0.08				<0.08	
9/30/2024	<0.08	<0.08	<0.08				
10/1/2024				<0.08	<0.08	0.0257 (J)	<0.08

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

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/4/2024 11:34 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			1.3 (B1)	0.61 (B1)	1.4 (B1)	0.93 (B1)	
3/23/2016	<1.9 (*)	<5.9 (*)					
5/18/2016	1.8	5.5	1.2	0.89	1	0.85	
7/11/2016				0.82			
7/12/2016	1.9	5.3	1.1		1.1	0.69	
9/12/2016	2	4.9	1.4		0.98	0.86	0.92
9/13/2016				0.82			
11/17/2016				0.75			
11/18/2016	2				1	0.41	0.68
11/19/2016		4.8	1.3				
1/18/2017		3.8		0.58	1	0.81	0.64
1/19/2017	1.8		1.3				
2/10/2017							0.58
3/21/2017			1.3	0.6	0.91	0.76	0.56
3/22/2017	1.8	3.3					
4/14/2017							0.51
5/23/2017			1.4	0.65			0.54
5/24/2017	2	3.6			0.96	0.8	
6/26/2017							0.66
10/17/2017	2	3.7	1.1	1.1	0.96	0.69	0.58
12/15/2017				0.89 (RS)			
5/31/2018	1.8			1.1	1.1	0.75	0.56
6/1/2018		2.8	0.97				
11/7/2018	2	2.9	1.1				
11/8/2018				0.76	0.96	0.78	0.57
4/22/2019	1.71			1.09	0.946	0.531	0.634
4/23/2019		2.76	1.01				
9/26/2019		2.4	1.08	0.758	1.11	0.631	1.24
9/27/2019	1.99						
4/13/2020	2.03	2.74	1.22		1.03		0.687
4/14/2020				0.92		0.627	
10/21/2020				0.798			0.806
10/22/2020	2.02	2.17	1.35		0.969	0.553	
3/16/2021	1.74	2.4	1.41	0.681	1.12	0.57	2.23
10/5/2021	1.87	1.89	0.632	0.793	0.883	0.43 (J)	3.67
3/15/2022	1.87	2.59	0.703	1.18			5.84
3/16/2022					1.04	0.406 (J)	
10/4/2022	1.3	2.56	1.11				
10/5/2022				1.19	0.755	0.285 (J)	2.16
4/19/2023	1.65	2.63	0.682			0.368 (J)	
4/20/2023				1.07	0.855		15.4 (o)
5/24/2023							1.7
10/27/2023	1.42	2.28	1.13	1.05	0.916		
10/30/2023						0.427 (J)	1.19
3/18/2024	1.19						
3/19/2024			1.16	0.87	1.03		6.05
3/20/2024		1.7				0.414 (J)	
9/30/2024	1.58	2.69	0.896				
10/1/2024				0.988	0.939	0.647	2.61

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

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:34 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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

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

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:34 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/16/2022					7	6.05	
10/4/2022	12	11.2	8.22				
10/5/2022				11.7	5.51	4.97	5.94
4/19/2023	12.2	10.2	5.21			5.08	
4/20/2023				10	5.73		4.84
5/24/2023							6.84
10/27/2023	12.1	9.77	8.9	10.4	6.16		
10/30/2023						11.1	5.88
3/18/2024	8.82						
3/19/2024			8.42	7.92	7.06		5.59
3/20/2024		7.44				5.44	
9/30/2024	12.3	10.5	7.42				
10/1/2024				7.89	5.72	7.15	5.78

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/4/2024 11:34 AM

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)	<0.026 (B1)	<0.1 (B1)	<0.1 (B1)	
3/23/2016	<0.1	<0.026 (B1)					
5/18/2016	<0.1	<0.026	<0.1	<0.026	<0.1	<0.1	
7/11/2016				<0.026			
7/12/2016	0.04 (J)	<0.026	<0.1		<0.1	0.04 (J)	
9/12/2016	0.04 (J)	<0.026	<0.1		<0.1	<0.1	<0.026
9/13/2016				<0.026			
11/17/2016				<0.026			
11/18/2016	<0.1				<0.1	<0.1	<0.026
11/19/2016		<0.026	<0.1				
1/18/2017		<0.026		<0.026	<0.1	<0.1	<0.026
1/19/2017	<0.1		<0.1				
2/10/2017							<0.026
3/21/2017			<0.1	<0.026	<0.1	<0.1	<0.026
3/22/2017	<0.1	<0.026					
4/14/2017							<0.026
5/23/2017			<0.1	<0.026			<0.026
5/24/2017	<0.1	<0.026			<0.1	<0.1	
6/26/2017							<0.026
10/17/2017	0.04 (J)	<0.026	<0.1	<0.026	<0.1	<0.1	<0.026
5/31/2018	0.04 (J)			<0.026	<0.1	0.04 (J)	<0.026
6/1/2018		<0.026	<0.1				
11/7/2018	0.05 (J)	<0.026	<0.1				
11/8/2018				<0.026	<0.1	<0.1	<0.026
4/22/2019	0.0353 (J)			0.029 (J)	<0.1	0.0311 (J)	<0.026
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				<0.026			<0.026
10/22/2020	<0.1	<0.026	<0.1		<0.1	<0.1	
3/16/2021	0.0269 (J)	<0.026	<0.1	<0.026	<0.1	0.0344 (J)	0.0376 (J)
10/5/2021	0.0561 (J)	0.03 (J)	<0.1	0.0264 (J)	<0.1	<0.1	<0.026
3/15/2022	<0.1	0.0364 (J)	0.0302 (J)	0.0438 (J)			0.0423 (J)
3/16/2022					0.0399 (J)	<0.1	
10/4/2022	0.0281 (J)	<0.026	<0.1				
10/5/2022				<0.026	<0.1	<0.1	<0.026
4/19/2023	0.0416 (J)	0.0415 (J)	0.0275 (J)			0.0297 (J)	
4/20/2023				0.0322 (J)	0.0271 (J)		0.0566 (J)
5/24/2023							0.0849 (J)
10/27/2023	0.058 (J)	0.0511 (J)	0.0459 (J)	0.0612 (J)	0.0494 (J)		
10/30/2023						<0.1	0.0511 (J)
3/18/2024	0.0518 (J)						
3/19/2024			0.0428 (J)	0.038 (J)	0.044 (J)		0.0458 (J)
3/20/2024		0.0454 (J)				0.0417 (J)	
9/30/2024	0.0367 (J)	0.0312 (J)	<0.1				
10/1/2024				0.0282 (J)	<0.1	0.0283 (J)	0.027 (J)

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

Time Series

Constituent: pH (SU) Analysis Run 12/4/2024 11:34 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			4.77	4.68	4.89	4.63	
3/23/2016	4.8	5.4					
5/18/2016	4.74	5.38	4.62	4.67	5.09	4.58	
7/11/2016				4.75			
7/12/2016	4.9	5.65	5.03		5.27	4.7	
9/12/2016	4.72	5.14	4.6		4.94	4.6	5.55
9/13/2016				4.56			
11/17/2016				4.6			
11/18/2016	4.65				4.82	4.52	5.14
11/19/2016		5.05	4.46				
1/18/2017		5.11		4.68	5.02	4.63	5.27
1/19/2017	4.77		4.65				
2/10/2017							5.14
3/21/2017			4.47	4.39	4.82	4.45	4.96
3/22/2017	4.46	4.86					
4/14/2017							5.07
5/23/2017			4.69	4.61			5.01
5/24/2017	4.74	5.02			4.87	4.55	
6/26/2017							4.93
10/17/2017	4.72	5.01	4.62	4.51	5	4.61	4.93
11/30/2017	4.61						4.81
5/31/2018	4.93			4.75	5.42	4.84	5.11
6/1/2018		5	4.87				
11/7/2018	4.58	4.81	4.61				
11/8/2018				4.71	5.02	4.63	5.09
4/22/2019	4.67			4.49	4.94	4.64	4.97
4/23/2019		4.93	4.77				
9/26/2019		4.99	4.84	4.62	5.01	4.71	5.19
9/27/2019	4.61						
4/13/2020	4.7	4.96	4.71		4.99		5.06
4/14/2020				4.61		4.75	
10/21/2020				4.5			5.05
10/22/2020	4.66	5.09	4.78		5.01	4.7	
3/16/2021	4.72	5.06	4.65	4.62	5		5.35
10/5/2021	4.67	4.98	4.85	4.6	4.88	4.68	5.53
3/15/2022	4.73	5.07	4.87	4.58			5.82
3/16/2022					4.91	4.79	
10/4/2022	4.62	4.9	4.71				
10/5/2022				4.52	5	4.7	5.3
4/19/2023	4.61	4.8	4.7			4.65	
4/20/2023				4.5	4.79		6.06
5/24/2023							5.15
10/27/2023	4.7	4.8	4.59	4.47	4.82		
10/30/2023						4.64	5.01
3/18/2024	4.72						
3/19/2024			4.73	4.55	4.87		5.61
3/20/2024		4.88				4.71	
9/30/2024	4.59	5.24	4.7				
10/1/2024				4.49	4.97	4.61	5.29

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:34 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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

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

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:34 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
10/5/2022				1.4	2.05	6.04	1.02
4/19/2023	2.85	1.93	2.42			7.48	
4/20/2023				2.59	3.44		3.73
5/24/2023							2.62
10/27/2023	2.72	1.53	1.7	3.08	3.82		
10/30/2023						7.39	2.73
3/18/2024	2.81						
3/19/2024			1.35	2.87	3.53		3.31
3/20/2024		1.61				6.1	
9/30/2024	2.69	1.41	1.58				
10/1/2024				3.36	4.89	5.43	2.77

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/4/2024 11:34 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

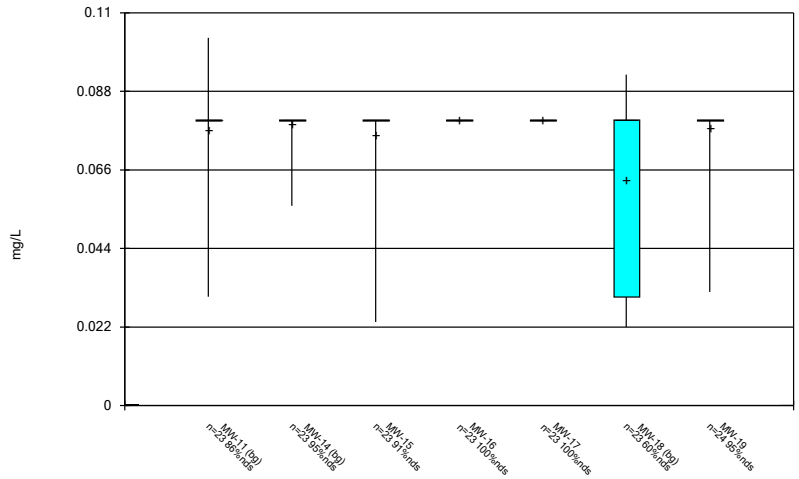
	MW-11 (bg)	MW-14 (bg)	MW-15	MW-16	MW-17	MW-18 (bg)	MW-19
3/22/2016			34 (B1)	42 (B1)	32 (B1)	28 (B1)	
3/23/2016	40	48 (B1)					
5/18/2016	52	26	24	<5	26	20	
7/11/2016				<5			
7/12/2016	42	24	24		22	24	
9/12/2016	42	32	4 (J)		32	48	12
9/13/2016				48			
11/17/2016				20			
11/18/2016	82				16	10	14
11/19/2016		76	44				
1/18/2017		48		18	32	30	20
1/19/2017	32		26				
2/10/2017							28
3/21/2017			20	8	16	6	20
3/22/2017	6	30					
4/14/2017							14
5/23/2017			6	<5			<5
5/24/2017	48	46			22	30	
6/26/2017							34
10/17/2017	34	8	58	58	26	32	42
12/15/2017			20 (RS)				
5/31/2018	32			24	<3.4	30	22
6/1/2018		44	26				
11/7/2018	52	26	8				
11/8/2018				4 (J)	36	22	8
4/22/2019	50			46	24	36	31
4/23/2019		48	34				
9/26/2019		39	32	27	25	30	29
9/27/2019	50						
4/13/2020	63	28	39		27		20
4/14/2020				36		29	
10/21/2020				33			19
10/22/2020	41	25	34		29	22	
3/16/2021	39	41	34	27	37	31	25
10/5/2021	43	29	25	29	34	29	35
3/15/2022	53	56	51	34			36
3/16/2022					55	25	
10/4/2022	53	52	42				
10/5/2022				42	35	34	31
4/19/2023	67	41	31			29	
4/20/2023				37	30		66
5/24/2023							32
10/27/2023	21	23	24	21	14		
10/30/2023						15	29
3/18/2024	33						
3/19/2024			17	24	20		31
3/20/2024		39				25	
9/30/2024	33	37	28				
10/1/2024				33	33	35	30

