

**2019 ANNUAL GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT**

**MISSISSIPPI POWER COMPANY  
PLANT VICTOR DANIEL  
GYPSUM STORAGE AREA**

**January 31, 2020**

Prepared for

Mississippi Power Company  
Gulfport, Mississippi

By

Southern Company Services  
Earth Science and Environmental Engineering



## CERTIFICATION STATEMENT

This 2019 Annual Groundwater Monitoring and Corrective Action Report, Mississippi Power Company – Plant Daniel Gypsum Storage Area has been prepared to comply with the United States Environmental Protection Agency coal combustion residual rule (40 Code of Federal Regulations (CFR) Part 257, Subpart D) under the supervision of a licensed Professional Geologist with Southern Company Services.



Lauren Parker

Originator

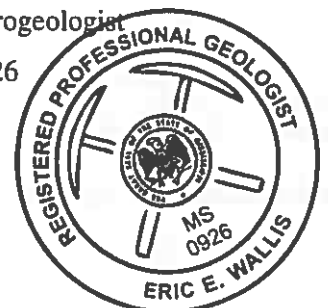
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## **1.0 INTRODUCTION**

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR § 257 Subpart D), this 2019 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document the 2019 detection groundwater monitoring activities at the Plant Daniel Gypsum Storage Area (GSA) and to satisfy the requirements of § 257.90(e). Semi-annual monitoring, and associated reporting for Plant Daniel GSA is performed in accordance with the monitoring requirements § 257.90 through § 257.94.

## 2.0 SITE DESCRIPTION

Mississippi Power Company's (MPC)'s Plant Daniel is located within Section 35, Township 5 South, Range 6 West, Sections 37, 10, 15, East half of Section 9, Southwest ¼ of Section 2, NW ¼ and south half of Section 11, and the north half and NW ¼ of the SW ¼ of Section 14, all of Township 6 South, Range 6 West. Plant Daniel is situated immediately northwest of the intersection of Mississippi State Highways 63 and 613, between the Pascagoula River to the west and Highway 63 to the east. The site address is 13201 Highway 63 N, Escatawpa, Mississippi 39562. **Figure 1, Site Location Map**, depicts the location of Plant Daniel relative to site features and the surrounding area.

### 2.1 Regional Geology & Hydrogeologic Setting

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

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

Studies prepared by Southern Company Services, establish five geologic units underlying the immediate Plant Daniel property:

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

## **2.2 Uppermost Aquifer**

Two aquifers supply water to the Pascagoula area. These are the Pliocene-age Citronelle and the Miocene Aquifer System, which includes the Graham Ferry Aquifer. Plant Daniel is located in the Citronelle outcrop area.

The Citronelle Aquifers are the shallowest aquifers in the Pascagoula area. Although principally a sand and gravel formation, the Citronelle is characterized by occasional lenses and layers of clay which may cause semi-artesian conditions. Sediments become coarse near the irregular contact with the underlying Pascagoula or Graham Ferry Formation. Also, the Citronelle and overlying coastal deposits are generally considered one hydrogeologic unit. The Citronelle is primarily a water table aquifer with a saturated thickness of about 45 feet. Recharge is primarily by rainfall which moves vertically and down dip to recharge underlying aquifers and to sustain local streams (Wasson, 1978).

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

### **3.0 GROUNDWATER MONITORING SYSTEM AND ACTIVITY**

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

#### **3.1 Groundwater Monitoring System**

The groundwater monitoring network is comprised of 10 monitoring wells. Monitoring well locations are presented on **Figure 2, Monitoring Well Location Map. Table 1, Monitoring Well Network Summary**, summarizes the monitoring well construction details and design purpose for the GSA.

Monitoring well locations MW-1, MW-2, and MW-10 serve as upgradient locations for the GSA. Upgradient wells are screened within the same uppermost aquifer as downgradient locations and are representative of background groundwater quality at the site. Monitoring well locations MW-3 through MW-9 are utilized as downgradient locations for the GSA. Downgradient locations were determined by water level monitoring and potentiometric surface maps constructed for the site.

#### **3.2 Detection Monitoring**

Based on results of the 2018 Annual Groundwater and Corrective Action Monitoring Report, the GSA began 2019 in detection monitoring. Samples were collected from wells in the Professional Engineer (PE)-certified monitoring systems shown on **Figure 2**. A summary of groundwater sampling and verification re-sampling events completed in 2019 is provided in **Table 2, Compliance Sampling Events Summary**.

Analytical data from the semi-annual monitoring events are included as **Appendix A, Laboratory Analytical and Field Sampling Reports**, in accordance with the requirements of § 257.90(e)(3).

#### **3.3 Monitoring Well Installation and Maintenance**

There was no change to the groundwater monitoring system in 2019; the network remained the same as in the previous reporting year. Monitoring well-related activities were limited to visual inspection of well conditions prior to sampling, recording the site conditions, and performing exterior maintenance to perform sampling under safe and clean conditions.

## 4.0 SAMPLE METHODOLOGY & ANALYSIS

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

### 4.1 Groundwater Flow Direction, Gradient, and Velocity

Prior to each sampling event, groundwater levels were measured and recorded to the nearest 0.01 foot within a 24-hour period. Groundwater levels recorded during the monitoring events are summarized in **Table 3, Groundwater Elevations Summary - 2019**. Groundwater levels and top of casing elevations were used to calculate groundwater elevation and develop the potentiometric surface elevation contour map provided as **Figures 3 and 4, Potentiometric Surface Contour Map(s)**. As shown on Figures 3 and 4, the general direction of groundwater flow is southwest. The groundwater flow pattern observed during the 2019 monitoring events is consistent with historic observations.

Groundwater flow rates at the site were calculated based on hydraulic gradients, hydraulic conductivity from previous slug test results, and an estimated effective porosity of the screened horizon. Based on slug test data at the site, hydraulic conductivity ranges from 25.09 feet per day, which is used in the flow calculations. The hydraulic gradient was calculated between well pairs shown on **Table 4, Groundwater Flow Velocity Calculations - 2019**. An effective porosity of 0.2 was used based on the default values for effective porosity recommended by USEPA for a silty sand-type soil (U.S. USEPA, 1996).

Horizontal flow velocity was calculated using the commonly-used derivative of Darcy's Law:

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

Where:

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

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

$i$  = Horizontal hydraulic gradient

$n_e$  = Effective porosity

Using this equation, groundwater flow velocities are calculated for various areas of the site and are tabulated on **Table 4**.

Groundwater monitoring wells MW-1 and MW-7 were used as points for calculating Flow Path A and MW-10 and MW-6 were used to calculate Flow Path B. The horizontal hydraulic gradients range from 0.0013 ft/ft to 0.0014 ft/ft. As presented on **Table 4**, groundwater flow velocity at the site ranges from approximately 0.1629 feet/day (or approximately 59.47 feet/year) to 0.1798 feet/day (or approximately

65.62 feet/year) across the GSA. These calculated groundwater flow velocities are consistent with historical calculations and with expected velocities.

#### **4.2 Groundwater Sampling**

Groundwater samples were collected from monitoring wells using low-flow sampling procedures in accordance with §257.93(a). All monitoring wells at the GSA are equipped with a dedicated pump. Monitoring wells were purged and sampled using low-flow sampling procedures whereby samples are collected when field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen) were measured to determine stabilization. Groundwater samples were collected when the following stabilization criteria were met:

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

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

#### **4.3 Laboratory Analysis**

Laboratory analyses was performed by Test America, Inc. (TAL) of Pittsburg, Pennsylvania. TAL is accredited by National Environmental Laboratory Accreditation Program (NELAP). TestAmerica maintains a NELAP certification for all parameters analyzed for this project. Groundwater analytical data and chain-of-custody records for the monitoring events are presented in **Appendix A**.

#### **4.4 Quality Assurance and Quality Control**

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

Analytical precision is measured through the calculation of the relative percent difference (RPD) of two

data sets generated from a similar source. Here, a comparison of results between samples and field duplicate samples are used as measure of laboratory precision. For groundwater analytical data, quality control procedures include calculating the relative percent difference (Where field duplicates are collected, the RPD) between the sample and duplicate sample duplicate concentrations. This is calculated as:

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Relative percent differences are calculated for all detected concentrations above the laboratory reporting limit (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 Calculation**, provides the relative percent differences for sample and sample duplicates during 2019 sampling events. RPD greater than 20% were noted for TDS in calculations for MW-8 and Dup-01. TDS does qualify because RPD is greater than 20% and both results (61 and 84 mg/l) are 5 x RL (10 mg/l). A validation flag of (+) J should be applied to this parent/duplicate set for TDS only.

## 5.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III groundwater monitoring data was performed on samples collected from the certified groundwater monitoring network pursuant to 40 CFR §257.93 and following the appropriate PE-certified method. The statistical method used at the site was developed by Groundwater Stats Consulting, LLC. (GSC), in accordance with 40 CFR §257.93(f) using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, EPA 530/R-09-007 (USEPA, 2009). Results are included in **Appendix B, Statistical Data Evaluation**.

### 5.1 Statistical Method

At Plant Daniel, intrawell prediction limits (PL) are used to compare the most recent sample to prediction limits constructed from carefully screened historical data from within the same well for each of the Appendix III parameters and determine whether any concentrations exceed background levels. The selected statistical method includes a 1-of-2 verification resample plan. When an initial (or apparent) statistically significant increase or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier. If the second sample exceeds its respective background statistical limit, a statistically significant increase (SSI) is identified. If the second sample is below its respective background limit there is no SSI.

### 5.2 Statistical Analysis Results

Analytical data from the 2019 semi-annual monitoring events in April and September were statistically analyzed in accordance with the PE-certified Statistical Analysis Plan (October 2017) and Statistical Background Updates performed by GSC (December 2019). Based on the statistical analysis, SSIs of monitored constituents were observed. As discussed in the following section, an Alternate Source Demonstrations (ASDs) was completed in accordance with 40 CFR §257.94(e)(2) to address the SSIs observed during the first semi-annual monitoring period.

#### 5.2.1 First Semi-Annual Groundwater Monitoring Event

Review of the Sanitas results presented in **Appendix B** identified the following SSIs during the first semi-annual detection monitoring event:

- MW-1: Sulfate
- MW-3: Calcium, Sulfate, Total Dissolved Solids
- MW-8: Chloride, Total Dissolved Solids

As discussed below, an ASD was completed to demonstrate that a release from the CCR unit was likely not the cause of these SSIs.



### **5.2.2 Second Semi-Annual Groundwater Monitoring Event**

Analytical data was received on October 23, 2019. As required by § 257.93(h)(2), statistical analysis was completed, and SSIs determined, on January 20, 2020 (i.e. within 90 days of sampling and analysis). Review of the Sanitas results presented in **Appendix B** identified the following SSIs during the second semi-annual detection monitoring event:

- MW-3: Boron, Calcium, Fluoride, Sulfate, Total Dissolved Solids

Pursuant to § 257.94(e), within 90 days of determining the SSIs during the second semi-annual monitoring event (i.e. 90 days from January 20, 2020), MPC will either (1) prepare a demonstration that a source other than the GSA was the cause, or (2) implement assessment monitoring per § 257.95.

### **5.3 Alternate Source Demonstration**

Section 257.94(e)(2) allows the owner or operator to demonstrate that a source other than the CCR Unit has caused an SSI and that the SSI was the result of an alternate source or resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. An ASD report for SSIs identified during the first semi-annual detection monitoring event is included as **Appendix C, Alternate Source Demonstration**. As discussed in the ASD report, the apparent exceedances observed during the first semi-annual event were not likely the result of a release from the CCR unit citing low constituent concentrations and insufficient travel time to migrate to the monitoring well. Based on the ASD, the GSA remained in detection monitoring.

## **6.0 MONITORING PROGRAM STATUS**

Presently, the GSA is in detection monitoring. SSIs of Appendix III parameters have been identified during the second semi-annual event. Pursuant to § 257.94(e)(1), MPC has 90 days from the date of determination to either (1) prepare a demonstration that a source other than the GSA was the cause, or (2) implement assessment monitoring per §257.95. MPC will address the reported SSIs in accordance with the requirements, and options, of § 257.94(e)(1-3) and (f).

## **7.0 CONCLUSIONS & FUTURE ACTIONS**

Based on results reported in the *2018 Annual Groundwater and Corrective Action Monitoring Report*, MPC remained in detection monitoring. The certified compliance monitoring well network was sampled on a semi-annual basis, occurring in April and September 2019. The groundwater samples were analyzed for all Appendix III parameters.

Statistical evaluations of the groundwater monitoring data for Plant Daniel GSA identified apparent SSIs of Appendix III groundwater monitoring parameters during the second semi-annual monitoring event. In accordance with § 257.94(e)(1-2), MPC will prepare an alternate source demonstration or initiate an assessment monitoring program within 90 days of determining the SSI. The next groundwater sampling event is scheduled for February 2020.

## 8.0 REFERENCES

- Gandl, L.A. “Characterization of Aquifers Designated as Potential Drinking Water Sources in Mississippi,” Water Resources Investigation Open-File Report 81-550, Mississippi Department of Natural Resources, Bureau of Pollution Control. 1982. 90 pp.
- USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March.
- USEPA. 2015. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. *40 CFR Parts 257 and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule.* [EPA-HQ-RCRA-2009-0640; FRL-9919-44-OSWER]. RIN-2050-AE81. April.
- USEPA. 2011. *Data Validation Standard Operating Procedures.* Science and Ecosystem Support Division. Region IV. Athens, GA. September.
- USEPA. 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC. January.
- Wasson, B.E., 1978, Availability of additional ground-water supplies in the Pascagoula area, Mississippi: Mississippi Research and Development Center Bulletin, 32 p.

# Tables

**Table 1.  
Monitoring Well Network Summary**

<b>Well ID</b>	<b>Purpose</b>	<b>Installation Date</b>	<b>Northing</b>	<b>Easting</b>	<b>Total Hole Depth (feet)</b>	<b>Top of Casing Elevation (feet MSL )</b>	<b>Ground Elevation (feet MSL)</b>	<b>Top of Screen Elevation (feet MSL)</b>	<b>Bottom of Screen Elevation (feet MSL)</b>
MW-1	Upgradient	6/10/2014	384802.921	1073787.149	50	38.89	35.85	-2.45	-12.45
MW-2	Upgradient	6/9/2014	383916.552	1074555.579	50	37.46	34.39	-3.95	-13.95
MW-3	Downgradient	3/5/2014	383579.364	1071953.225	50	37.71	34.67	-3.63	-13.63
MW-4	Downgradient	6/12/2014	384613.762	1072612.786	50	39.16	36.56	-1.73	-11.73
MW-5	Downgradient	7/28/2015	384749.995	1073113.220	68	39.28	36.64	-5.60	-15.60
MW-6	Downgradient	7/27/2015	384283.652	1071955.290	67	37.60	35.20	-7.10	-17.10
MW-7	Downgradient	7/26/2015	383260.900	1072367.375	63	34.60	32.10	-8.90	-18.90
MW-8	Downgradient	7/26/2015	383295.405	1073246.928	68	35.39	32.80	-9.10	-19.10
MW-9	Downgradient	7/26/2015	383525.662	1074005.616	68	36.10	33.48	-9.00	-19.00
MW-10	Upgradient	7/27/2015	384504.884	1074481.862	68	39.12	36.08	-5.80	-15.80

Notes:

1. Northing and Easting are referenced to MS SPCS (NAD 83) East Zone U.S. Survey Feet (2301).
2. Elevations shown are referenced Mean Sea Level (MSL) to NAVD 88 (G12) U.S. Survey Feet.
3. MSL refers to Mean Sea Level.