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

Box Plots

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Boron Analysis Run 12/4/2024 11:36 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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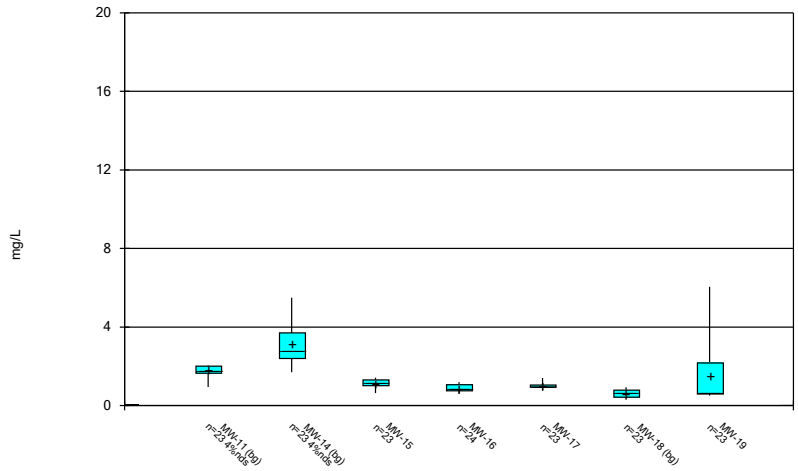
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/4/2024 11:36 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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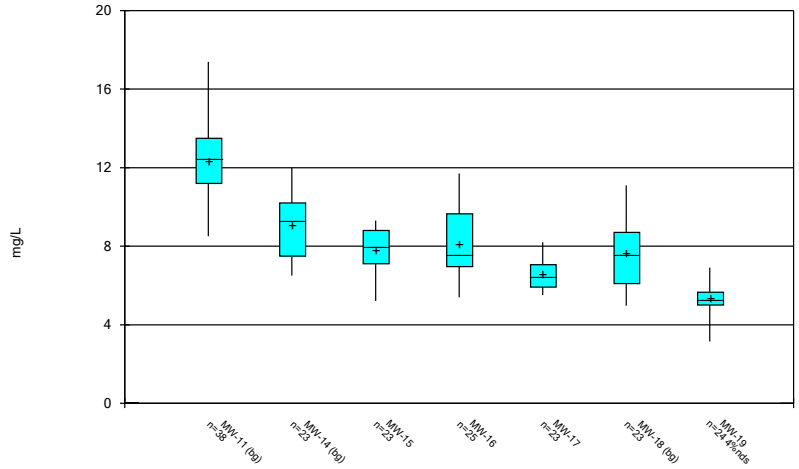
Box & Whiskers Plot



Constituent: Chloride Analysis Run 12/4/2024 11:36 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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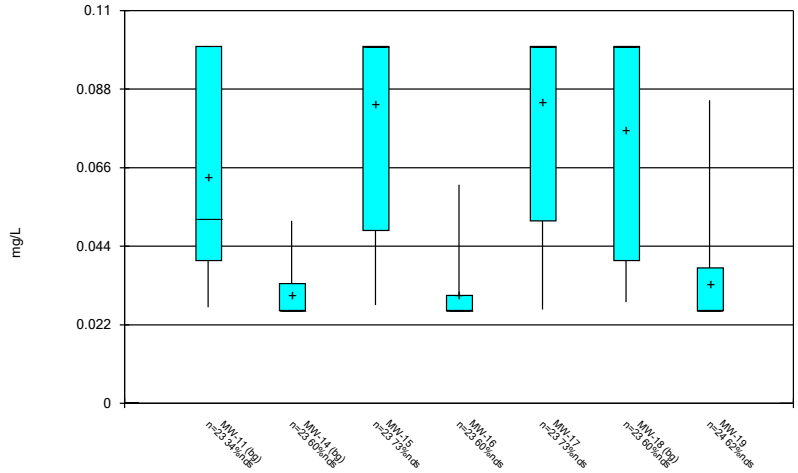
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 12/4/2024 11:36 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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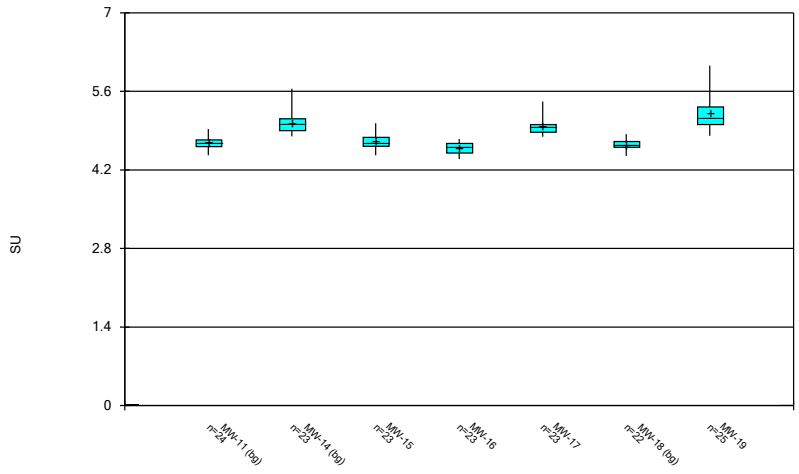
Box & Whiskers Plot



Constituent: pH Analysis Run 12/4/2024 11:36 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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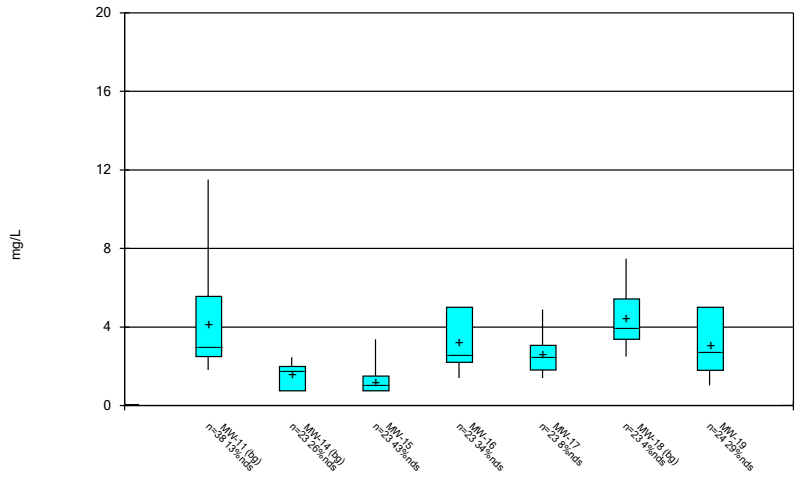
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/4/2024 11:36 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

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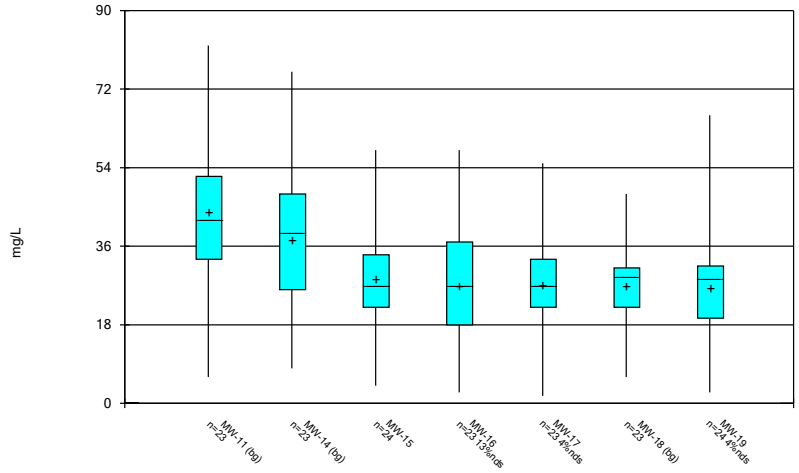
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:36 AM

Plant Daniel Client: Southern Company Data: NAMU CCR

Outlier Summary

Outlier Summary

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:38 AM

	MW-19 Calcium (mg/L)
4/20/2023	15.4 (o)

Prediction Limits - Intrawell

Intrawell Prediction Limits - Significant Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:47 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**MW-17**	**3.848**	**n/a**	**10/1/2024**	**4.89**	**Yes**	**21**	**2.469**	**0.698**	**9.524**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**

Intrawell Prediction Limits - All Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:47 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	NBg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-11	0.103	n/a	9/30/2024	0.08ND	No	21		n/a	n/a	85.71	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-14	0.08	n/a	9/30/2024	0.08ND	No	21		n/a	n/a	95.24	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-15	0.08	n/a	9/30/2024	0.08ND	No	21		n/a	n/a	90.48	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-18	0.0927	n/a	10/1/2024	0.0257J	No	21		n/a	n/a	61.9	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-19	0.08	n/a	10/1/2024	0.08ND	No	22		n/a	n/a	95.45	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-11	2.14	n/a	9/30/2024	1.58	No	21		11.51	4.784	4.762	None	x^4	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-14	5.45	n/a	9/30/2024	2.69	No	21		1.778	0.2818	4.762	None	sqrt(x)	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-15	1.592	n/a	9/30/2024	0.896	No	21		1.133	0.2321	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-16	1.249	n/a	10/1/2024	0.988	No	22		0.8682	0.1942	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-17	1.253	n/a	10/1/2024	0.939	No	21		0.9997	0.1281	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-18	0.9961	n/a	10/1/2024	0.647	No	21		0.6266	0.1871	0	None	No	0.00188	Param Intra 1 of 2
Calcium (mg/L)	MW-19	5.84	n/a	10/1/2024	2.61	No	21		n/a	n/a	0	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Chloride (mg/L)	MW-11	15.86	n/a	9/30/2024	12.3	No	36		12.44	1.847	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-14	12.24	n/a	9/30/2024	10.5	No	21		9.109	1.586	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-15	10.16	n/a	9/30/2024	7.42	No	21		7.741	1.227	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-16	11.41	n/a	10/1/2024	7.89	No	23		8.088	1.705	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-17	8.088	n/a	10/1/2024	5.72	No	21		6.617	0.745	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-18	11.41	n/a	10/1/2024	7.15	No	21		7.771	1.844	0	None	No	0.00188	Param Intra 1 of 2
Chloride (mg/L)	MW-19	6.91	n/a	10/1/2024	5.78	No	22		n/a	n/a	4.545	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-11	0.1	n/a	9/30/2024	0.0367J	No	21		n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.0511	n/a	9/30/2024	0.0312J	No	21		n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-15	0.1	n/a	9/30/2024	0.1ND	No	21		n/a	n/a	76.19	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-16	0.0612	n/a	10/1/2024	0.0282J	No	21		n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-17	0.1	n/a	10/1/2024	0.1ND	No	21		n/a	n/a	76.19	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-18	0.1	n/a	10/1/2024	0.0283J	No	21		n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-19	0.0849	n/a	10/1/2024	0.027J	No	22		n/a	n/a	68.18	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
pH (SU)	MW-11	4.897	4.494	9/30/2024	4.59	No	22		4.696	0.1027	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-14	5.464	4.648	9/30/2024	5.24	No	21		1.715	0.0234	0	None	x^(1/3)	0.0009398	Param Intra 1 of 2
pH (SU)	MW-15	4.981	4.434	9/30/2024	4.7	No	21		4.708	0.1383	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-16	4.781	4.402	10/1/2024	4.49	No	21		4.591	0.09588	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-17	5.42	4.79	10/1/2024	4.97	No	21		n/a	n/a	0	n/a	n/a	0.007998	NP Intra (normality) 1 of 2
pH (SU)	MW-18	4.83	4.47	10/1/2024	4.61	No	20		4.65	0.09032	0	None	No	0.0009398	Param Intra 1 of 2
pH (SU)	MW-19	6.06	4.81	10/1/2024	5.29	No	23		n/a	n/a	0	n/a	n/a	0.006831	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-11	11.5	n/a	9/30/2024	2.69	No	36		n/a	n/a	13.89	n/a	n/a	0.001429	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-14	2.435	n/a	9/30/2024	1.41	No	21		2.621	1.674	28.57	Kaplan-Meier	x^2	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-15	3.38	n/a	9/30/2024	1.58	No	21		n/a	n/a	47.62	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-16	5	n/a	10/1/2024	3.36	No	21		n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Sulfate (mg/L)	**MW-17**	**3.848**	**n/a**	**10/1/2024**	**4.89**	**Yes**	**21**		**2.469**	**0.698**	**9.524**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Sulfate (mg/L)	MW-18	7.288	n/a	10/1/2024	5.43	No	21		2.055	0.3266	4.762	None	sqrt(x)	0.00188	Param Intra 1 of 2
Sulfate (mg/L)	MW-19	5	n/a	10/1/2024	2.77	No	22		n/a	n/a	31.82	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	76.45	n/a	9/30/2024	33	No	21		44.86	15.99	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-14	67.05	n/a	9/30/2024	37	No	21		37.62	14.9	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	55.48	n/a	9/30/2024	28	No	22		29.09	13.45	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-16	59.04	n/a	10/1/2024	33	No	21		26.74	16.35	14.29	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-17	48.32	n/a	10/1/2024	33	No	21		27.22	10.68	4.762	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-18	44.58	n/a	10/1/2024	35	No	21		26.67	9.068	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-19	52.09	n/a	10/1/2024	30	No	22		25.89	13.35	4.545	None	No	0.00188	Param Intra 1 of 2

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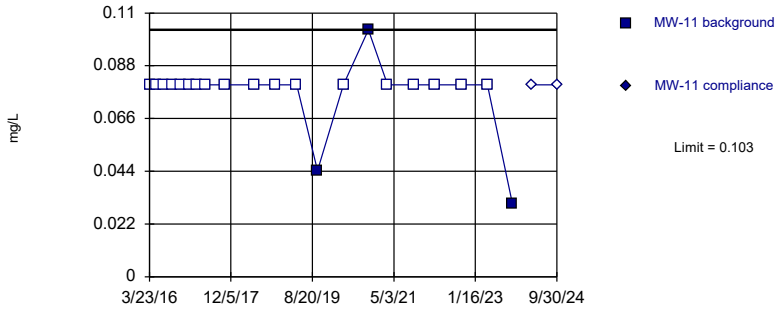
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Boron Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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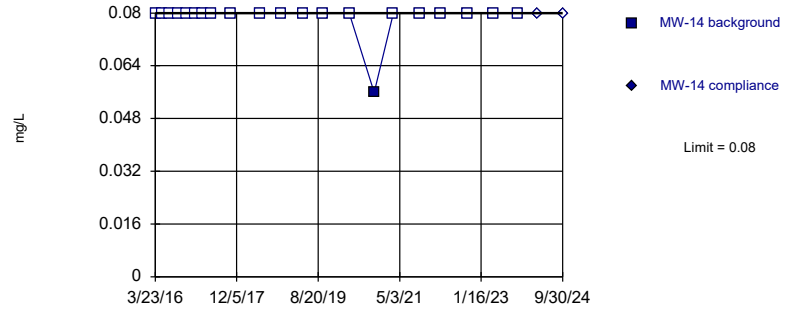
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



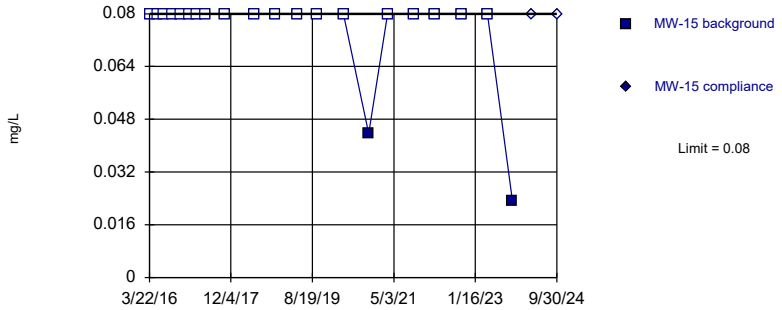
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 95.24% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Boron Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 90.48% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Boron Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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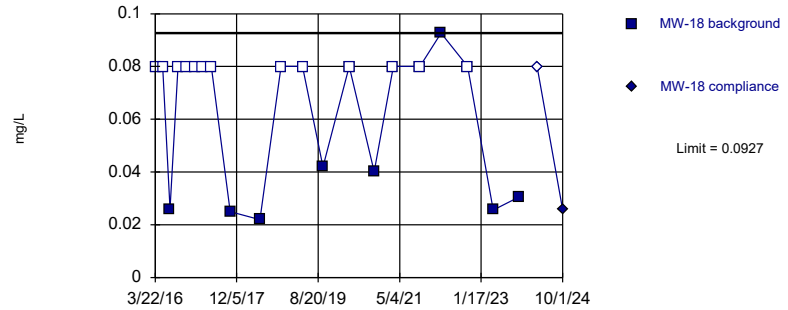
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 61.9% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Boron Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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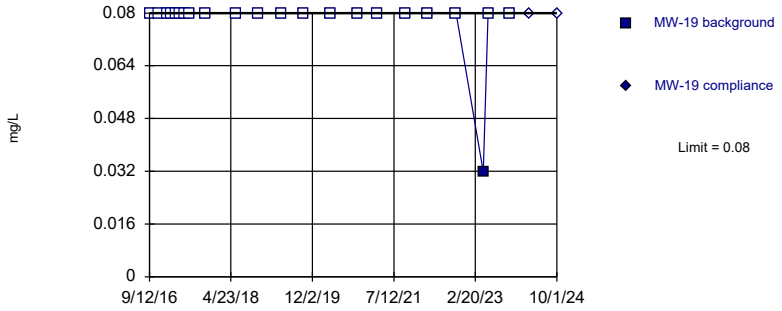
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



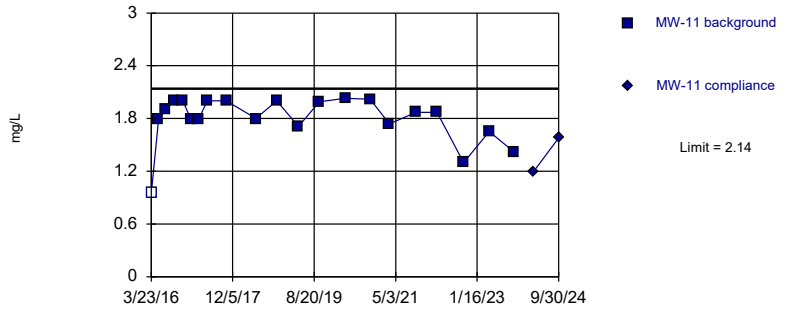
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 95.45% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Boron Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^4 transformation): Mean=11.51, Std. Dev.=4.784, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8952, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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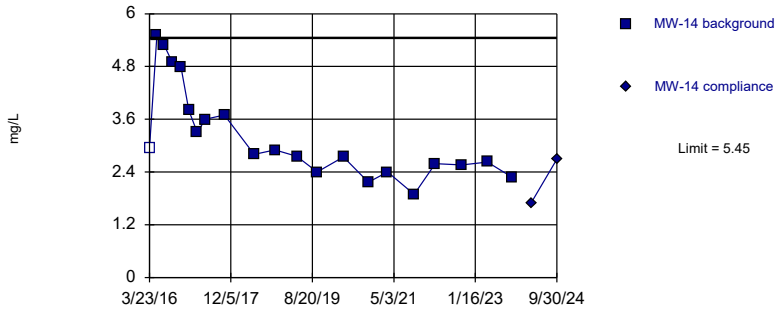
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.778, Std. Dev.=0.2818, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9038, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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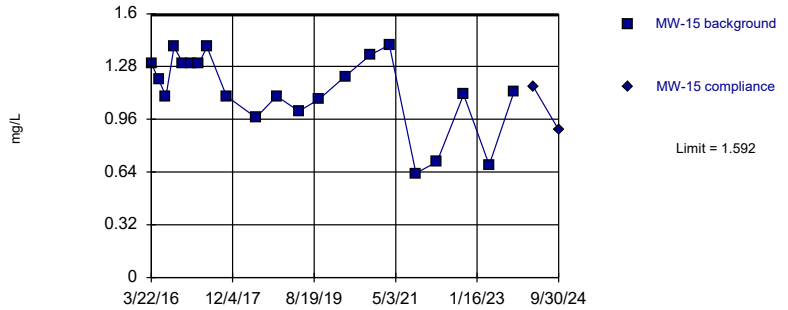
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.133, Std. Dev.=0.2321, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8874, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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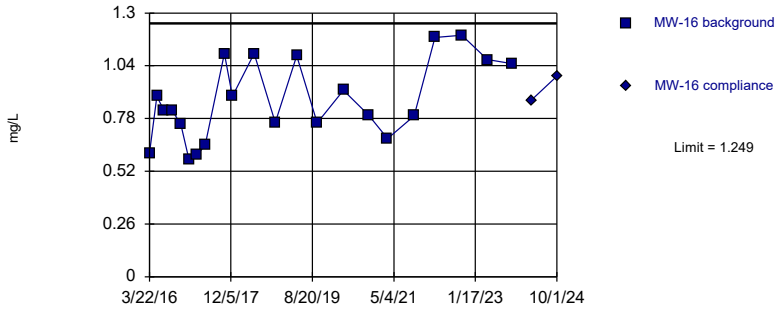
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.8682, Std. Dev.=0.1942, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9341, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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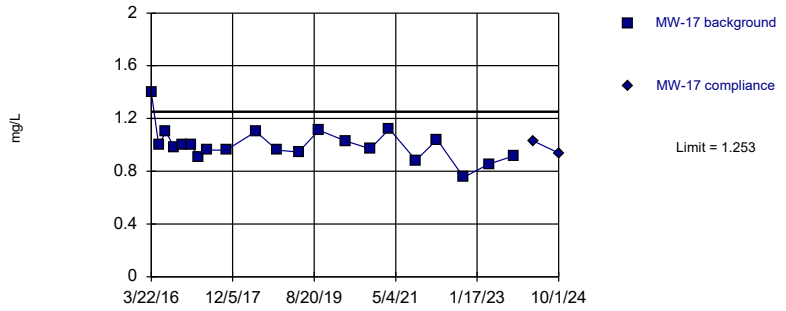
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.9997, Std. Dev.=0.1281, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8942, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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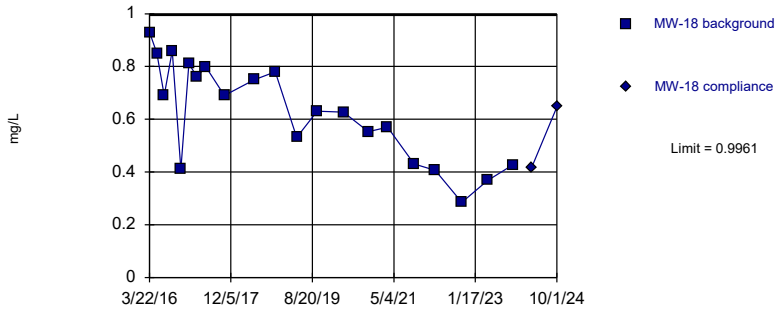
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.6266, Std. Dev.=0.1871, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9556, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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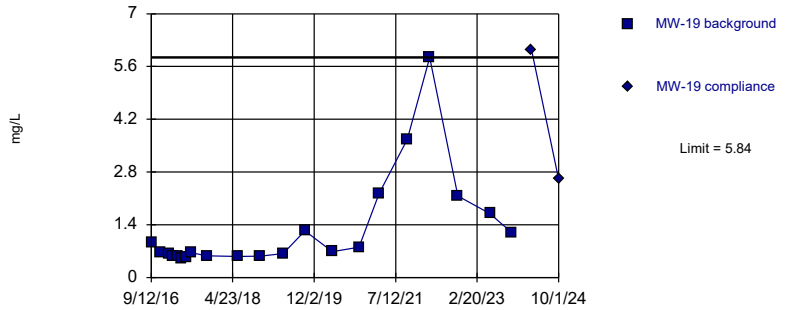
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Calcium Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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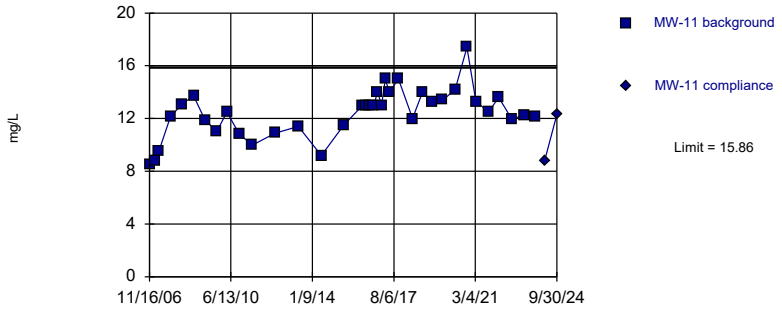
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=12.44, Std. Dev.=1.847, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9673, critical = 0.912. Kappa = 1.852 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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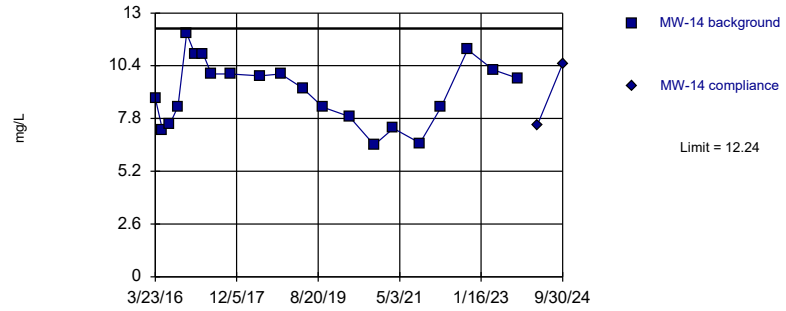
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=9.109, Std. Dev.=1.586, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9626, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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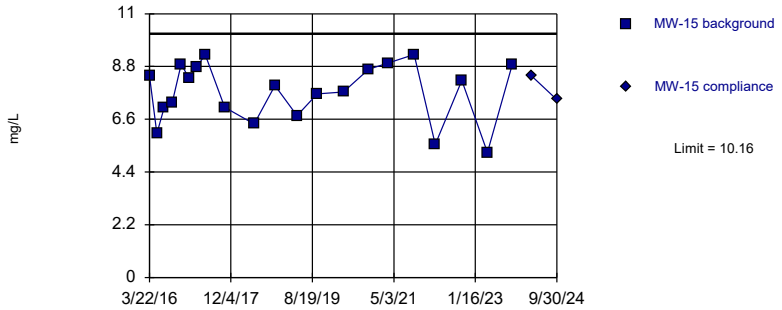
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.741, Std. Dev.=1.227, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9338, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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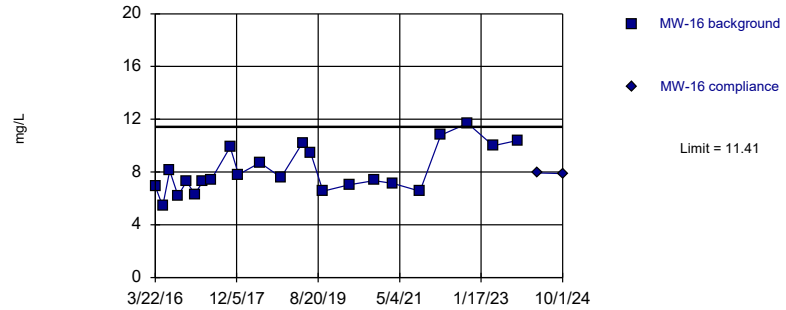
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.088, Std. Dev.=1.705, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9288, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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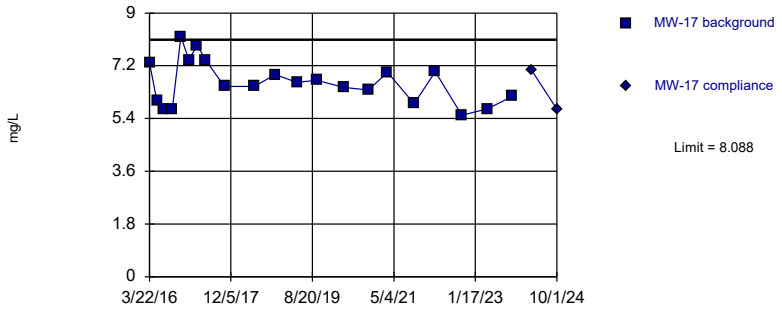
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.617, Std. Dev.=0.745, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9636, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 12/4/2024 11:46 AM View: Intrawell