**Table 2.  
Compliance Sampling Event Summary**

Well ID	Purpose	Summary of Sampling Events			
		April 19, 2019	June 7, 2019	September 25, 2019	November 29, 2019
Purpose of Sampling Event		2019 Semi-Annual 01	Resample	2019 Semi-Annual 02	Resample
<b>MW-1</b>	<b>Upgradient</b>	D04	R01	D05	R02
<b>MW-2</b>	<b>Upgradient</b>	D04	--	D05	--
<b>MW-3</b>	<b>Downgradient</b>	D04	R01	D05	R02
<b>MW-4</b>	<b>Downgradient</b>	D04	--	D05	--
<b>MW-5</b>	<b>Downgradient</b>	D04	--	D05	--
<b>MW-6</b>	<b>Downgradient</b>	D04	--	D05	--
<b>MW-7</b>	<b>Downgradient</b>	D04	--	D05	R02
<b>MW-8</b>	<b>Downgradient</b>	D04	R01	D05	R02
<b>MW-9</b>	<b>Downgradient</b>	D04	--	D05	R02
<b>MW-10</b>	<b>Upgradient</b>	D04	--	D05	--

Notes:

Dxx = Detection Event Number

Rxx = Resample Event

**Table 3.  
Groundwater Elevations Summary - 2019**

Well ID	Top of Casing Elevation  (feet MSL)	Groundwater Elevations (feet MSL)	
		April 17, 2019	September 24, 2019
MW-1	38.89	19.49	17.64
MW-2	37.46	19.73	17.56
MW-3	37.71	16.26	14.61
MW-4	39.16	17.91	16.06
MW-5	39.28	18.71	16.78
MW-6	37.60	16.90	15.12
MW-7	34.60	16.50	14.85
MW-8	35.39	17.49	15.74
MW-9	36.10	18.66	16.80
MW-10	39.12	20.27	18.42

Notes:

1. MSL refers to Mean Sea Level



**Table 4.**  
**Groundwater Flow Velocity Calculations - 2019**

<b>Flow Path A</b>								
	<b>MW-1</b>	<b>MW-7</b>	<b>Distance</b>	<b>Hydraulic Gradient</b>	<b>Hydraulic Conductivity</b>	<b>Assumed Effective Porosity (ne)</b>	<b>Calculated Groundwater Flow Velocity (feet/day)</b>	<b>Calculated Groundwater Flow Velocity (feet/year)</b>
	<b>h<sub>1</sub> (ft)</b>	<b>h<sub>2</sub> (ft)</b>	<b>Δl (ft)</b>	<b>Δh/Δl (ft/ft)</b>	<b>K</b>			
<b>4/17/2019</b>	19.49	16.50	2086.47	0.0014	25.09	0.2	0.1798	65.62
<b>9/24/2019</b>	17.64	14.85	2086.47	0.0013	25.09	0.2	0.1678	61.23

<b>Flow Path B</b>								
	<b>MW-10</b>	<b>MW-6</b>	<b>Distance</b>	<b>Hydraulic Gradient</b>	<b>Hydraulic Conductivity</b>	<b>Assumed Effective Porosity (ne)</b>	<b>Calculated Groundwater Flow Velocity (feet/day)</b>	<b>Calculated Groundwater Flow Velocity (feet/year)</b>
	<b>h<sub>1</sub> (ft)</b>	<b>h<sub>2</sub> (ft)</b>	<b>Δl (ft)</b>	<b>Δh/Δl (ft/ft)</b>	<b>K</b>			
<b>4/17/2019</b>	20.27	16.90	2540.99	0.0013	25.09	0.2	0.1664	60.73
<b>9/24/2019</b>	18.42	15.12	2540.99	0.0013	25.09	0.2	0.1629	59.47

Notes:

ft=feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year

**Table 5.**  
**Relative Percent Difference Calculations**

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-8	DUP-01	
TDS	mg/L	61	84	31.7
Chloride	mg/L	11.2	13.2	16.4
Calcium	mg/L	3.51	3.55	1.1

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-2	DUP-02	
TDS	mg/L	27	22	20.4
Chloride	mg/L	8.26	8.23	0.4
Calcium	mg/L	0.935	0.895	4.4

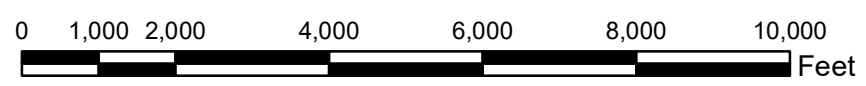
Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		MW-15	DUP-05	
TDS	mg/L	180	176	2.2
Fluoride	mg/L	0.331	0.286	14.6
Sulfate	mg/L	107	103	3.8
Boron	mg/L	0.123	0.112	9.4
Calcium	mg/L	35.8	34.7	3.1

# Figures





- Legend**
- North Ash Management Unit (NAMU) Boundary
  - Gypsum Storage Area (GSA) Boundary
  - Ash Pond B Boundary
  - Property Boundary (Approximate)





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CHECKED BY	LMP

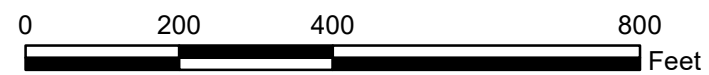
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SITE LOCATION MAP PLANT DANIEL GYPSUM STORAGE AREA	
FIGURE NO	<b>FIGURE 1</b>
Southern Company	





**Legend**

-  Monitoring Well Location
-  Gypsum Storage Area

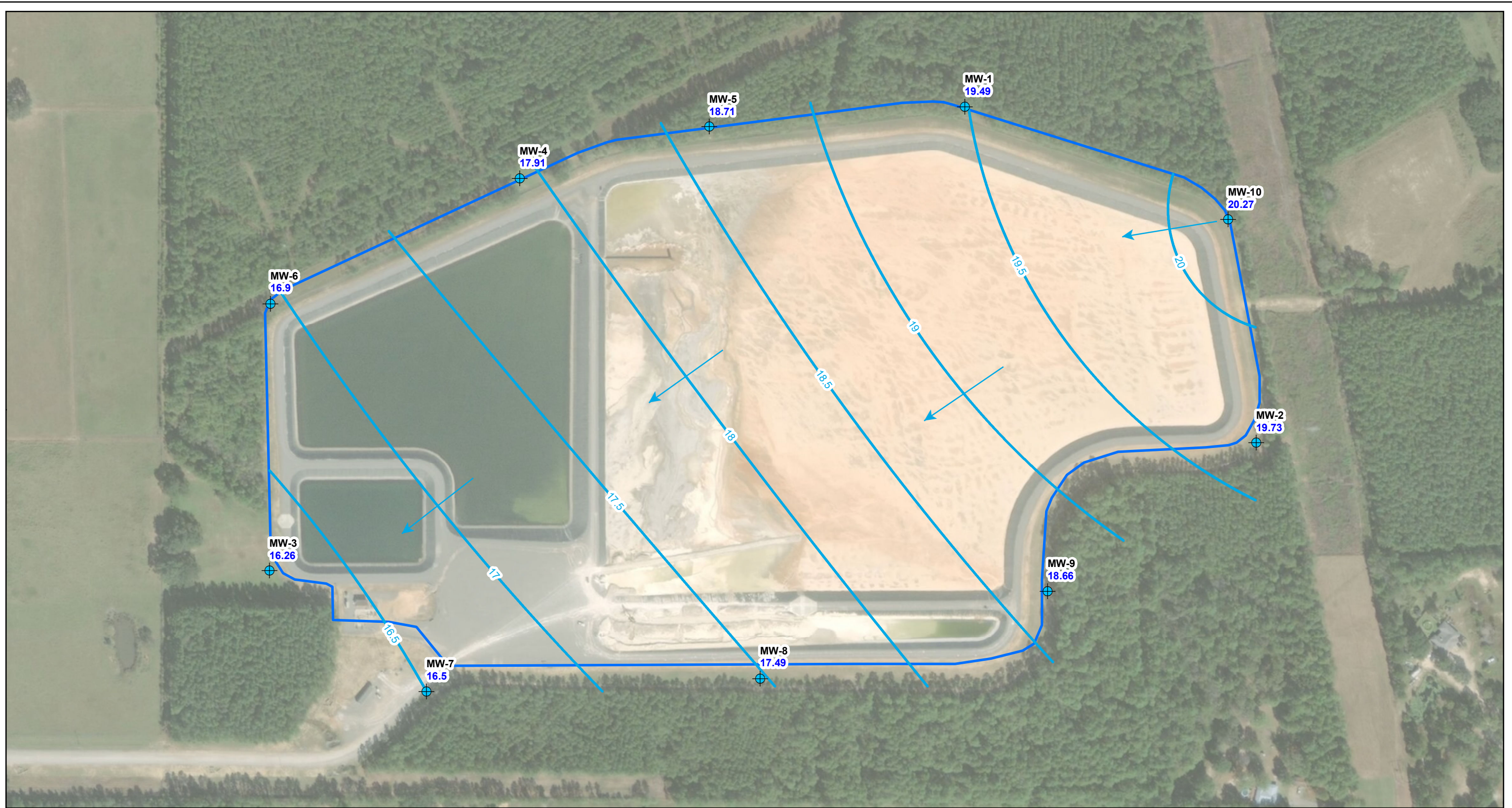


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CHECKED BY	LMP





DRAWING TITLE	
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DRAWING NO	
<b>FIGURE 2</b>	

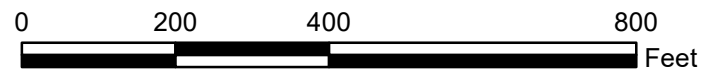






**Legend**

-  Monitoring Well Location
  -  Estimated Potentiometric Surface Contour
  -  Approximate Groundwater Flow Direction
  -  Gypsum Storage Area
- |                              |  |
|------------------------------|--|
| <p><b>MW-1</b><br/>19.49</p> | <p>Well Name<br/>Groundwater Elevation (ft NAVD88)</p> |
|------------------------------|--|



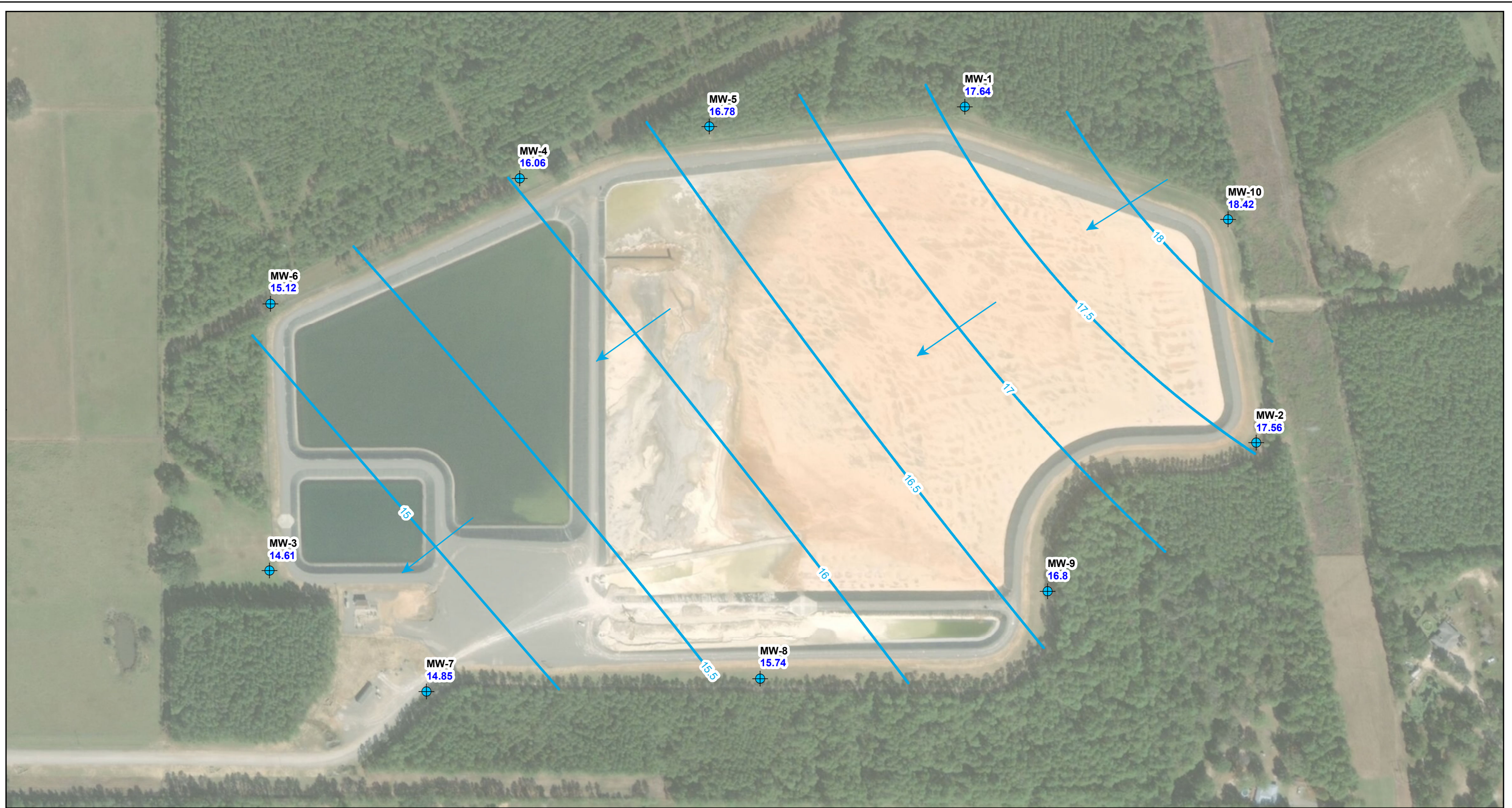
Note: ft NAVD88 indicates feet relative to the North American Vertical Datum of 1988.