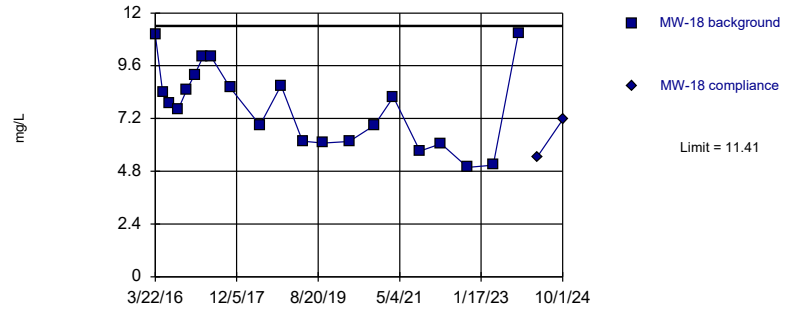
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.771, Std. Dev.=1.844, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9551, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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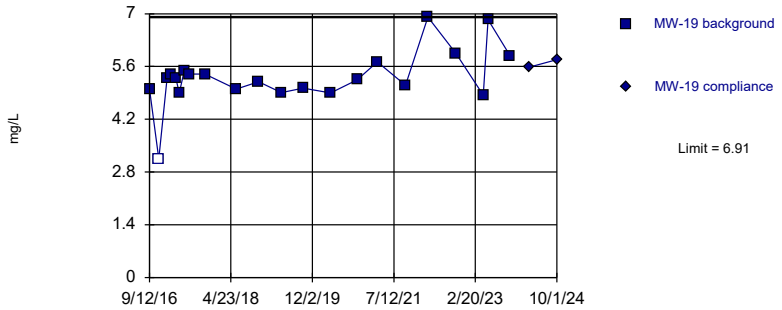
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. 4.545% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Chloride Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

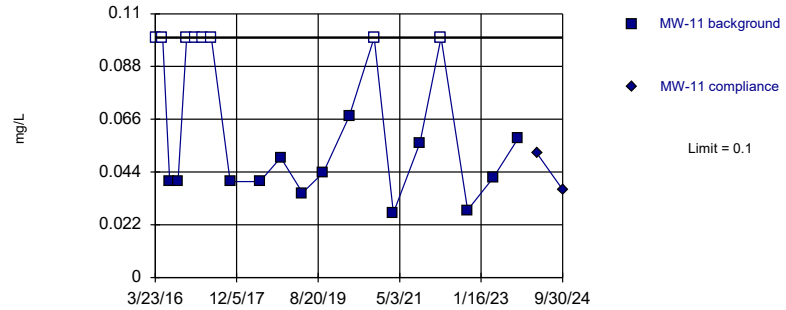
Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 38.1% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

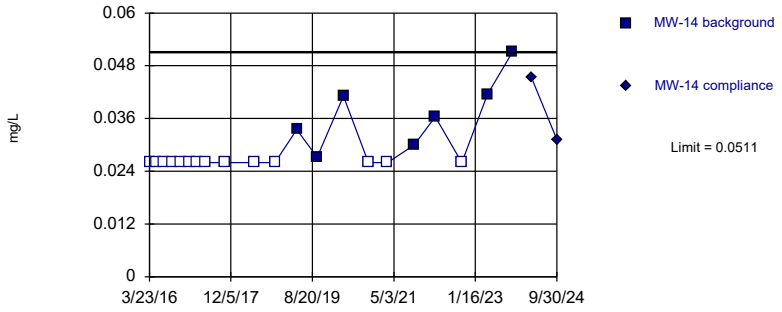
Constituent: Fluoride Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



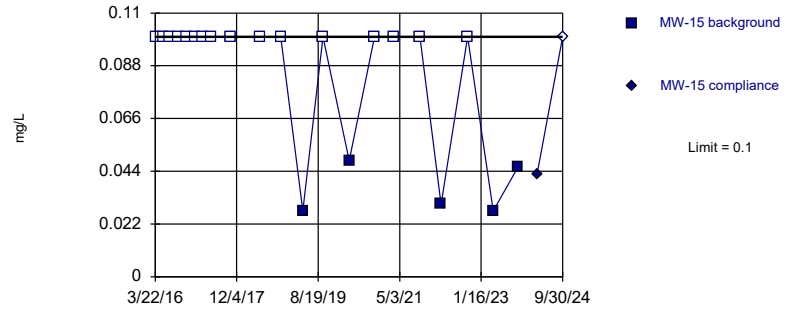
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



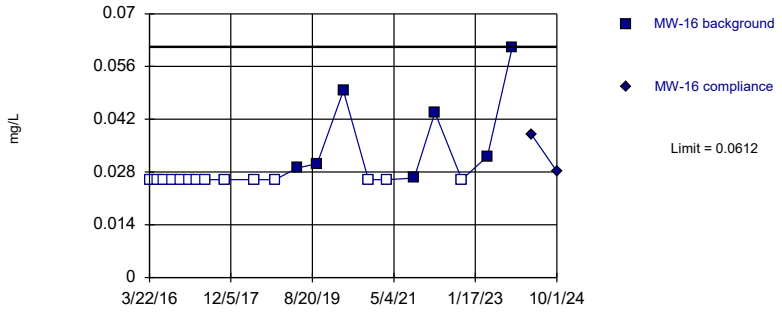
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 76.19% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



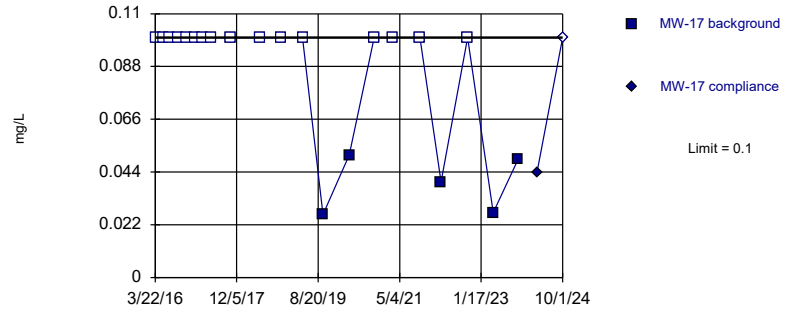
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



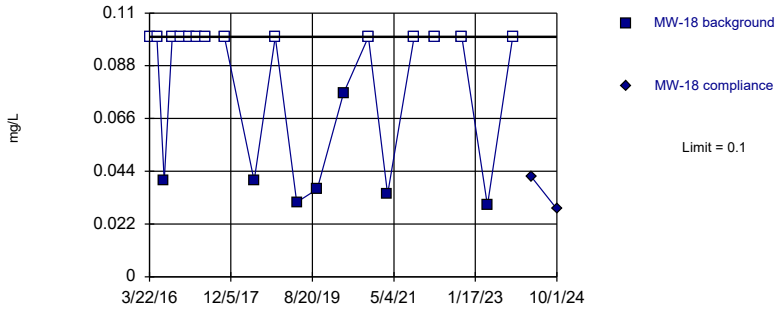
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 76.19% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



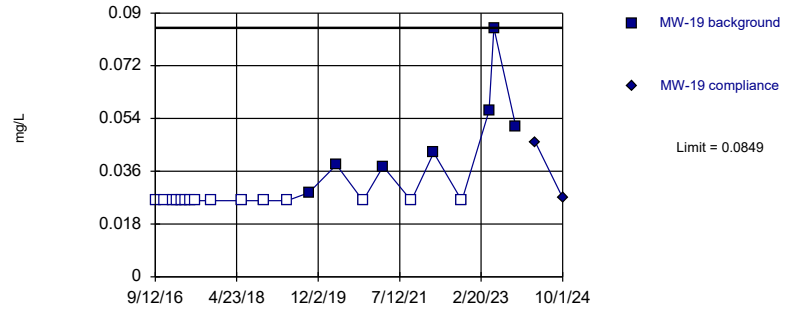
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Fluoride Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 68.18% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Fluoride Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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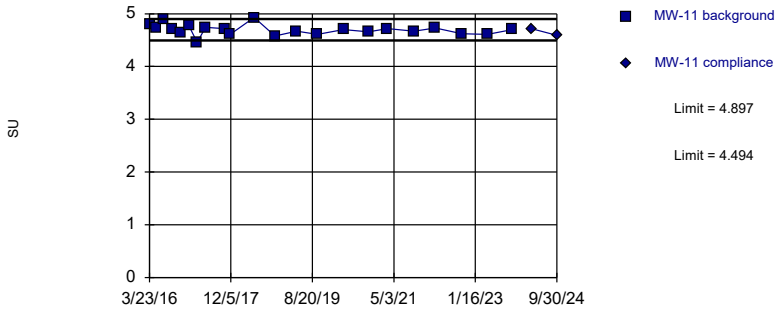
Within Limits

Prediction Limit

Intrawell Parametric



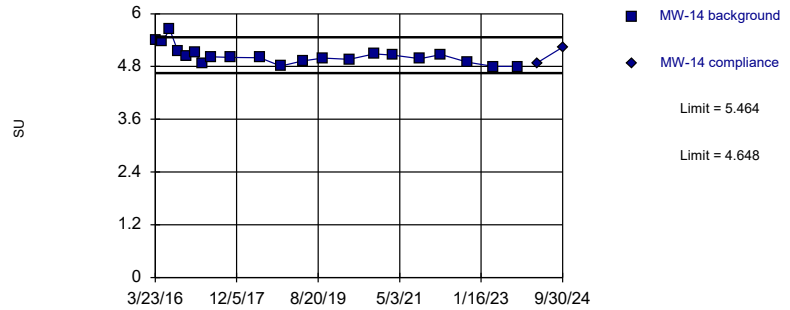
Background Data Summary: Mean=4.696, Std. Dev.=0.1027, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9532, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=1.715, Std. Dev.=0.0234, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8736, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

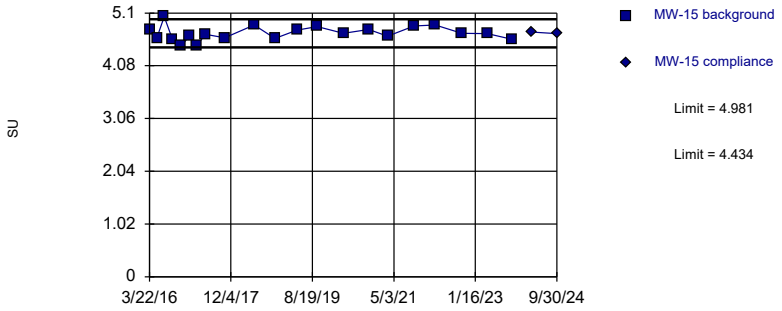
Constituent: pH Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.708, Std. Dev.=0.1383, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9702, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 12/4/2024 11:46 AM View: Intrawell

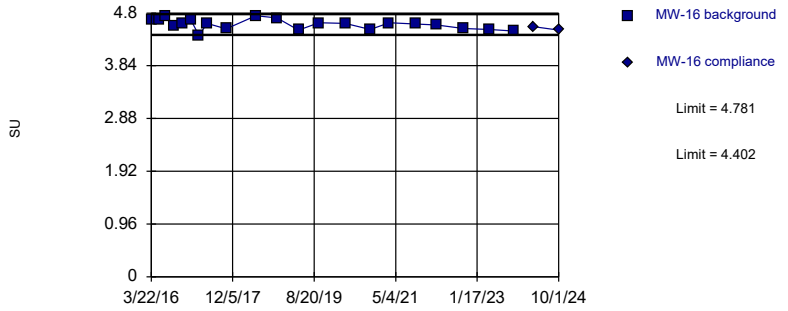
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.591, Std. Dev.=0.09588, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9705, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 12/4/2024 11:46 AM View: Intrawell

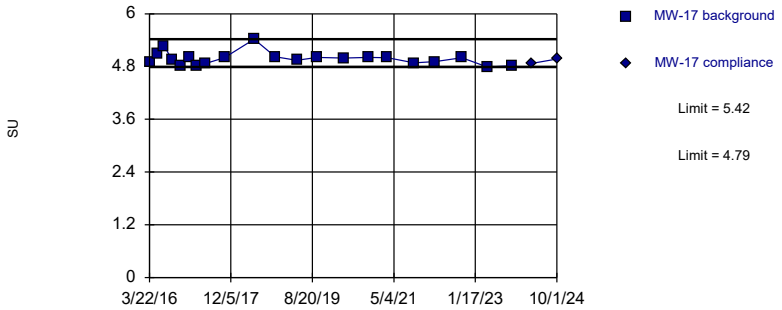
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 21 background values. Well-constituent pair annual alpha = 0.01596. Individual comparison alpha = 0.007998 (1 of 2).

Constituent: pH Analysis Run 12/4/2024 11:46 AM View: Intrawell

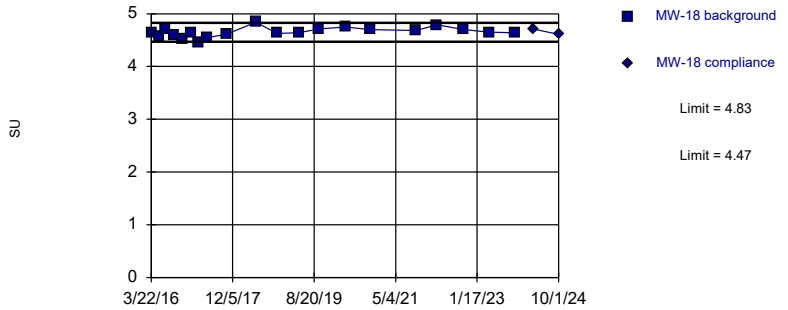
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.65, Std. Dev.=0.09032, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9817, critical = 0.868. Kappa = 1.988 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 12/4/2024 11:46 AM View: Intrawell

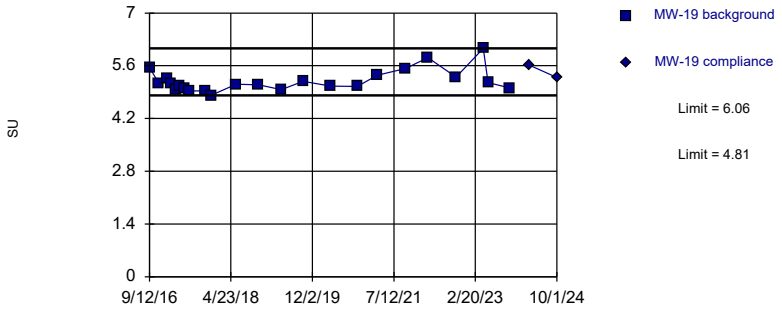
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 23 background values. Well-constituent pair annual alpha = 0.01364. Individual comparison alpha = 0.006831 (1 of 2).

Constituent: pH Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

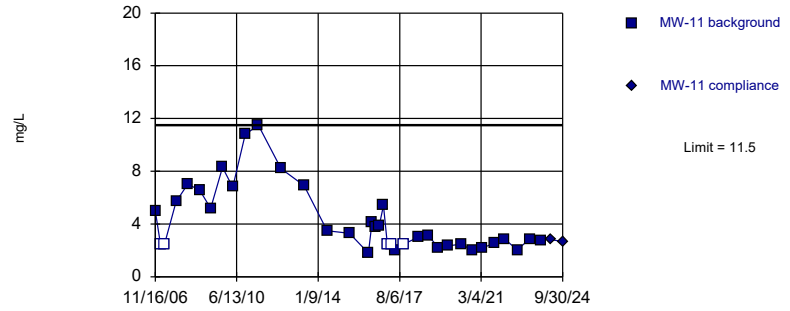
Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 13.89% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Sulfate Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

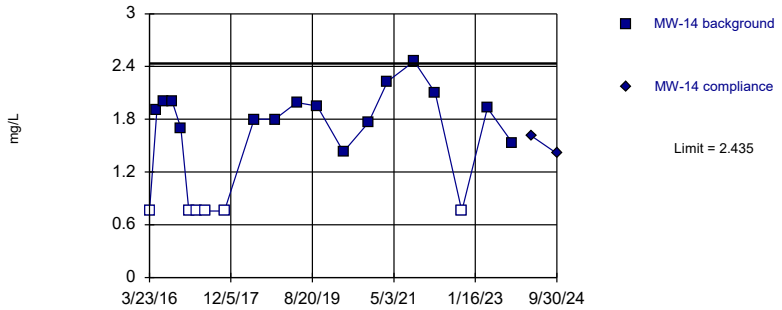
Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation) (after Kaplan-Meier Adjustment): Mean=2.621, Std. Dev.=1.674, n=21, 28.57% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8992, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

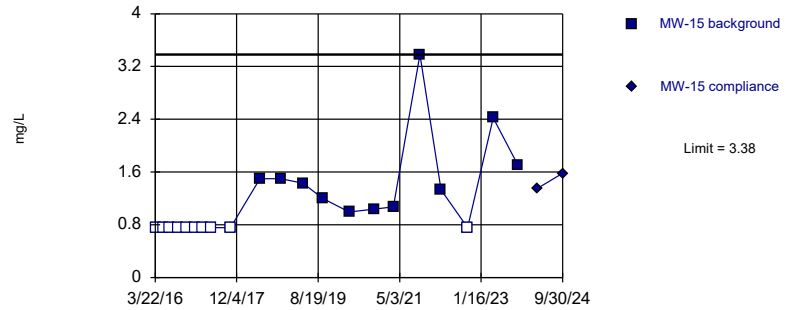
Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 47.62% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Sulfate Analysis Run 12/4/2024 11:46 AM View: Intrawell

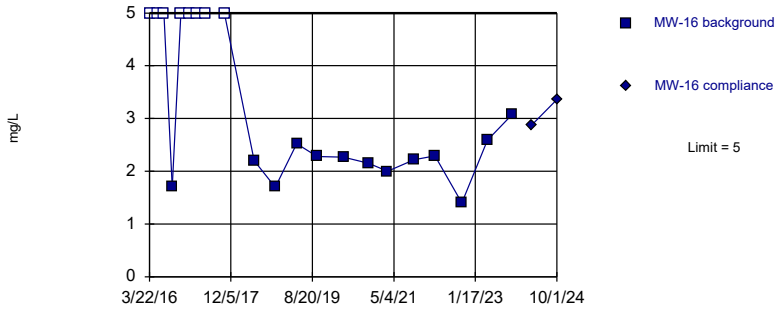
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 38.1% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

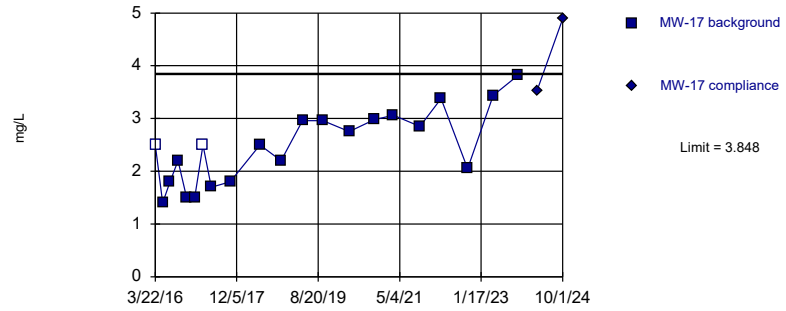
Constituent: Sulfate Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.469, Std. Dev.=0.698, n=21, 9.524% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9623, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