SCALE	1:3000
DATE	12/20/2019
DRAWN BY	KWR
CHECKED BY	LMP





DRAWING TITLE	
POTENTIOMETRIC SURFACE CONTOUR MAP APRIL 17, 2019 PLANT DANIEL GYPSUM STORAGE AREA	
DRAWING NO	<b>FIGURE 3</b>



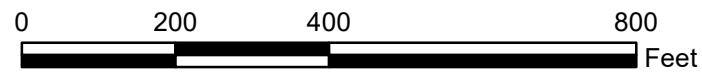




**Legend**

-  Monitoring Well Location
-  Estimated Potentiometric Surface Contour (ft NAVD88)
-  Approximate Groundwater Flow Direction
-  Gypsum Storage Area

MW-1	Well Name
17.64	Groundwater Elevation (ft NAVD88)



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

SCALE	1:3000
DATE	12/20/2019
DRAWN BY	KWR
CHECKED BY	LMP

DRAWING TITLE  
**POTENTIOMETRIC SURFACE CONTOUR MAP**  
 SEPTEMBER 24, 2019  
 PLANT DANIEL GYPSUM STORAGE AREA

DRAWING NO  
**FIGURE 4**





# Appendix A



**1st**  
**Semi-Annual**  
**Monitoring Event**

## ANALYTICAL REPORT

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

Laboratory Job ID: 180-89258-1

Laboratory Sample Delivery Group: GSA CCR  
Client Project/Site: CCR - Plant Daniel

**For:**

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

Attn: Lauren Parker



Authorized for release by:  
5/3/2019 8:34:33 AM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

PA Lab ID: 02-00416



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# Definitions/Glossary

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

Job ID: 180-89258-1  
SDG: GSA CCR

## Qualifiers

### HPLC/IC

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

## Glossary

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

# Accreditation/Certification Summary

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

Job ID: 180-89258-1  
SDG: GSA CCR

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19 *
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-20
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	02-06-20
Pennsylvania	NELAP	3	02-00416	04-30-20
South Carolina	State Program	4	89014	04-30-19 *
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

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

Eurofins TestAmerica, Pittsburgh

# Accreditation/Certification Summary

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

Job ID: 180-89258-1  
SDG: GSA CCR

## Laboratory: Eurofins TestAmerica, Pensacola

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

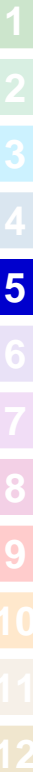
Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

# Sample Summary

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

Job ID: 180-89258-1  
SDG: GSA CCR

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-89258-1	MW-1	Water	04/19/19 17:10	04/20/19 13:50
180-89258-2	MW-2	Water	04/19/19 13:36	04/20/19 13:50
180-89258-3	MW-3	Water	04/19/19 11:25	04/20/19 13:50
180-89258-4	MW-4	Water	04/19/19 15:05	04/20/19 13:50
180-89258-5	MW-5	Water	04/19/19 15:55	04/20/19 13:50
180-89258-6	MW-6	Water	04/19/19 13:20	04/20/19 13:50
180-89258-7	MW-7	Water	04/19/19 10:15	04/20/19 13:50
180-89258-8	MW-8	Water	04/19/19 16:53	04/20/19 13:50
180-89258-9	MW-9	Water	04/19/19 15:24	04/20/19 13:50
180-89258-10	MW-10	Water	04/19/19 11:30	04/20/19 13:50
180-89258-11	DUP-03	Water	04/19/19 09:15	04/20/19 13:50



# Method Summary

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

Job ID: 180-89258-1  
SDG: GSA CCR

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN

#### Protocol References:

EPA = US Environmental Protection Agency

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

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

#### Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

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



# Lab Chronicle

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-1**  
**Date Collected: 04/19/19 17:10**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			276843	04/26/19 07:53	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 18:15	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 17:10	FDS	TAL PIT

**Client Sample ID: MW-2**  
**Date Collected: 04/19/19 13:36**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			276843	04/26/19 08:08	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 18:35	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 13:36	FDS	TAL PIT

**Client Sample ID: MW-3**  
**Date Collected: 04/19/19 11:25**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			276843	04/26/19 08:23	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 18:55	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 11:25	FDS	TAL PIT

# Lab Chronicle

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-4**  
**Date Collected: 04/19/19 15:05**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			276843	04/26/19 09:09	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 18:59	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 15:05	FDS	TAL PIT

**Client Sample ID: MW-5**  
**Date Collected: 04/19/19 15:55**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			276843	04/26/19 09:25	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 19:03	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 15:55	FDS	TAL PIT

**Client Sample ID: MW-6**  
**Date Collected: 04/19/19 13:20**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			276843	04/26/19 10:12	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 19:07	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 13:20	FDS	TAL PIT

# Lab Chronicle

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-7**  
**Date Collected: 04/19/19 10:15**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			276844	04/26/19 07:57	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 19:11	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 10:15	FDS	TAL PIT

**Client Sample ID: MW-8**  
**Date Collected: 04/19/19 16:53**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-8**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			276844	04/26/19 08:29	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 19:15	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 16:53	FDS	TAL PIT

**Client Sample ID: MW-9**  
**Date Collected: 04/19/19 15:24**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			276844	04/26/19 08:45	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 19:19	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 15:24	FDS	TAL PIT

# Lab Chronicle

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-10**  
**Date Collected: 04/19/19 11:30**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-10**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			276843	04/26/19 10:28	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 19:23	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			277604	04/19/19 11:30	FDS	TAL PIT

**Client Sample ID: DUP-03**  
**Date Collected: 04/19/19 09:15**  
**Date Received: 04/20/19 13:50**

**Lab Sample ID: 180-89258-11**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			276844	04/26/19 08:13	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	438449	04/25/19 11:09	AC	TAL PEN
Total Recoverable	Analysis	6020 Instrument ID: ICPMS7700		5			439157	04/30/19 19:27	DRE	TAL PEN
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	276658	04/24/19 12:32	AVS	TAL PIT

**Laboratory References:**

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001  
TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

**Analyst References:**

Lab: TAL PEN  
Batch Type: Prep  
AC = Alexis Castaing  
Batch Type: Analysis  
DRE = Daniel Etscheid  
Lab: TAL PIT  
Batch Type: Analysis  
AVS = Abbey Smith  
CMR = Carl Reagle  
FDS = Sampler Field  
MJH = Matthew Hartman

# Client Sample Results

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-1**  
Date Collected: 04/19/19 17:10  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-1**  
Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.65		1.00	0.715	mg/L			04/26/19 07:53	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 07:53	1
Sulfate	10.1		1.00	0.380	mg/L			04/26/19 07:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 18:15	5
Calcium	3.26		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 18:15	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	38.0		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH by SM4500-H B	4.89				SU			04/19/19 17:10	1

**Client Sample ID: MW-2**  
Date Collected: 04/19/19 13:36  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-2**  
Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.38		1.00	0.715	mg/L			04/26/19 08:08	1
Fluoride	0.0267	J	0.100	0.0263	mg/L			04/26/19 08:08	1
Sulfate	0.468	J	1.00	0.380	mg/L			04/26/19 08:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 18:35	5
Calcium	0.942		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 18:35	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	29.0		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH by SM4500-H B	4.85				SU			04/19/19 13:36	1

**Client Sample ID: MW-3**  
Date Collected: 04/19/19 11:25  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-3**  
Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.34		1.00	0.715	mg/L			04/26/19 08:23	1
Fluoride	0.108		0.100	0.0263	mg/L			04/26/19 08:23	1
Sulfate	19.5		1.00	0.380	mg/L			04/26/19 08:23	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-3**  
Date Collected: 04/19/19 11:25  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-3**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 18:55	5
<b>Calcium</b>	<b>6.30</b>		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 18:55	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>83.0</b>		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH by SM4500-H B</b>	<b>4.38</b>				SU			04/19/19 11:25	1

**Client Sample ID: MW-4**  
Date Collected: 04/19/19 15:05  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-4**  
Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>7.82</b>		1.00	0.715	mg/L			04/26/19 09:09	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 09:09	1
<b>Sulfate</b>	<b>2.10</b>		1.00	0.380	mg/L			04/26/19 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 18:59	5
<b>Calcium</b>	<b>1.88</b>		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 18:59	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>43.0</b>		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH by SM4500-H B</b>	<b>4.91</b>				SU			04/19/19 15:05	1

**Client Sample ID: MW-5**  
Date Collected: 04/19/19 15:55  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-5**  
Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>6.57</b>		1.00	0.715	mg/L			04/26/19 09:25	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 09:25	1
<b>Sulfate</b>	<b>3.82</b>		1.00	0.380	mg/L			04/26/19 09:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 19:03	5
<b>Calcium</b>	<b>1.70</b>		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 19:03	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>34.0</b>		10.0	10.0	mg/L			04/24/19 12:32	1

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# Client Sample Results

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-5**  
Date Collected: 04/19/19 15:55  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-5**  
Matrix: Water

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH by SM4500-H B	4.86				SU			04/19/19 15:55	1

**Client Sample ID: MW-6**  
Date Collected: 04/19/19 13:20  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-6**  
Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.99		1.00	0.715	mg/L			04/26/19 10:12	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 10:12	1
Sulfate	1.96		1.00	0.380	mg/L			04/26/19 10:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 19:07	5
Calcium	0.998		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 19:07	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26.0		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH by SM4500-H B	4.72				SU			04/19/19 13:20	1

**Client Sample ID: MW-7**  
Date Collected: 04/19/19 10:15  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-7**  
Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.6		1.00	0.715	mg/L			04/26/19 07:57	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 07:57	1
Sulfate	0.449	J	1.00	0.380	mg/L			04/26/19 07:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 19:11	5
Calcium	1.34		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 19:11	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	36.0		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH by SM4500-H B	4.51				SU			04/19/19 10:15	1

# Client Sample Results

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-8**

**Lab Sample ID: 180-89258-8**

Date Collected: 04/19/19 16:53

Matrix: Water

Date Received: 04/20/19 13:50

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.0		1.00	0.715	mg/L			04/26/19 08:29	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 08:29	1
Sulfate	0.906	J	1.00	0.380	mg/L			04/26/19 08:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 19:15	5
Calcium	2.99		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 19:15	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	71.0		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH by SM4500-H B	4.63				SU			04/19/19 16:53	1

**Client Sample ID: MW-9**

**Lab Sample ID: 180-89258-9**

Date Collected: 04/19/19 15:24

Matrix: Water

Date Received: 04/20/19 13:50

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.55		1.00	0.715	mg/L			04/26/19 08:45	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 08:45	1
Sulfate	2.30		1.00	0.380	mg/L			04/26/19 08:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 19:19	5
Calcium	1.00		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 19:19	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	23.0		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH by SM4500-H B	4.94				SU			04/19/19 15:24	1

**Client Sample ID: MW-10**

**Lab Sample ID: 180-89258-10**

Date Collected: 04/19/19 11:30

Matrix: Water

Date Received: 04/20/19 13:50

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.41		1.00	0.715	mg/L			04/26/19 10:28	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 10:28	1
Sulfate	0.702	J	1.00	0.380	mg/L			04/26/19 10:28	1

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# Client Sample Results

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

Job ID: 180-89258-1  
SDG: GSA CCR

**Client Sample ID: MW-10**  
Date Collected: 04/19/19 11:30  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-10**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 19:23	5
<b>Calcium</b>	<b>1.03</b>		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 19:23	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>20.0</b>		10.0	10.0	mg/L			04/24/19 12:32	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	NONE	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH by SM4500-H B</b>	<b>5.13</b>				SU			04/19/19 11:30	1

**Client Sample ID: DUP-03**  
Date Collected: 04/19/19 09:15  
Date Received: 04/20/19 13:50

**Lab Sample ID: 180-89258-11**  
Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>10.7</b>		1.00	0.715	mg/L			04/26/19 08:13	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 08:13	1
<b>Sulfate</b>	<b>0.421</b>	<b>J</b>	1.00	0.380	mg/L			04/26/19 08:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 19:27	5
<b>Calcium</b>	<b>1.31</b>		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 19:27	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>52.0</b>		10.0	10.0	mg/L			04/24/19 12:32	1

# QC Sample Results

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

Job ID: 180-89258-1  
SDG: GSA CCR

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID: MB 180-276843/6**  
**Matrix: Water**  
**Analysis Batch: 276843**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.715		1.00	0.715	mg/L			04/26/19 05:46	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 05:46	1
Sulfate	<0.380		1.00	0.380	mg/L			04/26/19 05:46	1

**Lab Sample ID: LCS 180-276843/5**  
**Matrix: Water**  
**Analysis Batch: 276843**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	24.91		mg/L		100	90 - 110
Fluoride	1.25	1.200		mg/L		96	90 - 110
Sulfate	25.0	24.43		mg/L		98	90 - 110

**Lab Sample ID: 180-89258-5 MS**  
**Matrix: Water**  
**Analysis Batch: 276843**

**Client Sample ID: MW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.57		25.0	31.90		mg/L		101	80 - 120
Fluoride	<0.0263		1.25	1.182		mg/L		95	80 - 120
Sulfate	3.82		25.0	28.33		mg/L		98	80 - 120

**Lab Sample ID: 180-89258-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 276843**

**Client Sample ID: MW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.57		25.0	33.38		mg/L		107	80 - 120	5	20
Fluoride	<0.0263		1.25	1.219		mg/L		97	80 - 120	3	20
Sulfate	3.82		25.0	30.28		mg/L		106	80 - 120	7	20

**Lab Sample ID: MB 180-276844/5**  
**Matrix: Water**  
**Analysis Batch: 276844**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.715		1.00	0.715	mg/L			04/26/19 04:32	1
Fluoride	<0.0263		0.100	0.0263	mg/L			04/26/19 04:32	1
Sulfate	<0.380		1.00	0.380	mg/L			04/26/19 04:32	1

**Lab Sample ID: LCS 180-276844/6**  
**Matrix: Water**  
**Analysis Batch: 276844**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	23.96		mg/L		96	90 - 110
Fluoride	1.25	1.200		mg/L		96	90 - 110
Sulfate	25.0	23.73		mg/L		95	90 - 110

# QC Sample Results

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

Job ID: 180-89258-1  
SDG: GSA CCR

## Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-438449/1-A ^5  
Matrix: Water  
Analysis Batch: 439157

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 438449

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0210		0.0500	0.0210	mg/L		04/25/19 11:09	04/30/19 18:07	5
Calcium	<0.125		0.250	0.125	mg/L		04/25/19 11:09	04/30/19 18:07	5

Lab Sample ID: LCS 400-438449/2-A  
Matrix: Water  
Analysis Batch: 439157

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 438449

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.1001		mg/L		100	80 - 120
Calcium	5.00	5.229		mg/L		105	80 - 120

Lab Sample ID: 180-89258-1 MS  
Matrix: Water  
Analysis Batch: 439157

Client Sample ID: MW-1  
Prep Type: Total Recoverable  
Prep Batch: 438449

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	<0.0210		0.100	0.1054		mg/L		105	75 - 125
Calcium	3.26		5.00	8.620		mg/L		107	75 - 125

Lab Sample ID: 180-89258-1 MSD  
Matrix: Water  
Analysis Batch: 439157

Client Sample ID: MW-1  
Prep Type: Total Recoverable  
Prep Batch: 438449

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Boron	<0.0210		0.100	0.1060		mg/L		106	75 - 125	1	20
Calcium	3.26		5.00	8.452		mg/L		104	75 - 125	2	20

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

Lab Sample ID: MB 180-276658/2  
Matrix: Water  
Analysis Batch: 276658

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			04/24/19 12:32	1

Lab Sample ID: LCS 180-276658/1  
Matrix: Water  
Analysis Batch: 276658

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	201	212.0		mg/L		105	80 - 120