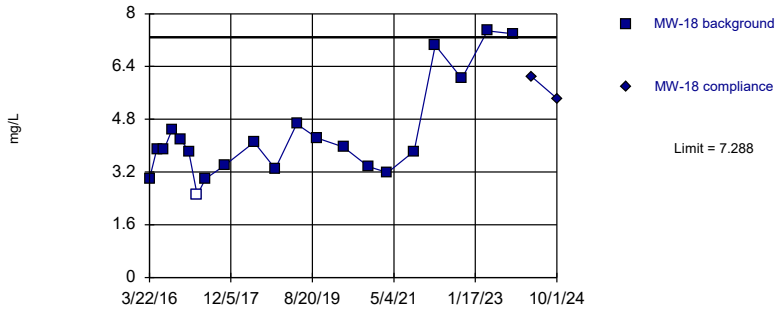
Constituent: Sulfate Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=2.055, Std. Dev.=0.3266, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8734, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

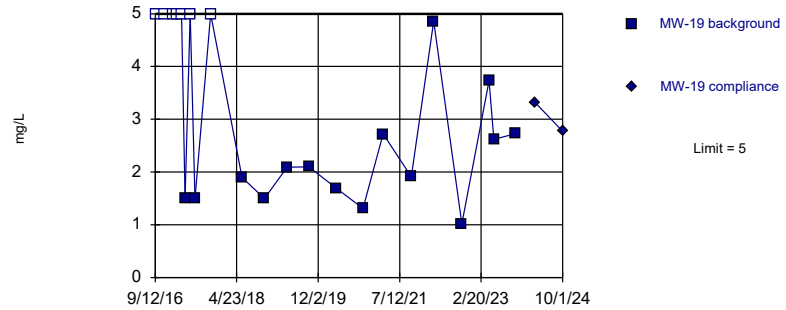
Constituent: Sulfate Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. 31.82% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Sulfate Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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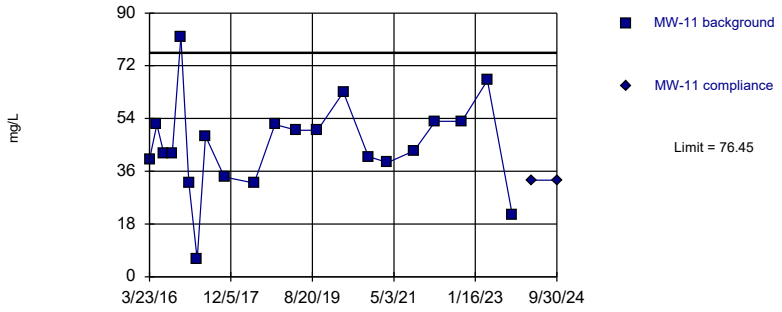
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=44.86, Std. Dev.=15.99, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9608, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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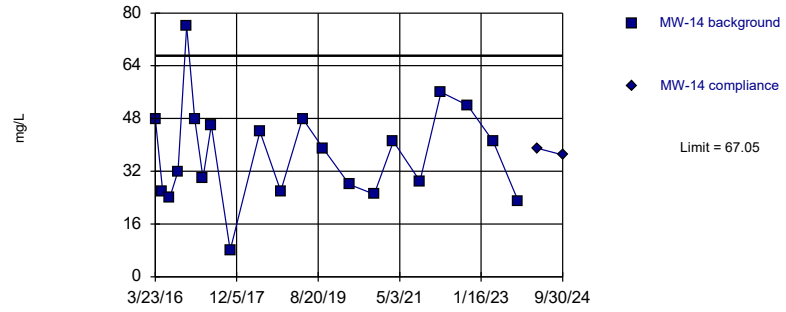
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=37.62, Std. Dev.=14.9, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9537, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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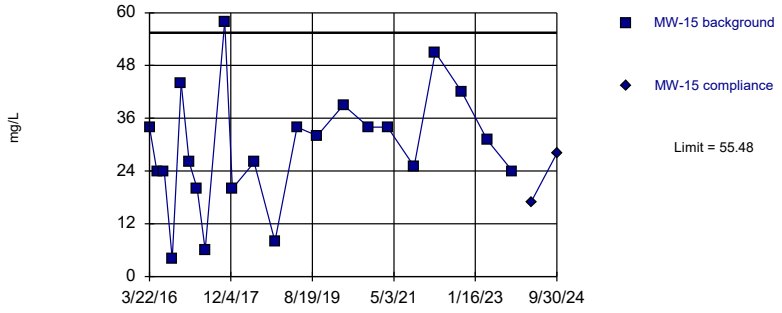
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=29.09, Std. Dev.=13.45, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9667, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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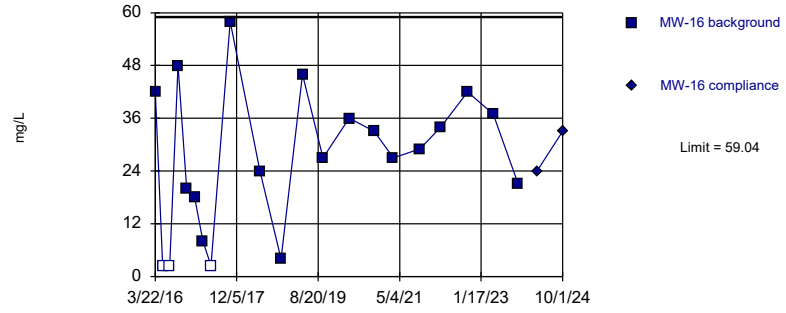
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=26.74, Std. Dev.=16.35, n=21, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9536, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:46 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

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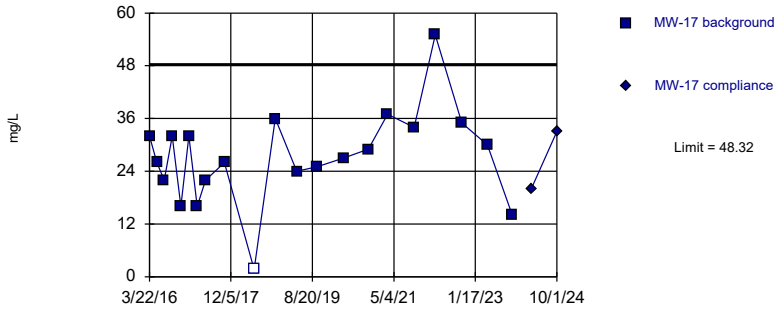
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=27.22, Std. Dev.=10.68, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9465, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

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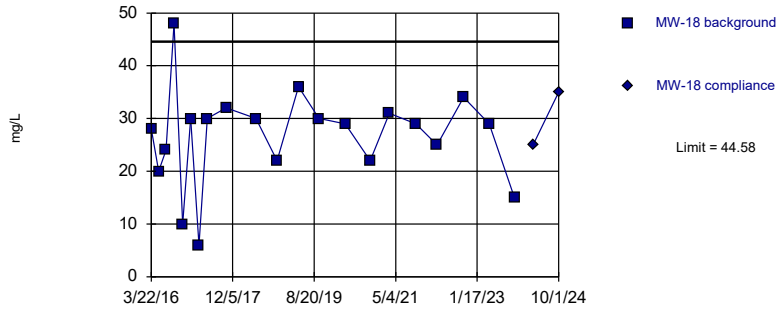
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=26.67, Std. Dev.=9.068, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.928, critical = 0.873. Kappa = 1.975 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

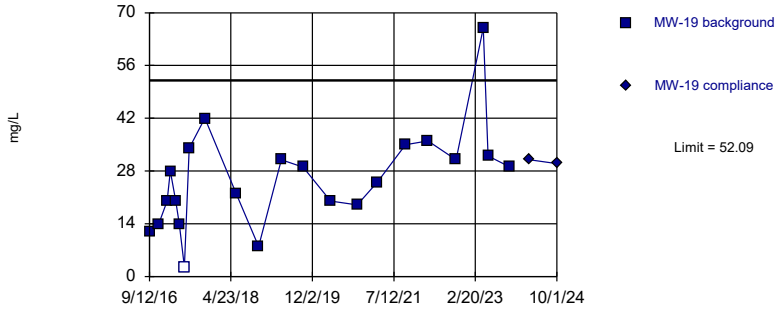
Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Sanitas™ v.10.0.23a Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=25.89, Std. Dev.=13.35, n=22, 4.545% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9302, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 12/4/2024 11:46 AM View: Intrawell
Plant Daniel Client: Southern Company Data: NAMU CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/4/2024 11:47 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	
10/22/2020	0.103	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022	<0.08	
10/4/2022	<0.08	
4/19/2023	<0.08	
10/27/2023	0.0305 (J)	
3/18/2024		<0.08
9/30/2024		<0.08

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/4/2024 11:47 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)	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022	<0.08	
10/4/2022	<0.08	
4/19/2023	<0.08	
10/27/2023	<0.08	
3/20/2024		<0.08
9/30/2024		<0.08

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/4/2024 11:47 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	
10/22/2020	0.0437 (J)	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022	<0.08	
10/4/2022	<0.08	
4/19/2023	<0.08	
10/27/2023	0.0234 (J)	
3/19/2024		<0.08
9/30/2024		<0.08

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/4/2024 11:47 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)	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/16/2022	0.0927	
10/5/2022	<0.08	
4/19/2023	0.0256 (J)	
10/30/2023	0.0304 (J)	
3/20/2024		<0.08
10/1/2024		0.0257 (J)

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.08	
11/18/2016	<0.08	
1/18/2017	<0.08	
2/10/2017	<0.08	
3/21/2017	<0.08	
4/14/2017	<0.08	
5/23/2017	<0.08	
6/26/2017	<0.08	
10/17/2017	<0.08	
5/31/2018	<0.08	
11/8/2018	<0.08	
4/22/2019	<0.08	
9/26/2019	<0.08	
4/13/2020	<0.08	
10/21/2020	<0.08	
3/16/2021	<0.08	
10/5/2021	<0.08	
3/15/2022	<0.08	
10/5/2022	<0.08	
4/20/2023	0.0318 (J)	
5/24/2023	<0.08	
10/30/2023	<0.08	
3/19/2024		<0.08
10/1/2024		<0.08

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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	1.74	
10/5/2021	1.87	
3/15/2022	1.87	
10/4/2022	1.3	
4/19/2023	1.65	
10/27/2023	1.42	
3/18/2024		1.19
9/30/2024		1.58

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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	2.4	
10/5/2021	1.89	
3/15/2022	2.59	
10/4/2022	2.56	
4/19/2023	2.63	
10/27/2023	2.28	
3/20/2024		1.7
9/30/2024		2.69

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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	1.41	
10/5/2021	0.632	
3/15/2022	0.703	
10/4/2022	1.11	
4/19/2023	0.682	
10/27/2023	1.13	
3/19/2024		1.16
9/30/2024		0.896

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/4/2024 11:47 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	
10/21/2020	0.798	
3/16/2021	0.681	
10/5/2021	0.793	
3/15/2022	1.18	
10/5/2022	1.19	
4/20/2023	1.07	
10/27/2023	1.05	
3/19/2024		0.87
10/1/2024		0.988

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	1.12	
10/5/2021	0.883	
3/16/2022	1.04	
10/5/2022	0.755	
4/20/2023	0.855	
10/27/2023	0.916	
3/19/2024		1.03
10/1/2024		0.939

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/4/2024 11:47 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	
10/22/2020	0.553	
3/16/2021	0.57	
10/5/2021	0.43 (J)	
3/16/2022	0.406 (J)	
10/5/2022	0.285 (J)	
4/19/2023	0.368 (J)	
10/30/2023	0.427 (J)	
3/20/2024		0.414 (J)
10/1/2024		0.647

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	2.23	
10/5/2021	3.67	
3/15/2022	5.84	
10/5/2022	2.16	
4/20/2023	15.4 (o)	
5/24/2023	1.7	
10/30/2023	1.19	
3/19/2024		6.05
10/1/2024		2.61