# QC Association Summary

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

Job ID: 180-89258-1  
SDG: GSA CCR

## HPLC/IC

### Analysis Batch: 276843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-89258-1	MW-1	Total/NA	Water	EPA 300.0 R2.1	
180-89258-2	MW-2	Total/NA	Water	EPA 300.0 R2.1	
180-89258-3	MW-3	Total/NA	Water	EPA 300.0 R2.1	
180-89258-4	MW-4	Total/NA	Water	EPA 300.0 R2.1	
180-89258-5	MW-5	Total/NA	Water	EPA 300.0 R2.1	
180-89258-6	MW-6	Total/NA	Water	EPA 300.0 R2.1	
180-89258-10	MW-10	Total/NA	Water	EPA 300.0 R2.1	
MB 180-276843/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-276843/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-89258-5 MS	MW-5	Total/NA	Water	EPA 300.0 R2.1	
180-89258-5 MSD	MW-5	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 276844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-89258-7	MW-7	Total/NA	Water	EPA 300.0 R2.1	
180-89258-8	MW-8	Total/NA	Water	EPA 300.0 R2.1	
180-89258-9	MW-9	Total/NA	Water	EPA 300.0 R2.1	
180-89258-11	DUP-03	Total/NA	Water	EPA 300.0 R2.1	
MB 180-276844/5	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-276844/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Prep Batch: 438449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-89258-1	MW-1	Total Recoverable	Water	3005A	
180-89258-2	MW-2	Total Recoverable	Water	3005A	
180-89258-3	MW-3	Total Recoverable	Water	3005A	
180-89258-4	MW-4	Total Recoverable	Water	3005A	
180-89258-5	MW-5	Total Recoverable	Water	3005A	
180-89258-6	MW-6	Total Recoverable	Water	3005A	
180-89258-7	MW-7	Total Recoverable	Water	3005A	
180-89258-8	MW-8	Total Recoverable	Water	3005A	
180-89258-9	MW-9	Total Recoverable	Water	3005A	
180-89258-10	MW-10	Total Recoverable	Water	3005A	
180-89258-11	DUP-03	Total Recoverable	Water	3005A	
MB 400-438449/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-438449/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-89258-1 MS	MW-1	Total Recoverable	Water	3005A	
180-89258-1 MSD	MW-1	Total Recoverable	Water	3005A	

### Analysis Batch: 439157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-89258-1	MW-1	Total Recoverable	Water	6020	438449
180-89258-2	MW-2	Total Recoverable	Water	6020	438449
180-89258-3	MW-3	Total Recoverable	Water	6020	438449
180-89258-4	MW-4	Total Recoverable	Water	6020	438449
180-89258-5	MW-5	Total Recoverable	Water	6020	438449
180-89258-6	MW-6	Total Recoverable	Water	6020	438449
180-89258-7	MW-7	Total Recoverable	Water	6020	438449
180-89258-8	MW-8	Total Recoverable	Water	6020	438449

Eurofins TestAmerica, Pittsburgh

# QC Association Summary

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

Job ID: 180-89258-1  
SDG: GSA CCR

## Metals (Continued)

### Analysis Batch: 439157 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-89258-9	MW-9	Total Recoverable	Water	6020	438449
180-89258-10	MW-10	Total Recoverable	Water	6020	438449
180-89258-11	DUP-03	Total Recoverable	Water	6020	438449
MB 400-438449/1-A ^5	Method Blank	Total Recoverable	Water	6020	438449
LCS 400-438449/2-A	Lab Control Sample	Total Recoverable	Water	6020	438449
180-89258-1 MS	MW-1	Total Recoverable	Water	6020	438449
180-89258-1 MSD	MW-1	Total Recoverable	Water	6020	438449

## General Chemistry

### Analysis Batch: 276658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-89258-1	MW-1	Total/NA	Water	SM 2540C	
180-89258-2	MW-2	Total/NA	Water	SM 2540C	
180-89258-3	MW-3	Total/NA	Water	SM 2540C	
180-89258-4	MW-4	Total/NA	Water	SM 2540C	
180-89258-5	MW-5	Total/NA	Water	SM 2540C	
180-89258-6	MW-6	Total/NA	Water	SM 2540C	
180-89258-7	MW-7	Total/NA	Water	SM 2540C	
180-89258-8	MW-8	Total/NA	Water	SM 2540C	
180-89258-9	MW-9	Total/NA	Water	SM 2540C	
180-89258-10	MW-10	Total/NA	Water	SM 2540C	
180-89258-11	DUP-03	Total/NA	Water	SM 2540C	
MB 180-276658/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-276658/1	Lab Control Sample	Total/NA	Water	SM 2540C	

## Field Service / Mobile Lab

### Analysis Batch: 277604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-89258-1	MW-1	Total/NA	Water	Field Sampling	
180-89258-2	MW-2	Total/NA	Water	Field Sampling	
180-89258-3	MW-3	Total/NA	Water	Field Sampling	
180-89258-4	MW-4	Total/NA	Water	Field Sampling	
180-89258-5	MW-5	Total/NA	Water	Field Sampling	
180-89258-6	MW-6	Total/NA	Water	Field Sampling	
180-89258-7	MW-7	Total/NA	Water	Field Sampling	
180-89258-8	MW-8	Total/NA	Water	Field Sampling	
180-89258-9	MW-9	Total/NA	Water	Field Sampling	
180-89258-10	MW-10	Total/NA	Water	Field Sampling	



**Chain of Custody Record**

<b>Client Information</b>		Sample: <u>Philip Evans</u> <u>Richard</u> <u>Agard</u> <u>for PM</u>		Lab PM: <u>Bortot, Veronica</u>	
Client Contact: Rick Hagendorfer		Phone: _____		E-Mail: <u>veronica.bortot@testamericainc.com</u>	
Company: RDH Environmental Services Inc		Address: 5720 Dove Drive		City: _____	
State: FL, Zip: 32571		TAT Requested (days): _____		Due Date Requested: _____	
Phone: 205-992-6283(Tel)		PO #: _____		Purchase Order Requested: _____	
Email: <u>rickhagendorfer@gmail.com</u>		WO #: _____		Project #: <u>18020047</u>	
Project Name: CCR - Plant Daniel GSA CCR		Site: _____		SSOW#: _____	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=sewage, BT=Tissue, As=Air)	Field Filtered Sample (Yes or No)	D	D	N	Sp	Total Number of Containers	Other:
<del>MW-1</del> MW-1	4/19/19	1710	G	Water		X					
MW-2		1336		Water							
MW-3		1125		Water							
MW-4		1505		Water							
MW-5		1555		Water							
MW-6		1320		Water							
MW-7		1015		Water							
MW-8		1653		Water							
MW-9		1524		Water							
MW-10		1130	✓	Water							
<u>DUP-03</u>			G	Water							

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

Special Instructions/QC Requirements: \_\_\_\_\_

Method of Shipment: \_\_\_\_\_

Received by: Delaney Watson Date/Time: 4-20-19 Company: APL

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Cooler Temperature(s) °C and Other Remarks: \_\_\_\_\_





180-89258 Waybill

000 1914 598  
Date: 05/03/19 TM  
Time: 00:50:50  
DIME: 786678  
DIME: 786678

**FedEx**  
MPS# 0263 7867 6435 4420

12:00P  
12:00P  
OVERNIGHT

**X0 AGCA**

**15238**  
PA-US  
**PIT**

Uncorrected temp	1.0	°C
Thermometer ID	10	
CF <u>0</u>	Initials	<u>B</u>

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

FID

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

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

ORIGIN ID:MOBA (850) 336-0192  
 RICK HAGENDORFER  
 RDH  
 5720 DOVE DRIVE  
 MILTON, FL 32571  
 UNITED STATES US

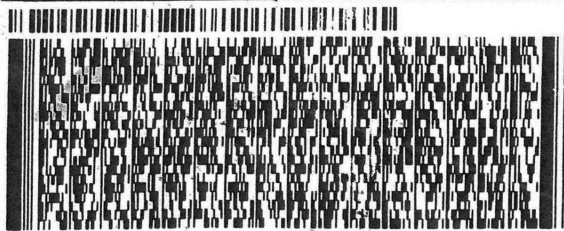
SHIP DATE: 19APR19  
 ACTWGT: 54.30 LB  
 CAD: 006994563/SSFE2002  
 DIMS: 22x14x14 IN  
 BILL THIRD PARTY

Part # 15825 QREZ/S24U/1F595/01/20

TO **SAMPLE RECEIVING**  
**TEST AMERICA PITTSBURG**  
**301 ALPHA DRIVE**  
**RETURNS**  
**PITTSBURGH PA 15283**

(412) 963-7058  
 INVT  
 PO1

REF:  
 DEPT:



**FedEx**  
 Express  
  
 REL#  
 3705346

**FedEx**  
 TRK#  
 # 0201 7867 6435 4415

**SATURDAY 12:00P**  
**PRIORITY OVERNIGHT**

**X0 AGCA**

1250  
**15238**  
 PA-US  
**PIT**



Uncorrected temp 15 °C  
 Thermometer ID 10  
 CF 0 Initials B

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

FID 967419 20APR19 P1



**Chain of Custody Record**



<b>Client Information (Sub Contract Lab)</b>		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:				
Client Contact: Shipping/Receiving		Phone:	Bortot, Veronica	State of Origin:	180-360847.1				
Company: TestAmerica Laboratories, Inc.		E-Mail:	veronica.bortot@testamericainc.com	Florida	Page: Page 1 of 2				
Address: 3355 McLemore Drive, Pensacola FL, 32514		Due Date Requested: 5/2/2019	Accreditations Required (See note):	Job #:	180-89258-1				
City: State, Zip: Phone: 850-474-1001(Tel) 850-478-2671(Fax)		TAT Requested (days):		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:				
Email: Project #: 18020047 Site:		PO #:		Analysis Requested					
Project Name: CCR - Plant Daniel		WO #:							
Site:									
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/305A Appendix III	Total Number of Containers	Special Instructions/Note:
MW-1 (180-89258-1)	4/19/19	17:10 Eastern		Water			X	1	
MW-2 (180-89258-2)	4/19/19	13:36 Eastern		Water			X	1	
MW-3 (180-89258-3)	4/19/19	11:25 Eastern		Water			X	1	
MW-4 (180-89258-4)	4/19/19	15:05 Eastern		Water			X	1	
MW-5 (180-89258-5)	4/19/19	15:55 Eastern		Water			X	1	
MW-6 (180-89258-6)	4/19/19	13:20 Eastern		Water			X	1	
MW-7 (180-89258-7)	4/19/19	10:15 Eastern		Water			X	1	
MW-8 (180-89258-8)	4/19/19	16:53 Eastern		Water			X	1	
MW-9 (180-89258-9)	4/19/19	15:24 Eastern		Water			X	1	

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

<b>Possible Hazard Identification</b>		Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed	Return To Client	Disposal By Lab	Archive For
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2		Months
Empty Kit Relinquished by:	Date:	Method of Shipment:	
Relinquished by: <i>[Signature]</i>	4/22/19 17:00	Received by: <i>Katelyn Owen</i>	Company: <i>IA</i>
Relinquished by:	Date/Time:	Received by:	Company:
Relinquished by:	Date/Time:	Received by:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: <i>1.9°C FIC</i>	





<b>Client Information (Sub Contract Lab)</b>			Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-360847.2			
Client Contact:			Phone:	E-Mail:	State of Origin:	Page:			
Shipping/Receiving			veronica.bortot@testamericainc.com			Page 2 of 2			
Company:			Accreditations Required (See note):						
TestAmerica Laboratories, Inc.			180-89258-1						
Address:			Preservation Codes:						
3355 McLemore Drive,			A - HCL						
City:			B - NaOH						
Pensacola			C - Zn Acetate						
State, Zip:			D - Nitric Acid						
FL, 32514			E - NaHSO4						
Phone:			F - MeOH						
850-474-1001(Tel) 850-478-2671(Fax)			G - Amchlor						
Email:			H - Ascorbic Acid						
Project #:			I - Ice						
18020047			J - DI Water						
Site:			K - EDTA						
CCR - Plant Daniel			L - EDA						
SSOW#:			M - Hexane						
			N - None						
			O - AsNaO2						
			P - Na2O4S						
			Q - Na2SO3						
			R - Na2S2O3						
			S - H2SO4						
			T - TSP Dodecahydrate						
			U - Acetone						
			V - MCAA						
			W - pH 4-5						
			X - EDTA						
			Y - EDA						
			Z - other (specify)						
			Other:						
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=comp, G=grab)</b>	<b>Matrix (W=water, S=solid, O=swissleil, BT=Tissue, As=Air)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>Total Number of containers</b>	<b>Special Instructions/Note:</b>
MW-10 (180-89258-10)		4/19/19	11:30 Eastern	Water	Water	X		1	
DUP-03 (180-89258-11)		4/19/19	09:15 Eastern	Water	Water	X		1	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I									
<b>Possible Hazard Identification</b>									
Unconfirmed									
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Special Instructions/QC Requirements:									
Relinquished by:			Date/Time:			Method of Shipment:			Company:
<i>[Signature]</i>			5/23/19 17:00			Kathy Owen			TA
Relinquished by:			Date/Time:			Received by:			Company:
						<i>[Signature]</i>			Company
Relinquished by:			Date/Time:			Received by:			Company:
									Company
Custody Seals Intact: Δ Yes Δ No			Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:			



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-89258-1

SDG Number: GSA CCR

**Login Number: 89258**

**List Source: Eurofins TestAmerica, Pittsburgh**

**List Number: 1**

**Creator: Watson, Debbie**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-89258-1

SDG Number: GSA CCR

**Login Number: 89258**

**List Number: 2**

**Creator: Avery, Kathy R**

**List Source: Eurofins TestAmerica, Pensacola**

**List Creation: 04/23/19 04:40 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
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	1.9°C IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-89258-1

SDG Number: GSA CCR

**Login Number: 89258**

**List Number: 3**

**Creator: Avery, Kathy R**

**List Source: Eurofins TestAmerica, Pensacola**

**List Creation: 04/23/19 04:46 PM**

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

Product Name: Low-Flow System

Date: 2019-04-19 10:10:23

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft  
  
Pump placement from TOC 49.8 ft

Well Information:

Well ID MW-7  
Well diameter 2 in  
Well Total Depth 54.8 ft  
Screen Length 10 ft  
Depth to Water 18.00 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.05 in  
Total Volume Pumped 16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:32:41	300.03	22.80	4.53	49.55	2.34	18.05	6.94	48.13
Last 5	09:42:41	900.03	22.80	4.51	49.95	1.49	18.05	6.92	79.11
Last 5	09:57:42	1801.03	22.87	4.51	50.32	1.33	18.05	6.96	104.51
Last 5	10:02:42	2101.03	22.94	4.51	50.36	1.20	18.05	6.95	107.73
Last 5	10:07:42	2401.04	23.03	4.51	50.36	1.12	18.05	6.95	111.99
Variance 0			0.07	-0.00	0.37			0.04	25.41
Variance 1			0.08	-0.00	0.04			-0.01	3.22
Variance 2			0.08	0.00	0.00			-0.00	4.25

Notes

Sample time @ 1015. Cloudy 60. DUP-03 @ 0915.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-19 11:20:14

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 65 ft  
  
Pump placement from TOC 49.3 ft

Well Information:

Well ID MW-3  
Well diameter 2 in  
Well Total Depth 54.3 ft  
Screen Length 10 ft  
Depth to Water 21.40 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7701225 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.1 in  
Total Volume Pumped 16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:57:44	1200.03	23.90	4.38	94.47	1.75	21.50	5.35	148.25
Last 5	11:02:44	1500.03	23.79	4.39	94.92	1.48	21.50	5.39	155.26
Last 5	11:07:44	1800.03	23.71	4.38	94.25	1.30	21.50	5.43	159.94
Last 5	11:12:44	2100.03	23.56	4.38	94.61	1.27	21.50	5.46	162.53
Last 5	11:17:44	2400.04	23.64	4.38	94.77	1.15	21.50	5.43	163.22
Variance 0			-0.08	-0.00	-0.67			0.04	4.68
Variance 1			-0.15	-0.01	0.36			0.03	2.60
Variance 2			0.08	0.00	0.17			-0.03	0.68

Notes

Sample time @ 1125. Cloudy 60.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-19 13:18:05

Project Information:

Operator Name Philip Evans  
Company Name RDH Environmental  
Project Name Plant Daniel GSA CCR  
Site Name Daniel  
Latitude 00° 0' 0"  
Longitude 00° 0' 0"  
Sonde SN 417744  
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC

51.0 ft

Well Information:

Well ID MW-9 BH MW-6  
Well diameter 2 in  
Well Total Depth 56.0 ft  
Screen Length 10 ft  
Depth to Water 20.70 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.05 in  
Total Volume Pumped 36 L

Low-Flow Sampling Stabilization Summary

Stabilization	Time	Elapsed	Temp C +/- 0.2	pH +/- 0.2	SpCond µS/cm +/- 5%	Turb NTU +/- 10	DTW ft	RDO mg/L +/- 0.2	ORP mV +/- 10
Last 5	12:56:13	4201.04	23.92	4.71	32.67	0.43	20.75	1.98	307.81
Last 5	13:01:13	4501.04	23.88	4.71	32.67	0.50	20.75	1.97	327.98
Last 5	13:06:13	4801.04	23.56	4.71	32.57	0.45	20.75	1.98	343.57
Last 5	13:11:13	5101.04	23.47	4.71	32.56	0.38	20.75	1.99	348.87
Last 5	13:16:13	5401.04	23.62	4.72	32.64	0.35	20.75	1.98	343.88
Variance 0			-0.32	0.00	-0.11			0.01	15.59
Variance 1			-0.09	0.00	-0.01			0.01	5.30
Variance 2			0.15	0.01	0.09			-0.01	-4.99

Notes

Sample time @ 1320. PC 62.