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	13.3	
10/5/2021	12.5	
3/15/2022	13.6	
10/4/2022	12	
4/19/2023	12.2	
10/27/2023	12.1	
3/18/2024		8.82
9/30/2024		12.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:47 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	
10/22/2020	6.5	
3/16/2021	7.32	
10/5/2021	6.59	
3/15/2022	8.36	
10/4/2022	11.2	
4/19/2023	10.2	
10/27/2023	9.77	
3/20/2024		7.44
9/30/2024		10.5

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	8.94	
10/5/2021	9.3	
3/15/2022	5.55	
10/4/2022	8.22	
4/19/2023	5.21	
10/27/2023	8.9	
3/19/2024		8.42
9/30/2024		7.42

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:47 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	
10/21/2020	7.36	
3/16/2021	7.14	
10/5/2021	6.55	
3/15/2022	10.8	
10/5/2022	11.7	
4/20/2023	10	
10/27/2023	10.4	
3/19/2024		7.92
10/1/2024		7.89

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:47 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	
10/22/2020	6.37	
3/16/2021	6.97	
10/5/2021	5.91	
3/16/2022	7	
10/5/2022	5.51	
4/20/2023	5.73	
10/27/2023	6.16	
3/19/2024		7.06
10/1/2024		5.72

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	8.18	
10/5/2021	5.72	
3/16/2022	6.05	
10/5/2022	4.97	
4/19/2023	5.08	
10/30/2023	11.1	
3/20/2024		5.44
10/1/2024		7.15

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5	
11/18/2016	<6.3 (*)	
1/18/2017	5.3	
2/10/2017	5.4	
3/21/2017	5.3	
4/14/2017	4.9 (B)	
5/23/2017	5.5	
6/26/2017	5.4	
10/17/2017	5.4	
5/31/2018	5	
11/8/2018	5.2	
4/22/2019	4.91	
9/26/2019	5.03	
4/13/2020	4.9	
10/21/2020	5.25	
3/16/2021	5.72	
10/5/2021	5.1	
3/15/2022	6.91	
10/5/2022	5.94	
4/20/2023	4.84	
5/24/2023	6.84	
10/30/2023	5.88	
3/19/2024		5.59
10/1/2024		5.78

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	0.0269 (J)	
10/5/2021	0.0561 (J)	
3/15/2022	<0.1	
10/4/2022	0.0281 (J)	
4/19/2023	0.0416 (J)	
10/27/2023	0.058 (J)	
3/18/2024		0.0518 (J)
9/30/2024		0.0367 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/12/2016	<0.026	
9/12/2016	<0.026	
11/19/2016	<0.026	
1/18/2017	<0.026	
3/22/2017	<0.026	
5/24/2017	<0.026	
10/17/2017	<0.026	
6/1/2018	<0.026	
11/7/2018	<0.026	
4/23/2019	0.0335 (J)	
9/26/2019	0.0272 (J)	
4/13/2020	0.0411 (J)	
10/22/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.03 (J)	
3/15/2022	0.0364 (J)	
10/4/2022	<0.026	
4/19/2023	0.0415 (J)	
10/27/2023	0.0511 (J)	
3/20/2024		0.0454 (J)
9/30/2024		0.0312 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.1 (B1)	
5/18/2016	<0.1	
7/12/2016	<0.1	
9/12/2016	<0.1	
11/19/2016	<0.1	
1/19/2017	<0.1	
3/21/2017	<0.1	
5/23/2017	<0.1	
10/17/2017	<0.1	
6/1/2018	<0.1	
11/7/2018	<0.1	
4/23/2019	0.0275 (J)	
9/26/2019	<0.1	
4/13/2020	0.0484 (J)	
10/22/2020	<0.1	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/15/2022	0.0302 (J)	
10/4/2022	<0.1	
4/19/2023	0.0275 (J)	
10/27/2023	0.0459 (J)	
3/19/2024		0.0428 (J)
9/30/2024		<0.1

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-16	MW-16
3/22/2016	<0.026 (B1)	
5/18/2016	<0.026	
7/11/2016	<0.026	
9/13/2016	<0.026	
11/17/2016	<0.026	
1/18/2017	<0.026	
3/21/2017	<0.026	
5/23/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	0.029 (J)	
9/26/2019	0.0302 (J)	
4/14/2020	0.0496 (J)	
10/21/2020	<0.026	
3/16/2021	<0.026	
10/5/2021	0.0264 (J)	
3/15/2022	0.0438 (J)	
10/5/2022	<0.026	
4/20/2023	0.0322 (J)	
10/27/2023	0.0612 (J)	
3/19/2024		0.038 (J)
10/1/2024		0.0282 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	<0.1	
10/5/2021	<0.1	
3/16/2022	0.0399 (J)	
10/5/2022	<0.1	
4/20/2023	0.0271 (J)	
10/27/2023	0.0494 (J)	
3/19/2024		0.044 (J)
10/1/2024		<0.1

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	0.0344 (J)	
10/5/2021	<0.1	
3/16/2022	<0.1	
10/5/2022	<0.1	
4/19/2023	0.0297 (J)	
10/30/2023	<0.1	
3/20/2024		0.0417 (J)
10/1/2024		0.0283 (J)

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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-19	MW-19
9/12/2016	<0.026	
11/18/2016	<0.026	
1/18/2017	<0.026	
2/10/2017	<0.026	
3/21/2017	<0.026	
4/14/2017	<0.026	
5/23/2017	<0.026	
6/26/2017	<0.026	
10/17/2017	<0.026	
5/31/2018	<0.026	
11/8/2018	<0.026	
4/22/2019	<0.026	
9/26/2019	0.0287 (J)	
4/13/2020	0.0382 (J)	
10/21/2020	<0.026	
3/16/2021	0.0376 (J)	
10/5/2021	<0.026	
3/15/2022	0.0423 (J)	
10/5/2022	<0.026	
4/20/2023	0.0566 (J)	
5/24/2023	0.0849 (J)	
10/30/2023	0.0511 (J)	
3/19/2024		0.0458 (J)
10/1/2024		0.027 (J)

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

Prediction Limit

Constituent: pH (SU) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-11	MW-11
3/23/2016	4.8	
5/18/2016	4.74	
7/12/2016	4.9	
9/12/2016	4.72	
11/18/2016	4.65	
1/19/2017	4.77	
3/22/2017	4.46	
5/24/2017	4.74	
10/17/2017	4.72	
11/30/2017	4.61	
5/31/2018	4.93	
11/7/2018	4.58	
4/22/2019	4.67	
9/27/2019	4.61	
4/13/2020	4.7	
10/22/2020	4.66	
3/16/2021	4.72	
10/5/2021	4.67	
3/15/2022	4.73	
10/4/2022	4.62	
4/19/2023	4.61	
10/27/2023	4.7	
3/18/2024		4.72
9/30/2024		4.59

Prediction Limit

Constituent: pH (SU) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-14	MW-14
3/23/2016	5.4	
5/18/2016	5.38	
7/12/2016	5.65	
9/12/2016	5.14	
11/19/2016	5.05	
1/18/2017	5.11	
3/22/2017	4.86	
5/24/2017	5.02	
10/17/2017	5.01	
6/1/2018	5	
11/7/2018	4.81	
4/23/2019	4.93	
9/26/2019	4.99	
4/13/2020	4.96	
10/22/2020	5.09	
3/16/2021	5.06	
10/5/2021	4.98	
3/15/2022	5.07	
10/4/2022	4.9	
4/19/2023	4.8	
10/27/2023	4.8	
3/20/2024		4.88
9/30/2024		5.24

Prediction Limit

Constituent: pH (SU) Analysis Run 12/4/2024 11:47 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	
10/22/2020	4.78	
3/16/2021	4.65	
10/5/2021	4.85	
3/15/2022	4.87	
10/4/2022	4.71	
4/19/2023	4.7	
10/27/2023	4.59	
3/19/2024		4.73
9/30/2024		4.7

Prediction Limit

Constituent: pH (SU) Analysis Run 12/4/2024 11:47 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	
10/21/2020	4.5	
3/16/2021	4.62	
10/5/2021	4.6	
3/15/2022	4.58	
10/5/2022	4.52	
4/20/2023	4.5	
10/27/2023	4.47	
3/19/2024		4.55
10/1/2024		4.49

Prediction Limit

Constituent: pH (SU) Analysis Run 12/4/2024 11:47 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	
3/16/2021	5	
10/5/2021	4.88	
3/16/2022	4.91	
10/5/2022	5	
4/20/2023	4.79	
10/27/2023	4.82	
3/19/2024		4.87
10/1/2024		4.97

Prediction Limit

Constituent: pH (SU) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-18	MW-18
3/22/2016	4.63	
5/18/2016	4.58	
7/12/2016	4.7	
9/12/2016	4.6	
11/18/2016	4.52	
1/18/2017	4.63	
3/21/2017	4.45	
5/24/2017	4.55	
10/17/2017	4.61	
5/31/2018	4.84	
11/8/2018	4.63	
4/22/2019	4.64	
9/26/2019	4.71	
4/14/2020	4.75	
10/22/2020	4.7	
10/5/2021	4.68	
3/16/2022	4.79	
10/5/2022	4.7	
4/19/2023	4.65	
10/30/2023	4.64	
3/20/2024		4.71
10/1/2024		4.61

Prediction Limit

Constituent: pH (SU) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-19	MW-19
9/12/2016	5.55	
11/18/2016	5.14	
1/18/2017	5.27	
2/10/2017	5.14	
3/21/2017	4.96	
4/14/2017	5.07	
5/23/2017	5.01	
6/26/2017	4.93	
10/17/2017	4.93	
11/30/2017	4.81	
5/31/2018	5.11	
11/8/2018	5.09	
4/22/2019	4.97	
9/26/2019	5.19	
4/13/2020	5.06	
10/21/2020	5.05	
3/16/2021	5.35	
10/5/2021	5.53	
3/15/2022	5.82	
10/5/2022	5.3	
4/20/2023	6.06	
5/24/2023	5.15	
10/30/2023	5.01	
3/19/2024		5.61
10/1/2024		5.29

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	2.15	
10/5/2021	2.57	
3/15/2022	2.88	
10/4/2022	2.04	
4/19/2023	2.85	
10/27/2023	2.72	
3/18/2024		2.81
9/30/2024		2.69

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-14	MW-14
3/23/2016	<0.756	
5/18/2016	1.9	
7/12/2016	2 (J)	
9/12/2016	2 (J)	
11/19/2016	1.7 (J)	
1/18/2017	<0.756	
3/22/2017	<0.756	
5/24/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.8 (J)	
11/7/2018	1.8 (J)	
4/23/2019	1.99	
9/26/2019	1.95	
4/13/2020	1.43	
10/22/2020	1.76	
3/16/2021	2.23	
10/5/2021	2.46	
3/15/2022	2.1	
10/4/2022	<0.756	
4/19/2023	1.93	
10/27/2023	1.53	
3/20/2024		1.61
9/30/2024		1.41

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-15	MW-15
3/22/2016	<0.756	
5/18/2016	<0.756	
7/12/2016	<0.756	
9/12/2016	<0.756	
11/19/2016	<0.756	
1/19/2017	<0.756	
3/21/2017	<0.756	
5/23/2017	<0.756	
10/17/2017	<0.756	
6/1/2018	1.5 (J)	
11/7/2018	1.5 (J)	
4/23/2019	1.43	
9/26/2019	1.2	
4/13/2020	0.992 (J)	
10/22/2020	1.04	
3/16/2021	1.07	
10/5/2021	3.38	
3/15/2022	1.33	
10/4/2022	<0.756	
4/19/2023	2.42	
10/27/2023	1.7	
3/19/2024		1.35
9/30/2024		1.58

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	2	
10/5/2021	2.22	
3/15/2022	2.29	
10/5/2022	1.4	
4/20/2023	2.59	
10/27/2023	3.08	
3/19/2024		2.87
10/1/2024		3.36

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:47 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	
10/22/2020	2.98	
3/16/2021	3.06	
10/5/2021	2.85	
3/16/2022	3.38	
10/5/2022	2.05	
4/20/2023	3.44	
10/27/2023	3.82	
3/19/2024		3.53
10/1/2024		4.89

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	3.18	
10/5/2021	3.83	
3/16/2022	7.04	
10/5/2022	6.04	
4/19/2023	7.48	
10/30/2023	7.39	
3/20/2024		6.1
10/1/2024		5.43