Grab Samples



Low-Flow

Date: #####

Operator N Philip Evans

Pump Mod QED

Company N RDH Environmental

Tubing Typ PE

Project Nar Plant Daniel GSA CCR

Site Name: Daniel

Latitude: 0° 0' 0"

Longitude: 0° 0' 0"

Tubing Dia: .17in

Tubing Len 60 ft

Sonde SN: 417744

Turbidity M HACH 2100Q

Pump place 51.0 ft

Well ID: ~~MW-9~~ BH MW-6

Well diame 2 in

Well Total 56.0 ft

Screen Len 10 ft

Depth to W 20.70 ft

Final Pump 400 mL/min

Total Syste 0.7478054 L

Calculated 300 sec

Stabilizatio 0.05 in

Total Volur 36 L

Time	pH	ORP	Conductivi	DO	Temperatu	Turbidity	DTW
300.0354	4.69	168.5	33.5	2.01	23.52	0.9	20.75
600.0349	4.69	173.6	33.2	1.94	23.7	0.88	20.75
900.0339	4.7	184.2	33	1.95	23.52	0.7	20.75
1200.036	4.69	196.2	32.9	1.96	23.47	0.64	20.75
1500.037	4.7	208.3	32.8	1.96	23.81	0.52	20.75
1800.038	4.7	222.8	32.7	1.96	23.76	0.5	20.75
2100.039	4.7	239.3	32.7	1.95	23.93	0.41	20.75
2400.037	4.71	257.4	32.7	1.98	23.5	0.4	20.75
2700.039	4.7	267.7	32.7	1.98	23.34	0.35	20.75
3000.038	4.7	268.7	32.7	1.98	23.39	0.42	20.75
3300.038	4.71	268.8	32.6	1.98	23.79	0.4	20.75
3601.037	4.71	276.6	32.7	1.97	23.92	0.42	20.75
3901.038	4.71	289.4	32.7	1.97	24.02	0.47	20.75
4201.036	4.71	307.8	32.7	1.98	23.92	0.43	20.75
4501.039	4.71	328	32.7	1.97	23.88	0.5	20.75
4801.037	4.71	343.6	32.6	1.98	23.56	0.45	20.75
5101.036	4.71	348.9	32.6	1.99	23.47	0.38	20.75
5401.036	4.72	343.9	32.6	1.98	23.62	0.35	20.75

Product Name: Low-Flow System

Date: 2019-04-19 15:03:44

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft  
  
Pump placement from TOC 46.8 ft

Well Information:

Well ID MW-4  
Well diameter 2 in  
Well Total Depth 51.8 ft  
Screen Length 10 ft  
Depth to Water 21.22 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.03 in  
Total Volume Pumped 30 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:42:01	3300.04	23.48	4.90	39.47	1.18	21.25	3.03	305.44
Last 5	14:47:02	3601.04	23.87	4.91	39.30	1.08	21.25	3.02	305.18
Last 5	14:52:02	3901.04	23.52	4.90	39.30	1.12	21.25	3.04	315.97
Last 5	14:57:02	4201.04	23.54	4.91	39.24	1.15	21.25	3.06	320.70
Last 5	15:02:02	4501.04	23.52	4.91	39.08	1.12	21.25	3.07	321.91
Variance 0			-0.35	-0.00	-0.00			0.02	10.80
Variance 1			0.03	0.00	-0.06			0.02	4.72
Variance 2			-0.02	0.00	-0.16			0.01	1.21

Notes

Sample time @ 1505. PC 65.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-19 15:55:35

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 51.3 ft

Well Information:

Well ID MW-5  
Well diameter 2 in  
Well Total Depth 56.3 ft  
Screen Length 10 ft  
Depth to Water 20.55 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.03 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	15:34:15	300.04	23.51	4.85	37.47	1.55	20.58	3.10	267.14
Last 5	15:39:15	600.04	23.79	4.86	37.58	1.10	20.58	3.00	263.55
Last 5	15:44:15	900.04	23.93	4.86	37.70	1.03	20.58	2.97	264.64
Last 5	15:49:15	1200.04	23.95	4.86	37.66	0.91	20.58	2.97	270.68
Last 5									
Variance 0			0.28	0.01	0.11			-0.10	-3.60
Variance 1			0.14	0.00	0.12			-0.03	1.10
Variance 2			0.02	-0.00	-0.04			-0.00	6.04

Notes

Sample time @ 1555. PC 65.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-19 17:04:16

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 48.3 ft

Well Information:

Well ID MW-1  
Well diameter 2 in  
Well Total Depth 53.3 ft  
Screen Length 10 ft  
Depth to Water 19.35 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0 in  
Total Volume Pumped 18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	16:34:53	1500.04	22.79	5.04	52.27	16.20	19.35	7.87	188.87
Last 5	16:39:53	1800.04	22.86	5.00	52.31	7.50	19.35	7.93	185.90
Last 5	16:44:53	2100.04	22.84	4.93	52.31	4.24	19.35	7.98	185.02
Last 5	16:49:53	2400.04	22.85	4.90	52.57	2.09	19.35	8.00	180.23
Last 5	16:54:53	2700.04	22.85	4.89	52.62	1.78	19.35	8.02	176.97
Variance 0			-0.02	-0.06	0.00			0.05	-0.88
Variance 1			0.01	-0.04	0.25			0.02	-4.80
Variance 2			0.01	-0.01	0.05			0.02	-3.25

Notes

Sample time @ 1710. Rainy 65.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-19 11:28:44

Project Information:

Operator Name Rick Hagendorfer  
Company Name RDH Env.  
Project Name Daniel GSA CCR  
Site Name Plant Daniel  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 632615  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 56 ft

Pump placement from TOC 51.4 ft

Well Information:

Well ID MW-10  
Well diameter 2 in  
Well Total Depth 56.4 ft  
Screen Length 10 ft  
Depth to Water 18.84 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7299517 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.02 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	11:11:53	300.08	20.30	5.12	32.55	3.80	18.86	5.02	87.12
Last 5	11:16:53	600.02	20.39	5.15	31.35	1.97	18.86	4.71	87.76
Last 5	11:21:53	900.02	20.41	5.14	30.90	1.07	18.86	4.62	91.43
Last 5	11:26:53	1200.02	20.50	5.13	30.73	0.87	18.86	4.58	95.51
Last 5									
Variance 0			0.09	0.03	-1.20			-0.31	0.64
Variance 1			0.02	-0.01	-0.45			-0.10	3.67
Variance 2			0.09	-0.01	-0.17			-0.04	4.07

Notes

Sample time 1130. Cloudy 59.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-19 13:35:46

Project Information:

Operator Name Rick Hagendorfer  
Company Name RDH Env.  
Project Name Daniel GSA CCR  
Site Name Plant Daniel  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 632615  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 55 ft

Pump placement from TOC 48.2 ft

Well Information:

Well ID MW-2  
Well diameter 2 in  
Well Total Depth 53.2 ft  
Screen Length 10 ft  
Depth to Water 17.72 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7254883 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.03 in  
Total Volume Pumped 53 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:12:44	4800.02	20.25	4.86	42.71	2.47	17.75	6.44	176.87
Last 5	13:17:44	5100.02	20.19	4.86	42.65	2.30	17.75	6.45	175.40
Last 5	13:22:44	5400.02	20.47	4.87	42.65	2.20	17.75	6.45	172.49
Last 5	13:27:44	5700.02	20.33	4.86	42.67	1.96	17.75	6.45	173.25
Last 5	13:32:44	6000.02	20.40	4.85	42.71	1.79	17.75	6.46	173.18
Variance 0			0.28	0.01	0.01			0.00	-2.91
Variance 1			-0.14	-0.01	0.01			0.01	0.76
Variance 2			0.08	-0.01	0.04			0.01	-0.07

Notes

Sample time 1336. PC 65.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-19 15:24:01

Project Information:

Operator Name Rick Hagendorfer  
Company Name RDH Env.  
Project Name Daniel GSA CCR  
Site Name Plant Daniel  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 632615  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 56 ft

Pump placement from TOC 51.2 ft

Well Information:

Well ID MW-9  
Well diameter 2 in  
Well Total Depth 56.2 ft  
Screen Length 10 ft  
Depth to Water 17.44 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7299517 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.02 in  
Total Volume Pumped 20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	15:01:31	1800.02	20.66	4.93	47.25	1.90	17.45	1.93	144.40
Last 5	15:06:31	2100.02	20.44	4.93	47.21	1.63	17.46	2.06	152.53
Last 5	15:11:32	2401.02	20.50	4.93	47.18	1.37	17.46	2.16	157.44
Last 5	15:16:32	2701.02	20.62	4.93	47.19	1.40	17.46	2.28	159.94
Last 5	15:21:32	3001.02	20.43	4.94	47.16	1.49	17.46	2.36	162.77
Variance 0			0.06	-0.00	-0.03			0.11	4.92
Variance 1			0.11	-0.01	0.01			0.11	2.49
Variance 2			-0.18	0.01	-0.03			0.09	2.83

Notes

Sample time 1524. PC 65.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-19 16:52:33

Project Information:

Operator Name Rick Hagendorfer  
Company Name RDH Env.  
Project Name Daniel GSA CCR  
Site Name Plant Daniel  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 632615  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 56 ft

Pump placement from TOC 50.8 ft

Well Information:

Well ID MW-8  
Well diameter 2 in  
Well Total Depth 55.8 ft  
Screen Length 10 ft  
Depth to Water 17.87 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7299517 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.07 in  
Total Volume Pumped 24 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	16:29:53	2400.02	20.17	4.60	83.76	3.00	17.94	5.71	118.39
Last 5	16:34:54	2701.02	20.39	4.61	83.30	2.84	17.94	5.62	116.70
Last 5	16:39:54	3001.02	20.57	4.62	82.15	2.52	17.94	5.51	115.07
Last 5	16:44:56	3303.02	20.62	4.63	81.36	1.97	17.94	5.39	114.17
Last 5	16:49:59	3606.02	20.57	4.63	81.03	1.62	17.94	5.38	113.80
Variance 0			0.18	0.01	-1.15			-0.11	-1.64
Variance 1			0.05	0.01	-0.80			-0.12	-0.89
Variance 2			-0.05	-0.00	-0.32			-0.01	-0.37

Notes

Sample time 1653. Rained during purging. Cloudy 64.

Grab Samples



## ANALYTICAL REPORT

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

Laboratory Job ID: 180-91095-1  
Laboratory Sample Delivery Group: 1  
Client Project/Site: GSA - Plant Daniel

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

Attn: Ms. Lauren Petty



Authorized for release by:  
6/19/2019 9:01:09 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

PA Lab ID: 02-00416



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# Case Narrative

Client: Southern Company  
Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
SDG: 1

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**Job ID: 180-91095-1**

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**Laboratory: Eurofins TestAmerica, Pittsburgh**

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**Narrative**

**Job Narrative**  
**180-91095-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 6/10/2019 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

**Anions**

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

**Metals**

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

**General Chemistry**

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

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# Definitions/Glossary

Client: Southern Company  
Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
SDG: 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.

## Glossary

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

# Accreditation/Certification Summary

Client: Southern Company  
 Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
 SDG: 1

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State		2891	04-30-20
California	State Program	9	2891	04-30-20
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Florida	NELAP		E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Illinois	NELAP		004375	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Kentucky (DW)	Kentucky UST	4	162013	04-30-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State		PA00164	07-31-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-20
New Jersey	NELAP	2	PA005	06-30-19
New Jersey	NELAP		PA005	06-30-19 *
New York	NELAP	2	11182	03-31-20
New York	NELAP		11182	04-01-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	02-06-20
Oregon	NELAP		PA-2151	02-06-20
Pennsylvania	NELAP	3	02-00416	04-30-20
Pennsylvania	NELAP		02-00416	04-30-20
South Carolina	State Program	4	89014	04-30-20
Texas	NELAP	6	T104704528-15-2	03-31-20
Texas	NELAP		T104704528	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
US Fish & Wildlife	US Federal Programs		058448	07-31-20
USDA	Federal		P330-16-00211	06-26-19
USDA	US Federal Programs		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
Virginia	NELAP		10043	09-14-19
West Virginia DEP	State		142	01-31-20
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State		998027800	08-31-19
Wisconsin	State Program	5	998027800	08-31-19

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

# Sample Summary

Client: Southern Company  
Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
SDG: 1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-91095-1	MW-3	Water	06/07/19 08:00	06/10/19 08:30	
180-91095-2	MW-8	Water	06/07/19 10:20	06/10/19 08:30	
180-91095-3	MW-1	Water	06/07/19 08:40	06/10/19 08:30	

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# Method Summary

Client: Southern Company  
Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
SDG: 1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

#### Protocol References:

EPA = US Environmental Protection Agency

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

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

#### Laboratory References:

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

# Lab Chronicle

Client: Southern Company  
Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
SDG: 1

**Client Sample ID: MW-3**  
**Date Collected: 06/07/19 08:00**  
**Date Received: 06/10/19 08:30**

**Lab Sample ID: 180-91095-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			282013	06/18/19 06:14	MJH	TAL PIT
Instrument ID: CHIC2100A										
Total Recoverable	Prep	3005A			50 mL	50 mL	281592	06/13/19 06:45	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			281989	06/15/19 23:39	WTR	TAL PIT
Instrument ID: M										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	281532	06/12/19 13:25	AVS	TAL PIT
Instrument ID: NOEQUIP										

**Client Sample ID: MW-8**  
**Date Collected: 06/07/19 10:20**  
**Date Received: 06/10/19 08:30**

**Lab Sample ID: 180-91095-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			281888	06/17/19 11:43	MJH	TAL PIT
Instrument ID: CHIC2100A										

**Client Sample ID: MW-1**  
**Date Collected: 06/07/19 08:40**  
**Date Received: 06/10/19 08:30**

**Lab Sample ID: 180-91095-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			281888	06/17/19 11:58	MJH	TAL PIT
Instrument ID: CHIC2100A										

**Laboratory References:**

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

**Analyst References:**

Lab: TAL PIT

Batch Type: Prep

RJR = Ron Rosenbaum

Batch Type: Analysis

AVS = Abbey Smith

MJH = Matthew Hartman

WTR = Bill Reinheimer

# Client Sample Results

Client: Southern Company  
Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
SDG: 1

## Client Sample ID: MW-3

## Lab Sample ID: 180-91095-1

Date Collected: 06/07/19 08:00

Matrix: Water

Date Received: 06/10/19 08:30

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	19.2		1.00	0.380	mg/L			06/18/19 06:14	1
Fluoride	0.0937	J	0.100	0.0263	mg/L			06/18/19 06:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6.91		0.500	0.116	mg/L		06/13/19 06:45	06/15/19 23:39	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	76.0		10.0	10.0	mg/L			06/12/19 13:25	1

## Client Sample ID: MW-8

## Lab Sample ID: 180-91095-2

Date Collected: 06/07/19 10:20

Matrix: Water

Date Received: 06/10/19 08:30

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.3		1.00	0.715	mg/L			06/17/19 11:43	1

## Client Sample ID: MW-1

## Lab Sample ID: 180-91095-3

Date Collected: 06/07/19 08:40

Matrix: Water

Date Received: 06/10/19 08:30

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	8.98		1.00	0.380	mg/L			06/17/19 11:58	1

# QC Sample Results

Client: Southern Company  
Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
SDG: 1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID: MB 180-281888/6**  
**Matrix: Water**  
**Analysis Batch: 281888**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.715		1.00	0.715	mg/L			06/17/19 04:26	1
Sulfate	<0.380		1.00	0.380	mg/L			06/17/19 04:26	1

**Lab Sample ID: LCS 180-281888/5**  
**Matrix: Water**  
**Analysis Batch: 281888**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.09		mg/L		100	90 - 110
Sulfate	25.0	24.84		mg/L		99	90 - 110

**Lab Sample ID: MB 180-282013/6**  
**Matrix: Water**  
**Analysis Batch: 282013**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<0.380		1.00	0.380	mg/L			06/18/19 05:03	1
Fluoride	<0.0263		0.100	0.0263	mg/L			06/18/19 05:03	1

**Lab Sample ID: LCS 180-282013/5**  
**Matrix: Water**  
**Analysis Batch: 282013**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	25.0	26.63		mg/L		107	90 - 110
Fluoride	1.25	1.336		mg/L		107	90 - 110

**Lab Sample ID: 180-91095-1 MS**  
**Matrix: Water**  
**Analysis Batch: 282013**

**Client Sample ID: MW-3**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	19.2		25.0	43.59		mg/L		98	80 - 120
Fluoride	0.0937	J	1.25	1.353		mg/L		101	80 - 120

**Lab Sample ID: 180-91095-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 282013**

**Client Sample ID: MW-3**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	19.2		25.0	46.68		mg/L		110	80 - 120	7	20
Fluoride	0.0937	J	1.25	1.419		mg/L		106	80 - 120	5	20

# QC Sample Results

Client: Southern Company  
 Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
 SDG: 1

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

Lab Sample ID: MB 180-281592/1-A  
 Matrix: Water  
 Analysis Batch: 281989

Client Sample ID: Method Blank  
 Prep Type: Total Recoverable  
 Prep Batch: 281592

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.116		0.500	0.116	mg/L		06/13/19 06:45	06/15/19 21:45	1

Lab Sample ID: LCS 180-281592/2-A  
 Matrix: Water  
 Analysis Batch: 281989

Client Sample ID: Lab Control Sample  
 Prep Type: Total Recoverable  
 Prep Batch: 281592

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	25.0	24.17		mg/L		97	80 - 120

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

Lab Sample ID: MB 180-281532/2  
 Matrix: Water  
 Analysis Batch: 281532

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			06/12/19 13:25	1

Lab Sample ID: LCS 180-281532/1  
 Matrix: Water  
 Analysis Batch: 281532

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	201	202.0		mg/L		100	80 - 120

# QC Association Summary

Client: Southern Company  
Project/Site: GSA - Plant Daniel

Job ID: 180-91095-1  
SDG: 1

## HPLC/IC

### Analysis Batch: 281888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-91095-2	MW-8	Total/NA	Water	EPA 300.0 R2.1	
180-91095-3	MW-1	Total/NA	Water	EPA 300.0 R2.1	
MB 180-281888/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-281888/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 282013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-91095-1	MW-3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-282013/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-282013/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-91095-1 MS	MW-3	Total/NA	Water	EPA 300.0 R2.1	
180-91095-1 MSD	MW-3	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Prep Batch: 281592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-91095-1	MW-3	Total Recoverable	Water	3005A	
MB 180-281592/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-281592/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 281989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-91095-1	MW-3	Total Recoverable	Water	EPA 6020	281592
MB 180-281592/1-A	Method Blank	Total Recoverable	Water	EPA 6020	281592
LCS 180-281592/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	281592

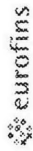
## General Chemistry

### Analysis Batch: 281532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-91095-1	MW-3	Total/NA	Water	SM 2540C	
MB 180-281532/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-281532/1	Lab Control Sample	Total/NA	Water	SM 2540C	



**Chain of Custody Record**



Environment Testing  
TestAmerica

<b>Client Information</b>		Sampler: <b>Philip Evans</b>		Lab PM: <b>Bortot, Veronica</b>	Carrier Tracking No(s):	COG No: <b>180-52127-10913.1</b>
Client Contact: <b>Rick Hagendorfer</b>		Phone: <b>950-336-092</b>		E-Mail: <b>veronica.bortot@testamericainc.com</b>		Page: <b>Page 1 of 1</b>
Company: <b>RDH Environmental Services Inc</b>		Due Date Requested:		Analysis Requested		
Address: <b>5720 Dove Drive</b>		TAT Requested (days):		300_ORGFM_28D - Sulfate		
City: <b>Pace</b>		Purchase Order Requested		300_ORGFM_28D - Chloride		
State, Zip: <b>FL, 32571</b>		FO #:		2540C_Calcid - TDS		
Phone: <b>205-992-5417(Tel)</b>		WO #:		6020 - Calcium		
Email: <b>rickhagendorfer@gmail.com</b>		Project #:		300_ORGFM_28D - Sulfate, Fluoride		
Project Name: <b>CCR - Plant Daniel GSA Resampling</b>		SSOW#:		Perform MS/MSD (Yes or No)		
Site:		Sample Date		Field Filtered Sample (Yes or No)		
<b>Sample Identification</b>		Sample Time		Preservation Code:		
MW-3		6/7/19	0800 G	Water		
MW-8		6/7/19	1020 G	Water		
MW-1		6/7/19	0840 G	Water		
				Total Number of containers		
				Spe		
				180-91095 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 Other:		
				M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		
Deliverable Requested: I, II, III, IV, Other (specify)		Empty KV Relinquished by:		Method of Shipment:		
Relinquished by:		Date: <b>6/7/19</b>		Date/Time: <b>1100</b>		
Relinquished by:		Date: <b>6/7/19</b>		Date/Time: <b>830</b>		
Relinquished by:		Date:		Date/Time:		
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-91095-1

SDG Number: 1

**Login Number: 91095**

**List Source: Eurofins TestAmerica, Pittsburgh**

**List Number: 1**

**Creator: Kovitch, Christina M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Product Name: Low-Flow System

Date: 2019-06-07 08:01:37

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 65 ft

Pump placement from TOC 49.3 ft

Well Information:

Well ID MW-3  
Well diameter 2 in  
Well Total Depth 54.3 ft  
Screen Length 10 ft  
Depth to Water 22.07 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7701225 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.96 in  
Total Volume Pumped 16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:39:46	1200.02	26.95	4.33	108.68	0.95	22.15	5.17	160.23
Last 5	07:44:46	1500.02	27.15	4.34	109.06	0.90	22.15	5.17	161.62
Last 5	07:49:46	1800.02	26.97	4.33	109.62	0.87	22.15	5.19	162.18
Last 5	07:54:46	2100.02	26.84	4.33	108.93	0.85	22.15	5.15	162.31
Last 5	07:59:46	2400.02	27.00	4.33	110.01	0.81	22.15	5.19	162.23
Variance 0			-0.18	-0.01	0.56			0.01	0.57
Variance 1			-0.13	-0.00	-0.69			-0.04	0.13
Variance 2			0.15	0.00	1.08			0.05	-0.08

Notes

Sample time @ 0800. PC 85.

Grab Samples

Product Name: Low-Flow System

Date: 2019-06-07 08:37:21

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 48.3 ft

Well Information:

Well ID MW-1  
Well diameter 2 in  
Well Total Depth 53.3 ft  
Screen Length 10 ft  
Depth to Water 20.20 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.24 in  
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:24:11	300.02	26.51	5.06	59.26	2.45	20.22	7.72	176.14
Last 5	08:29:11	600.02	26.60	4.97	59.14	2.10	20.22	7.79	171.65
Last 5	08:34:11	900.02	26.46	4.93	59.18	1.86	20.22	7.80	167.80
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.09	-0.09	-0.12			0.07	-4.49
Variance 2			-0.14	-0.04	0.04			0.02	-3.85

Notes

Sample time @ 0840. PC 87.

Grab Samples

Product Name: Low-Flow System

Date: 2019-06-07 10:19:14

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 50.8 ft

Well Information:

Well ID MW-8  
Well diameter 2 in  
Well Total Depth 55.8 ft  
Screen Length 10 ft  
Depth to Water 18.63 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.84 in  
Total Volume Pumped 32 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:37:07	2418.03	24.36	4.54	75.50	1.21	18.70	5.35	166.75
Last 5	10:02:08	3919.03	24.15	4.56	73.07	1.25	18.70	5.03	175.00
Last 5	10:07:08	4219.03	24.17	4.56	72.79	1.15	18.70	4.99	165.62
Last 5	10:12:08	4519.09	24.17	4.57	72.59	1.12	18.70	4.95	160.32
Last 5	10:17:09	4820.04	24.24	4.57	72.31	1.18	18.70	4.93	158.42
Variance 0			0.02	0.00	-0.28			-0.04	-9.38
Variance 1			-0.00	0.00	-0.20			-0.04	-5.29
Variance 2			0.07	-0.00	-0.27			-0.02	-1.90

Notes

Sample time @ 1020. Rainy 85. Missing readings due to lightning storm.

Grab Samples

**2nd**  
**Semi-Annual**  
**Monitoring Event**



## ANALYTICAL REPORT

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

Laboratory Job ID: 180-96288-1

Laboratory Sample Delivery Group: GSA CCR  
Client Project/Site: CCR - Plant Daniel GSA CCR

**For:**

Southern Company  
PO BOX 2641 GSC8  
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty



Authorized for release by:  
10/23/2019 10:25:51 PM

Veronica Bortot, Senior Project Manager  
(412)963-2435

[veronica.bortot@testamericainc.com](mailto:veronica.bortot@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

PA Lab ID: 02-00416

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# Case Narrative

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

Job ID: 180-96288-1  
SDG: GSA CCR

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**Job ID: 180-96288-1**

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**Laboratory: Eurofins TestAmerica, Pittsburgh**

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**Narrative**

**Job Narrative**  
**180-96288-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 9/26/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

**GC Semi VOA**

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

**Metals**

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

**General Chemistry**

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

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# Definitions/Glossary

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

Job ID: 180-96288-1  
SDG: GSA CCR

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

# Accreditation/Certification Summary

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

Job ID: 180-96288-1  
 SDG: GSA CCR

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

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



# Sample Summary

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

Job ID: 180-96288-1  
SDG: GSA CCR

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-96288-1	MW-1	Water	09/25/19 08:45	09/26/19 09:00	
180-96288-2	MW-2	Water	09/25/19 07:40	09/26/19 09:00	
180-96288-3	MW-3	Water	09/25/19 12:45	09/26/19 09:00	
180-96288-4	MW-4	Water	09/25/19 10:55	09/26/19 09:00	
180-96288-5	MW-5	Water	09/25/19 09:45	09/26/19 09:00	
180-96288-6	MW-6	Water	09/25/19 12:00	09/26/19 09:00	
180-96288-7	MW-7	Water	09/25/19 13:30	09/26/19 09:00	
180-96288-8	MW-8	Water	09/25/19 12:35	09/26/19 09:00	
180-96288-9	MW-9	Water	09/25/19 15:35	09/26/19 09:00	
180-96288-10	MW-10	Water	09/25/19 08:15	09/26/19 09:00	
180-96288-11	DUP-01	Water	09/24/19 11:35	09/26/19 09:00	
180-96288-12	DUP-02	Water	09/25/19 06:40	09/26/19 09:00	

# Method Summary

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

Job ID: 180-96288-1  
SDG: GSA CCR

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

#### Protocol References:

EPA = US Environmental Protection Agency

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

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

#### Laboratory References:

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





# Lab Chronicle

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

Job ID: 180-96288-1  
 SDG: GSA CCR

**Client Sample ID: MW-1**  
**Date Collected: 09/25/19 08:45**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 05:34	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293198	09/30/19 11:22	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295315	10/17/19 18:04	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293325	10/01/19 11:17	AVS	TAL PIT

**Client Sample ID: MW-2**  
**Date Collected: 09/25/19 07:40**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 06:20	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293198	09/30/19 11:22	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295315	10/17/19 18:08	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293325	10/01/19 11:17	AVS	TAL PIT

**Client Sample ID: MW-3**  
**Date Collected: 09/25/19 12:45**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 06:35	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293198	09/30/19 11:22	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295315	10/17/19 18:11	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293325	10/01/19 11:17	AVS	TAL PIT

**Client Sample ID: MW-4**  
**Date Collected: 09/25/19 10:55**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 06:51	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293198	09/30/19 11:22	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295315	10/17/19 18:15	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293325	10/01/19 11:17	AVS	TAL PIT

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# Lab Chronicle

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

Job ID: 180-96288-1  
 SDG: GSA CCR

**Client Sample ID: MW-5**  
**Date Collected: 09/25/19 09:45**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 07:06	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293198	09/30/19 11:22	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295315	10/17/19 18:25	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293326	10/01/19 11:21	AVS	TAL PIT

**Client Sample ID: MW-6**  
**Date Collected: 09/25/19 12:00**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 07:21	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293198	09/30/19 11:22	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295315	10/17/19 18:28	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293326	10/01/19 11:21	AVS	TAL PIT

**Client Sample ID: MW-7**  
**Date Collected: 09/25/19 13:30**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 08:10	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293356	10/01/19 13:09	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295742	10/22/19 19:39	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293326	10/01/19 11:21	AVS	TAL PIT

**Client Sample ID: MW-8**  
**Date Collected: 09/25/19 12:35**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-8**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 08:26	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293356	10/01/19 13:09	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295742	10/22/19 19:42	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293326	10/01/19 11:21	AVS	TAL PIT

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# Lab Chronicle

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

Job ID: 180-96288-1  
 SDG: GSA CCR

**Client Sample ID: MW-9**  
**Date Collected: 09/25/19 15:35**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 08:41	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293356	10/01/19 13:09	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295742	10/22/19 19:46	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293326	10/01/19 11:21	AVS	TAL PIT

**Client Sample ID: MW-10**  
**Date Collected: 09/25/19 08:15**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-10**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 08:57	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293356	10/01/19 13:09	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295742	10/22/19 19:49	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293326	10/01/19 11:21	AVS	TAL PIT