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	2.72	
10/5/2021	1.91	
3/15/2022	4.86	
10/5/2022	1.02	
4/20/2023	3.73	
5/24/2023	2.62	
10/30/2023	2.73	
3/19/2024		3.31
10/1/2024		2.77

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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	39	
10/5/2021	43	
3/15/2022	53	
10/4/2022	53	
4/19/2023	67	
10/27/2023	21	
3/18/2024		33
9/30/2024		33

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	41	
10/5/2021	29	
3/15/2022	56	
10/4/2022	52	
4/19/2023	41	
10/27/2023	23	
3/20/2024		39
9/30/2024		37

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	34	
10/5/2021	25	
3/15/2022	51	
10/4/2022	42	
4/19/2023	31	
10/27/2023	24	
3/19/2024		17
9/30/2024		28

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	27	
10/5/2021	29	
3/15/2022	34	
10/5/2022	42	
4/20/2023	37	
10/27/2023	21	
3/19/2024		24
10/1/2024		33

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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/4/2024 11:47 AM View: Intrawell

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-17	MW-17
3/22/2016	32 (B1)	
5/18/2016	26	
7/12/2016	22	
9/12/2016	32	
11/18/2016	16	
1/18/2017	32	
3/21/2017	16	
5/24/2017	22	
10/17/2017	26	
5/31/2018	<3.4	
11/8/2018	36	
4/22/2019	24	
9/26/2019	25	
4/13/2020	27	
10/22/2020	29	
3/16/2021	37	
10/5/2021	34	
3/16/2022	55	
10/5/2022	35	
4/20/2023	30	
10/27/2023	14	
3/19/2024		20
10/1/2024		33

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

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	31	
10/5/2021	29	
3/16/2022	25	
10/5/2022	34	
4/19/2023	29	
10/30/2023	15	
3/20/2024		25
10/1/2024		35

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/4/2024 11:47 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	
3/16/2021	25	
10/5/2021	35	
3/15/2022	36	
10/5/2022	31	
4/20/2023	66	
5/24/2023	32	
10/30/2023	29	
3/19/2024		31
10/1/2024		30

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

Prediction Limits - Interwell (Two-Step)

Interwell Prediction Limits - Two-Step - All Results (No Significant)

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:51 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	MW-17	8.216	n/a	10/1/2024	4.89	No	84	1.711	0.6564	14.29	None	sqrt(x)	0.00188	Param Inter 1 of 2

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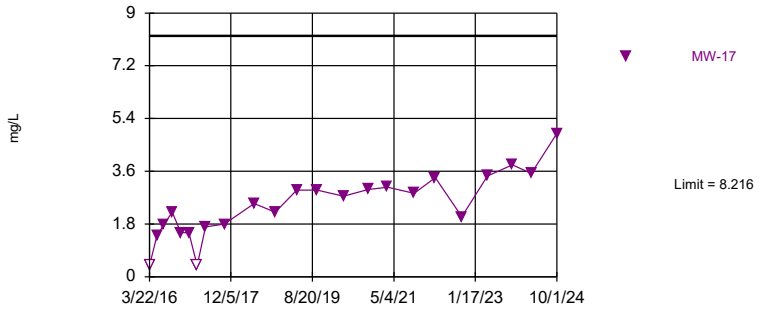
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=1.711, Std. Dev.=0.6564, n=84, 14.29% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9671, critical = 0.96. Kappa = 1.76 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.00188. Assumes 3 future values.

Constituent: Sulfate Analysis Run 12/4/2024 11:51 AM View: Interwell - Two-Step

Plant Daniel Client: Southern Company Data: NAMU CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:51 AM View: Interwell - Two-Step

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-11 (bg)	MW-18 (bg)	MW-17	MW-14 (bg)
11/16/2006	5			
2/5/2007	<0.756			
4/12/2007	<0.756			
10/17/2007	5.7			
4/17/2008	7			
10/24/2008	6.6			
4/21/2009	5.2			
10/26/2009	8.3			
4/12/2010	6.8			
10/30/2010	10.8			
5/25/2011	11.5			
5/25/2012	8.2			
5/28/2013	6.9			
5/31/2014	3.5			
5/29/2015	3.3			
3/22/2016		3 (J)	<0.756	
3/23/2016	1.8 (J)			<0.756
5/18/2016	4.1	3.9 (J)	1.4	1.9
7/12/2016	3.8 (J)	3.9 (J)	1.8 (J)	2 (J)
9/12/2016	3.9 (J)	4.5 (J)	2.2 (J)	2 (J)
11/18/2016	5.4	4.2 (J)	1.5 (J)	
11/19/2016				1.7 (J)
1/18/2017		3.8 (J)	1.5 (J)	<0.756
1/19/2017	<0.756			
3/21/2017		<0.756 (*)	<0.756	
3/22/2017	<0.756			<0.756
5/24/2017	2 (J)	3 (J)	1.7 (J)	<0.756
10/17/2017	<0.756	3.4 (J)	1.8 (J)	<0.756
5/31/2018	3 (J)	4.1 (J)	2.5 (J)	
6/1/2018				1.8 (J)
11/7/2018	3.1 (J)			1.8 (J)
11/8/2018		3.3 (J)	2.2 (J)	
4/22/2019	2.22	4.66	2.96	
4/23/2019				1.99
9/26/2019		4.23	2.96	1.95
9/27/2019	2.36			
4/13/2020	2.47		2.75	1.43
4/14/2020		3.96		
10/22/2020	2.01	3.37	2.98	1.76
3/16/2021	2.15	3.18	3.06	2.23
10/5/2021	2.57	3.83	2.85	2.46
3/15/2022	2.88			2.1
3/16/2022		7.04	3.38	
10/4/2022	2.04			<0.756
10/5/2022		6.04	2.05	
4/19/2023	2.85	7.48		1.93
4/20/2023			3.44	
10/27/2023	2.72		3.82	1.53
10/30/2023		7.39		
3/18/2024	2.81			
3/19/2024			3.53	
3/20/2024		6.1		1.61

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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/4/2024 11:51 AM View: Interwell - Two-Step

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-11 (bg)	MW-18 (bg)	MW-17	MW-14 (bg)
9/30/2024	2.69			1.41
10/1/2024		5.43	4.89	

Trend Tests - Prediction Limit Exceedances

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Sulfate (mg/L)	**MW-11 (bg)**	**-0.1991**	**-273**	**-206**	**Yes**	**38**	**13.16**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-17**	**0.2693**	**170**	**98**	**Yes**	**23**	**8.696**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/4/2024, 11:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Sulfate (mg/L)	**MW-11 (bg)**	**-0.1991**	**-273**	**-206**	**Yes**	**38**	**13.16**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-14 (bg)	0.004333	18	98	No	23	26.09	n/a	0.01	NP
Sulfate (mg/L)	**MW-17**	**0.2693**	**170**	**98**	**Yes**	**23**	**8.696**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-18 (bg)	0.286	97	98	No	23	4.348	n/a	0.01	NP

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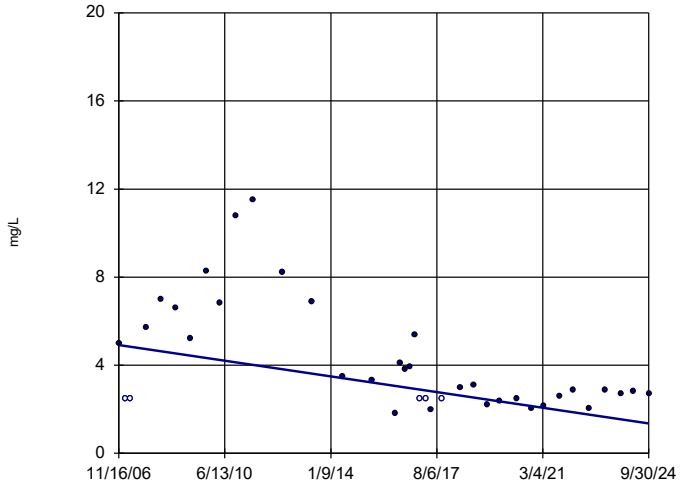
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-11 (bg)



n = 38

Slope = -0.1991 units per year.

Mann-Kendall statistic = -273 critical = -206

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/4/2024 11:52 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: NAMU CCR

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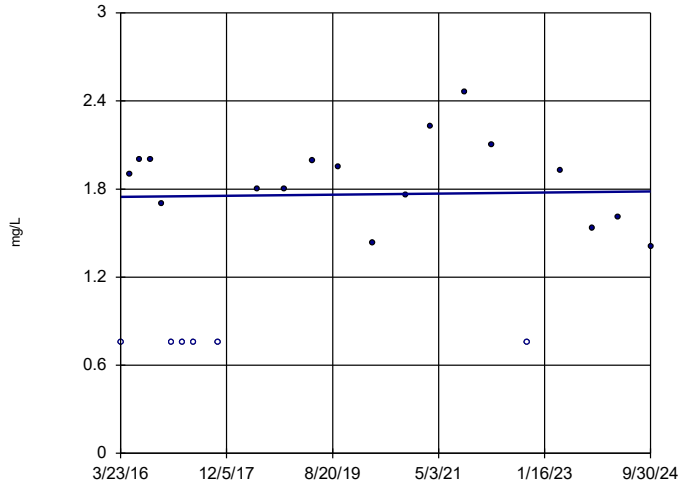
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-14 (bg)



n = 23

Slope = 0.004333 units per year.

Mann-Kendall statistic = 18 critical = 98

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/4/2024 11:52 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: NAMU CCR

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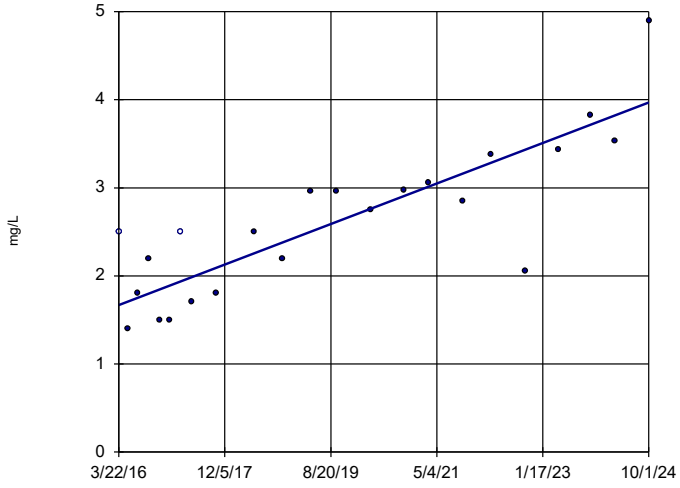
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-17



n = 23

Slope = 0.2693 units per year.

Mann-Kendall statistic = 170 critical = 98

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/4/2024 11:52 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: NAMU CCR

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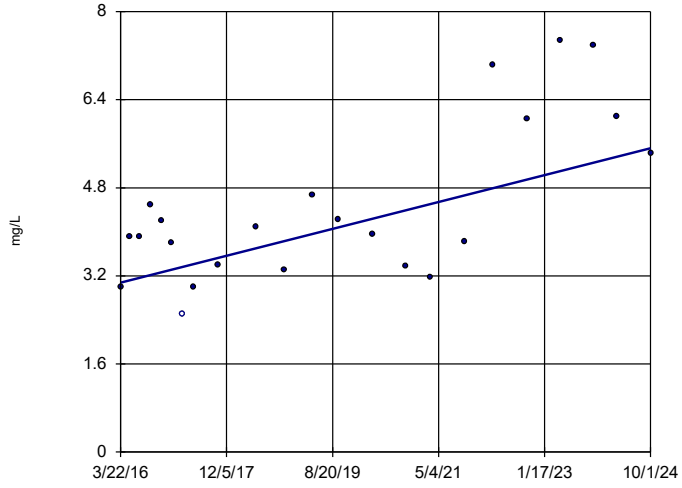
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18 (bg)



n = 23

Slope = 0.286 units per year.

Mann-Kendall statistic = 97 critical = 98

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/4/2024 11:52 AM View: Trend Tests
Plant Daniel Client: Southern Company Data: NAMU CCR