**Client Sample ID: DUP-01**  
**Date Collected: 09/24/19 11:35**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-11**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 09:12	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293356	10/01/19 13:09	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295742	10/22/19 19:52	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293083	09/28/19 10:14	AVS	TAL PIT

**Client Sample ID: DUP-02**  
**Date Collected: 09/25/19 06:40**  
**Date Received: 09/26/19 09:00**

**Lab Sample ID: 180-96288-12**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			294190	10/09/19 09:58	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	293305	10/01/19 10:06	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			295479	10/19/19 18:30	WTR	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	293326	10/01/19 11:21	AVS	TAL PIT

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# Lab Chronicle

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

Job ID: 180-96288-1  
SDG: GSA CCR

## Laboratory References:

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

## Analyst References:

Lab: TAL PIT

Batch Type: Prep

MWW = Margaret Wanyoike

Batch Type: Analysis

AVS = Abbey Smith

MJH = Matthew Hartman

RSK = Robert Kurtz

WTR = Bill Reinheimer

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# Client Sample Results

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

Job ID: 180-96288-1  
 SDG: GSA CCR

## Client Sample ID: MW-1

## Lab Sample ID: 180-96288-1

Date Collected: 09/25/19 08:45

Matrix: Water

Date Received: 09/26/19 09:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0263		0.100	0.0263	mg/L			10/09/19 05:34	1
Chloride	2.93		1.00	0.715	mg/L			10/09/19 05:34	1
Sulfate	8.87		1.00	0.380	mg/L			10/09/19 05:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		09/30/19 11:22	10/17/19 18:04	1
Calcium	3.68		0.250	0.127	mg/L		09/30/19 11:22	10/17/19 18:04	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	52.0		10.0	10.0	mg/L			10/01/19 11:17	1

## Client Sample ID: MW-2

## Lab Sample ID: 180-96288-2

Date Collected: 09/25/19 07:40

Matrix: Water

Date Received: 09/26/19 09:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0263		0.100	0.0263	mg/L			10/09/19 06:20	1
Chloride	8.26		1.00	0.715	mg/L			10/09/19 06:20	1
Sulfate	0.436	J	1.00	0.380	mg/L			10/09/19 06:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		09/30/19 11:22	10/17/19 18:08	1
Calcium	0.935		0.250	0.127	mg/L		09/30/19 11:22	10/17/19 18:08	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	27.0		10.0	10.0	mg/L			10/01/19 11:17	1

## Client Sample ID: MW-3

## Lab Sample ID: 180-96288-3

Date Collected: 09/25/19 12:45

Matrix: Water

Date Received: 09/26/19 09:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.198		0.100	0.0263	mg/L			10/09/19 06:35	1
Chloride	9.57		1.00	0.715	mg/L			10/09/19 06:35	1
Sulfate	65.1		1.00	0.380	mg/L			10/09/19 06:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0677		0.0500	0.0386	mg/L		09/30/19 11:22	10/17/19 18:11	1
Calcium	20.2		0.250	0.127	mg/L		09/30/19 11:22	10/17/19 18:11	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	143		10.0	10.0	mg/L			10/01/19 11:17	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-96288-1  
 SDG: GSA CCR

## Client Sample ID: MW-4

## Lab Sample ID: 180-96288-4

Date Collected: 09/25/19 10:55

Matrix: Water

Date Received: 09/26/19 09:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0263		0.100	0.0263	mg/L			10/09/19 06:51	1
<b>Chloride</b>	<b>8.94</b>		1.00	0.715	mg/L			10/09/19 06:51	1
<b>Sulfate</b>	<b>2.30</b>		1.00	0.380	mg/L			10/09/19 06:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		09/30/19 11:22	10/17/19 18:15	1
<b>Calcium</b>	<b>2.18</b>		0.250	0.127	mg/L		09/30/19 11:22	10/17/19 18:15	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>44.0</b>		10.0	10.0	mg/L			10/01/19 11:17	1

## Client Sample ID: MW-5

## Lab Sample ID: 180-96288-5

Date Collected: 09/25/19 09:45

Matrix: Water

Date Received: 09/26/19 09:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0263		0.100	0.0263	mg/L			10/09/19 07:06	1
<b>Chloride</b>	<b>6.59</b>		1.00	0.715	mg/L			10/09/19 07:06	1
<b>Sulfate</b>	<b>3.52</b>		1.00	0.380	mg/L			10/09/19 07:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		09/30/19 11:22	10/17/19 18:25	1
<b>Calcium</b>	<b>1.85</b>		0.250	0.127	mg/L		09/30/19 11:22	10/17/19 18:25	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>42.0</b>		10.0	10.0	mg/L			10/01/19 11:21	1

## Client Sample ID: MW-6

## Lab Sample ID: 180-96288-6

Date Collected: 09/25/19 12:00

Matrix: Water

Date Received: 09/26/19 09:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0263		0.100	0.0263	mg/L			10/09/19 07:21	1
<b>Chloride</b>	<b>6.72</b>		1.00	0.715	mg/L			10/09/19 07:21	1
<b>Sulfate</b>	<b>1.98</b>		1.00	0.380	mg/L			10/09/19 07:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		09/30/19 11:22	10/17/19 18:28	1
<b>Calcium</b>	<b>1.09</b>		0.250	0.127	mg/L		09/30/19 11:22	10/17/19 18:28	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>46.0</b>		10.0	10.0	mg/L			10/01/19 11:21	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-96288-1  
 SDG: GSA CCR

**Client Sample ID: MW-7**  
 Date Collected: 09/25/19 13:30  
 Date Received: 09/26/19 09:00

**Lab Sample ID: 180-96288-7**  
 Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0263		0.100	0.0263	mg/L			10/09/19 08:10	1
Chloride	8.59		1.00	0.715	mg/L			10/09/19 08:10	1
Sulfate	1.57		1.00	0.380	mg/L			10/09/19 08:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0630		0.0500	0.0386	mg/L		10/01/19 13:09	10/22/19 19:39	1
Calcium	1.25		0.250	0.127	mg/L		10/01/19 13:09	10/22/19 19:39	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	42.0		10.0	10.0	mg/L			10/01/19 11:21	1

**Client Sample ID: MW-8**  
 Date Collected: 09/25/19 12:35  
 Date Received: 09/26/19 09:00

**Lab Sample ID: 180-96288-8**  
 Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0277	J	0.100	0.0263	mg/L			10/09/19 08:26	1
Chloride	11.2		1.00	0.715	mg/L			10/09/19 08:26	1
Sulfate	<0.380		1.00	0.380	mg/L			10/09/19 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0484	J	0.0500	0.0386	mg/L		10/01/19 13:09	10/22/19 19:42	1
Calcium	3.51		0.250	0.127	mg/L		10/01/19 13:09	10/22/19 19:42	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	61.0		10.0	10.0	mg/L			10/01/19 11:21	1

**Client Sample ID: MW-9**  
 Date Collected: 09/25/19 15:35  
 Date Received: 09/26/19 09:00

**Lab Sample ID: 180-96288-9**  
 Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0313	J	0.100	0.0263	mg/L			10/09/19 08:41	1
Chloride	13.2		1.00	0.715	mg/L			10/09/19 08:41	1
Sulfate	<0.380		1.00	0.380	mg/L			10/09/19 08:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0455	J	0.0500	0.0386	mg/L		10/01/19 13:09	10/22/19 19:46	1
Calcium	1.06		0.250	0.127	mg/L		10/01/19 13:09	10/22/19 19:46	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	33.0		10.0	10.0	mg/L			10/01/19 11:21	1

Eurofins TestAmerica, Pittsburgh



# Client Sample Results

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

Job ID: 180-96288-1  
 SDG: GSA CCR

## Client Sample ID: MW-10

Date Collected: 09/25/19 08:15

Date Received: 09/26/19 09:00

## Lab Sample ID: 180-96288-10

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0267	J	0.100	0.0263	mg/L			10/09/19 08:57	1
Chloride	4.69		1.00	0.715	mg/L			10/09/19 08:57	1
Sulfate	0.648	J	1.00	0.380	mg/L			10/09/19 08:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0460	J	0.0500	0.0386	mg/L		10/01/19 13:09	10/22/19 19:49	1
Calcium	0.625		0.250	0.127	mg/L		10/01/19 13:09	10/22/19 19:49	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	29.0		10.0	10.0	mg/L			10/01/19 11:21	1

## Client Sample ID: DUP-01

Date Collected: 09/24/19 11:35

Date Received: 09/26/19 09:00

## Lab Sample ID: 180-96288-11

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0364	J	0.100	0.0263	mg/L			10/09/19 09:12	1
Chloride	13.2		1.00	0.715	mg/L			10/09/19 09:12	1
Sulfate	0.556	J	1.00	0.380	mg/L			10/09/19 09:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		10/01/19 13:09	10/22/19 19:52	1
Calcium	3.55		0.250	0.127	mg/L		10/01/19 13:09	10/22/19 19:52	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	84.0		10.0	10.0	mg/L			09/28/19 10:14	1

## Client Sample ID: DUP-02

Date Collected: 09/25/19 06:40

Date Received: 09/26/19 09:00

## Lab Sample ID: 180-96288-12

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0268	J	0.100	0.0263	mg/L			10/09/19 09:58	1
Chloride	8.23		1.00	0.715	mg/L			10/09/19 09:58	1
Sulfate	0.418	J	1.00	0.380	mg/L			10/09/19 09:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		10/01/19 10:06	10/19/19 18:30	1
Calcium	0.895		0.250	0.127	mg/L		10/01/19 10:06	10/19/19 18:30	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22.0		10.0	10.0	mg/L			10/01/19 11:21	1

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-96288-1  
 SDG: GSA CCR

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID: MB 180-294190/6**  
**Matrix: Water**  
**Analysis Batch: 294190**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0263		0.100	0.0263	mg/L			10/09/19 05:12	1
Chloride	<0.715		1.00	0.715	mg/L			10/09/19 05:12	1
Sulfate	<0.380		1.00	0.380	mg/L			10/09/19 05:12	1

**Lab Sample ID: LCS 180-294190/5**  
**Matrix: Water**  
**Analysis Batch: 294190**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.25	1.299		mg/L		104	90 - 110
Chloride	25.0	25.06		mg/L		100	90 - 110
Sulfate	25.0	25.11		mg/L		100	90 - 110

**Lab Sample ID: 180-96288-1 MS**  
**Matrix: Water**  
**Analysis Batch: 294190**

**Client Sample ID: MW-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.0263		1.25	1.312		mg/L		105	80 - 120
Chloride	2.93		25.0	29.00		mg/L		104	80 - 120
Sulfate	8.87		25.0	35.08		mg/L		105	80 - 120

**Lab Sample ID: 180-96288-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 294190**

**Client Sample ID: MW-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.0263		1.25	1.301		mg/L		104	80 - 120	1	20
Chloride	2.93		25.0	28.44		mg/L		102	80 - 120	2	20
Sulfate	8.87		25.0	33.98		mg/L		100	80 - 120	3	20

**Lab Sample ID: 180-96288-11 MS**  
**Matrix: Water**  
**Analysis Batch: 294190**

**Client Sample ID: DUP-01**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.0364	J	1.25	1.329		mg/L		103	80 - 120
Chloride	13.2		25.0	38.94		mg/L		103	80 - 120
Sulfate	0.556	J	25.0	25.87		mg/L		101	80 - 120

**Lab Sample ID: 180-96288-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 294190**

**Client Sample ID: DUP-01**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.0364	J	1.25	1.333		mg/L		104	80 - 120	0	20
Chloride	13.2		25.0	38.54		mg/L		101	80 - 120	1	20
Sulfate	0.556	J	25.0	25.43		mg/L		99	80 - 120	2	20

# QC Sample Results

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

Job ID: 180-96288-1  
 SDG: GSA CCR

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

**Lab Sample ID: MB 180-293198/1-A**  
**Matrix: Water**  
**Analysis Batch: 295315**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 293198**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		09/30/19 11:22	10/17/19 17:30	1
Calcium	<0.127		0.250	0.127	mg/L		09/30/19 11:22	10/17/19 17:30	1

**Lab Sample ID: LCS 180-293198/2-A**  
**Matrix: Water**  
**Analysis Batch: 295315**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 293198**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.165		mg/L		93	80 - 120
Calcium	25.0	26.46		mg/L		106	80 - 120

**Lab Sample ID: MB 180-293305/1-A**  
**Matrix: Water**  
**Analysis Batch: 295479**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 293305**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		10/01/19 10:06	10/19/19 18:24	1
Calcium	<0.127		0.250	0.127	mg/L		10/01/19 10:06	10/19/19 18:24	1

**Lab Sample ID: LCS 180-293305/2-A**  
**Matrix: Water**  
**Analysis Batch: 295479**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 293305**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.238		mg/L		99	80 - 120
Calcium	25.0	25.43		mg/L		102	80 - 120

**Lab Sample ID: MB 180-293356/1-A**  
**Matrix: Water**  
**Analysis Batch: 295742**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 293356**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		10/01/19 13:09	10/22/19 19:22	1
Calcium	<0.127		0.250	0.127	mg/L		10/01/19 13:09	10/22/19 19:22	1

**Lab Sample ID: LCS 180-293356/2-A**  
**Matrix: Water**  
**Analysis Batch: 295742**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 293356**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.267		mg/L		101	80 - 120
Calcium	25.0	26.50		mg/L		106	80 - 120

# QC Sample Results

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

Job ID: 180-96288-1  
 SDG: GSA CCR

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

**Lab Sample ID: MB 180-293083/2**  
**Matrix: Water**  
**Analysis Batch: 293083**

**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			09/28/19 10:14	1

**Lab Sample ID: LCS 180-293083/1**  
**Matrix: Water**  
**Analysis Batch: 293083**

**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	633	614.0		mg/L		97	80 - 120

**Lab Sample ID: MB 180-293325/2**  
**Matrix: Water**  
**Analysis Batch: 293325**

**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			10/01/19 11:17	1

**Lab Sample ID: LCS 180-293325/1**  
**Matrix: Water**  
**Analysis Batch: 293325**

**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	633	648.0		mg/L		102	80 - 120

**Lab Sample ID: MB 180-293326/2**  
**Matrix: Water**  
**Analysis Batch: 293326**

**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			10/01/19 11:21	1

**Lab Sample ID: LCS 180-293326/1**  
**Matrix: Water**  
**Analysis Batch: 293326**

**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	633	634.0		mg/L		100	80 - 120

# QC Association Summary

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

Job ID: 180-96288-1  
 SDG: GSA CCR

## HPLC/IC

### Analysis Batch: 294190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-1	MW-1	Total/NA	Water	EPA 300.0 R2.1	
180-96288-2	MW-2	Total/NA	Water	EPA 300.0 R2.1	
180-96288-3	MW-3	Total/NA	Water	EPA 300.0 R2.1	
180-96288-4	MW-4	Total/NA	Water	EPA 300.0 R2.1	
180-96288-5	MW-5	Total/NA	Water	EPA 300.0 R2.1	
180-96288-6	MW-6	Total/NA	Water	EPA 300.0 R2.1	
180-96288-7	MW-7	Total/NA	Water	EPA 300.0 R2.1	
180-96288-8	MW-8	Total/NA	Water	EPA 300.0 R2.1	
180-96288-9	MW-9	Total/NA	Water	EPA 300.0 R2.1	
180-96288-10	MW-10	Total/NA	Water	EPA 300.0 R2.1	
180-96288-11	DUP-01	Total/NA	Water	EPA 300.0 R2.1	
180-96288-12	DUP-02	Total/NA	Water	EPA 300.0 R2.1	
MB 180-294190/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-294190/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-96288-1 MS	MW-1	Total/NA	Water	EPA 300.0 R2.1	
180-96288-1 MSD	MW-1	Total/NA	Water	EPA 300.0 R2.1	
180-96288-11 MS	DUP-01	Total/NA	Water	EPA 300.0 R2.1	
180-96288-11 MSD	DUP-01	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Prep Batch: 293198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-1	MW-1	Total Recoverable	Water	3005A	
180-96288-2	MW-2	Total Recoverable	Water	3005A	
180-96288-3	MW-3	Total Recoverable	Water	3005A	
180-96288-4	MW-4	Total Recoverable	Water	3005A	
180-96288-5	MW-5	Total Recoverable	Water	3005A	
180-96288-6	MW-6	Total Recoverable	Water	3005A	
MB 180-293198/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-293198/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Prep Batch: 293305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-12	DUP-02	Total Recoverable	Water	3005A	
MB 180-293305/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-293305/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Prep Batch: 293356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-7	MW-7	Total Recoverable	Water	3005A	
180-96288-8	MW-8	Total Recoverable	Water	3005A	
180-96288-9	MW-9	Total Recoverable	Water	3005A	
180-96288-10	MW-10	Total Recoverable	Water	3005A	
180-96288-11	DUP-01	Total Recoverable	Water	3005A	
MB 180-293356/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-293356/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 295315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-1	MW-1	Total Recoverable	Water	EPA 6020	293198

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# QC Association Summary

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

Job ID: 180-96288-1  
SDG: GSA CCR

## Metals (Continued)

### Analysis Batch: 295315 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-2	MW-2	Total Recoverable	Water	EPA 6020	293198
180-96288-3	MW-3	Total Recoverable	Water	EPA 6020	293198
180-96288-4	MW-4	Total Recoverable	Water	EPA 6020	293198
180-96288-5	MW-5	Total Recoverable	Water	EPA 6020	293198
180-96288-6	MW-6	Total Recoverable	Water	EPA 6020	293198
MB 180-293198/1-A	Method Blank	Total Recoverable	Water	EPA 6020	293198
LCS 180-293198/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	293198

### Analysis Batch: 295479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-12	DUP-02	Total Recoverable	Water	EPA 6020	293305
MB 180-293305/1-A	Method Blank	Total Recoverable	Water	EPA 6020	293305
LCS 180-293305/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	293305

### Analysis Batch: 295742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-7	MW-7	Total Recoverable	Water	EPA 6020	293356
180-96288-8	MW-8	Total Recoverable	Water	EPA 6020	293356
180-96288-9	MW-9	Total Recoverable	Water	EPA 6020	293356
180-96288-10	MW-10	Total Recoverable	Water	EPA 6020	293356
180-96288-11	DUP-01	Total Recoverable	Water	EPA 6020	293356
MB 180-293356/1-A	Method Blank	Total Recoverable	Water	EPA 6020	293356
LCS 180-293356/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	293356

## General Chemistry

### Analysis Batch: 293083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-11	DUP-01	Total/NA	Water	SM 2540C	
MB 180-293083/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-293083/1	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 293325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-1	MW-1	Total/NA	Water	SM 2540C	
180-96288-2	MW-2	Total/NA	Water	SM 2540C	
180-96288-3	MW-3	Total/NA	Water	SM 2540C	
180-96288-4	MW-4	Total/NA	Water	SM 2540C	
MB 180-293325/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-293325/1	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 293326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-96288-5	MW-5	Total/NA	Water	SM 2540C	
180-96288-6	MW-6	Total/NA	Water	SM 2540C	
180-96288-7	MW-7	Total/NA	Water	SM 2540C	
180-96288-8	MW-8	Total/NA	Water	SM 2540C	
180-96288-9	MW-9	Total/NA	Water	SM 2540C	
180-96288-10	MW-10	Total/NA	Water	SM 2540C	
180-96288-12	DUP-02	Total/NA	Water	SM 2540C	
MB 180-293326/2	Method Blank	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh

# QC Association Summary

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

Job ID: 180-96288-1  
SDG: GSA CCR

## General Chemistry (Continued)

### Analysis Batch: 293326 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-293326/1	Lab Control Sample	Total/NA	Water	SM 2540C	

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



**Chain of Custody Record**

<b>Client Information</b>		Sampler: <b>Philip Evans</b>		Lab PM: <b>Bortot, Veronica</b>		Carrier Tracking No(s):		COC No: <b>180-54717-10707.1</b>	
Client Contact: <b>Rick Hagedorfer</b>		Phone: <b>850-336-0192</b>		E-Mail: <b>veronica.bortot@testamericainc.com</b>		Page: <b>Page 1 of 2</b>		Job #:	
Company: <b>RDH Environmental Services Inc</b>		Due Date Requested:		Analysis Requested		TAT Requested (days):		Preservation Codes:	
Address: <b>5720 Dove Drive</b>		City: <b>Pace</b>		State, Zip: <b>FL, 32571</b>		PO #: <b>205-992-5417(Tel)</b>		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - NaHSO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 L - EDTA Z - other (specify)	
Email: <b>rickhagedorfer@gmail.com</b>		Purchase Order Requested		Project #: <b>18020047</b>		Project Name: <b>CCR - Plant Daniel GSA CCR</b>		Other:	
Site: <b>SSOW#:</b>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=Air)	
<b>Sample Identification</b>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=Air)	
<b>MW-1</b>		9/25/19		0845		G		Water	
<b>MW-2</b>				0740				Water	
<b>MW-3</b>				1245				Water	
<b>MW-4</b>				1055				Water	
<b>MW-5</b>				0945				Water	
<b>MW-6</b>				1200				Water	
<b>MW-7</b>		9/25/19		1330				Water	
<b>MW-8</b>		9/24/19		1235				Water	
<b>MW-9</b>		9/24/19		1535				Water	
<b>MW-10</b>		9/25/19		0815				Water	
<b>Dup-01</b>		9/24/19		1135		G		Water	
<b>Possible Hazard Identification</b>		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		2540C, Calcd. 300_ORGFM_28D		Total Number of Containers	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant		<input checked="" type="checkbox"/> D		<input checked="" type="checkbox"/> N		<input checked="" type="checkbox"/> X		<input checked="" type="checkbox"/> Special	
Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		<input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab		<input type="checkbox"/> Archive For		Months	
Empty Kit Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Company	
Relinquished by: <i>[Signature]</i>		9/25/19 1630		9-26-19		9:00		Company	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Company	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Company	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Method of Shipment:		Company	



**Chain of Custody Record**

<b>Client Information</b> Client Contact: Rick Hagedorfer Company: RDH Environmental Services Inc Address: 5720 Dove Drive City: Pace State, Zip: FL, 32571 Phone: 205-992-5417(Tel) Email: rickhagedorfer@gmail.com Project Name: CCR - Plant Daniel GSA CCR Site:		Lab PM: Bortot, Veronica E-Mail: veronica.bortot@testamericainc.com Phone: 850-336-0192 Carrier Tracking No(s):		COC No: 180-54717-10707.2 Page: Page 2 of 2 Job #:	
<b>Due Date Requested:</b> TAT Requested (days): PO #: Purchase Order Requested WO #:		<b>Analysis Requested</b>			
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers	
Sample Identification Dup-02		Sample Date 9/25/19	Sample Time 0640	Sample Type G	Matrix Water
Preservation Code:		D N		Special Instructions/Note:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by:		Date: 9/25/19 1630		Method of Shipment:	
Relinquished by:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:			



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-96288-1

SDG Number: GSA CCR

**Login Number: 96288**

**List Source: Eurofins TestAmerica, Pittsburgh**

**List Number: 1**

**Creator: Watson, Debbie**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Product Name: Low-Flow System

Date: 2019-09-24 12:35:52

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 56 ft  
  
Pump placement from TOC 50.8 ft

Well Information:

Well ID MW-8  
Well diameter 2 in  
Well Total Depth 55.8 ft  
Screen Length 10 ft  
Depth to Water 19.65 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7299517 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.84 in  
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:22:04	300.08	23.43	4.58	78.32	1.47	19.72	6.89	243.43
Last 5	12:27:04	600.02	23.52	4.57	77.97	1.38	19.72	6.92	239.34
Last 5	12:32:04	900.02	23.52	4.57	77.61	1.35	19.72	6.90	238.90
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.09	-0.01	-0.35			0.04	-4.09
Variance 2			0.00	-0.00	-0.36			-0.02	-0.44

Notes

Sample time @ 1235. Sunny 90. DUP-01@1135.

Grab Samples



Product Name: Low-Flow System

Date: 2019-09-24 15:35:44

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 51.2 ft

Well Information:

Well ID MW-9  
Well diameter 2 in  
Well Total Depth 56.2 ft  
Screen Length 10 ft  
Depth to Water 19.30 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.24 in  
Total Volume Pumped 54 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	15:12:27	6910.02	23.16	4.87	42.72	0.33	19.32	2.65	328.91
Last 5	15:17:27	7210.02	23.52	4.87	42.80	0.35	19.32	2.68	325.02
Last 5	15:22:27	7510.02	22.80	4.87	42.79	0.37	19.32	2.69	320.91
Last 5	15:27:27	7810.02	22.78	4.87	42.59	0.41	19.32	2.68	318.17
Last 5	15:32:27	8110.02	22.81	4.86	42.63	0.37	19.32	2.68	315.74
Variance 0			-0.72	-0.00	-0.01			0.01	-4.11
Variance 1			-0.02	0.00	-0.19			-0.02	-2.74
Variance 2			0.02	-0.01	0.03			0.00	-2.43

Notes

Sample time @ 1535. Sunny 90.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-25 07:40:58

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 55 ft

Pump placement from TOC 48.2 ft

Well Information:

Well ID MW-2  
Well diameter 2 in  
Well Total Depth 53.2 ft  
Screen Length 10 ft  
Depth to Water 19.70 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7254883 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.48 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:23:58	300.03	21.69	4.85	38.27	2.30	19.74	5.95	265.89
Last 5	07:28:58	600.02	21.69	4.80	37.11	2.04	19.74	5.98	261.63
Last 5	07:33:58	900.02	21.73	4.79	36.40	1.92	19.74	6.03	259.09
Last 5	07:38:58	1200.02	21.75	4.79	36.03	1.70	19.74	6.07	258.82
Last 5									
Variance 0			0.00	-0.05	-1.16			0.03	-4.26
Variance 1			0.04	-0.01	-0.71			0.05	-2.54
Variance 2			0.02	0.00	-0.37			0.04	-0.28

Notes

Sample time @ 0740. Sunny 80. Dup-02@ 0640.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-25 08:14:44

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 56 ft

Pump placement from TOC 51.4 ft

Well Information:

Well ID MW-10  
Well diameter 2 in  
Well Total Depth 56.4 ft  
Screen Length 10 ft  
Depth to Water 20.85 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7299517 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.24 in  
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:02:52	300.02	21.91	4.92	26.65	1.10	20.87	4.08	251.34
Last 5	08:07:52	600.02	21.91	4.91	26.70	0.98	20.87	4.04	249.70
Last 5	08:12:52	900.02	21.91	4.90	26.61	0.80	20.87	4.07	250.15
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.00	-0.00	0.05			-0.03	-1.63
Variance 2			-0.00	-0.01	-0.09			0.03	0.45

Notes

Sample time @ 0815. Sunny 82.

Grab Samples



Product Name: Low-Flow System

Date: 2019-09-25 08:45:55

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 48.3 ft

Well Information:

Well ID MW-1  
Well diameter 2 in  
Well Total Depth 53.3 ft  
Screen Length 10 ft  
Depth to Water 21.42 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.36 in  
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:32:55	300.08	21.84	4.94	55.97	2.16	21.45	8.06	263.50
Last 5	08:37:55	600.02	21.82	4.87	56.21	1.95	21.45	8.19	267.23
Last 5	08:42:55	900.02	21.89	4.83	56.33	1.94	21.45	8.19	269.60
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.02	-0.07	0.24			0.13	3.73
Variance 2			0.07	-0.04	0.12			0.00	2.37

Notes

Sample time@ 0845. Sunny 87.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-25 09:45:22

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 51.3 ft

Well Information:

Well ID MW-5  
Well diameter 2 in  
Well Total Depth 56.3 ft  
Screen Length 10 ft  
Depth to Water 22.55 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.24 in  
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:34:26	300.04	22.85	4.81	41.45	1.56	22.57	3.25	249.90
Last 5	09:39:26	600.02	22.86	4.82	41.44	1.48	22.57	3.25	247.22
Last 5	09:44:26	900.02	22.89	4.82	41.39	1.42	22.57	3.25	245.63
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.01	0.00	-0.00			-0.00	-2.68
Variance 2			0.03	0.00	-0.06			0.00	-1.59

Notes

Sample time @ 0945. Sunny 90.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-25 10:53:39

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 46.8 ft

Well Information:

Well ID MW-4  
Well diameter 2 in  
Well Total Depth 51.8 ft  
Screen Length 10 ft  
Depth to Water 23.20 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.48 in  
Total Volume Pumped 22 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:31:10	2101.02	22.57	4.79	42.48	2.06	23.24	4.15	288.91
Last 5	10:36:10	2401.02	22.49	4.79	42.39	1.85	23.24	4.16	298.01
Last 5	10:41:11	2702.02	22.53	4.79	42.17	1.82	23.24	4.19	313.26
Last 5	10:46:11	3002.02	22.50	4.78	42.16	1.49	23.24	4.21	314.02
Last 5	10:51:11	3302.02	22.52	4.79	42.01	1.21	23.24	4.19	315.69
Variance 0			0.04	-0.00	-0.22			0.03	15.24
Variance 1			-0.03	-0.00	-0.02			0.02	0.76
Variance 2			0.03	0.01	-0.15			-0.01	1.68

Notes

Sample time @ 1055. Sunny 92.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-25 11:57:36

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 51 ft

Well Information:

Well ID MW-6  
Well diameter 2 in  
Well Total Depth 56 ft  
Screen Length 10 ft  
Depth to Water 22.55 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.24 in  
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:46:22	300.03	22.63	4.66	36.76	0.72	22.57	2.18	249.40
Last 5	11:51:22	600.03	22.71	4.66	36.73	0.75	22.57	2.18	247.42
Last 5	11:56:22	900.03	22.73	4.67	36.82	0.74	22.57	2.19	245.59
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.08	0.00	-0.03			0.00	-1.98
Variance 2			0.02	0.01	0.10			0.01	-1.83

Notes

Sample time @ 1200. Sunny 92.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-25 12:44:22

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 65 ft

Pump placement from TOC 49.3 ft

Well Information:

Well ID MW-3  
Well diameter 2 in  
Well Total Depth 54.3 ft  
Screen Length 10 ft  
Depth to Water 23.20 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7701225 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.6 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:27:44	300.03	24.05	4.27	173.90	1.95	23.25	5.03	289.38
Last 5	12:32:44	600.03	23.92	4.28	189.15	1.87	23.25	5.02	286.58
Last 5	12:37:44	900.03	23.88	4.28	186.52	1.82	23.25	5.02	284.25
Last 5	12:42:44	1200.03	23.83	4.27	184.62	1.90	23.25	5.04	282.73
Last 5									
Variance 0			-0.12	0.01	15.26			-0.01	-2.80
Variance 1			-0.04	0.00	-2.63			0.00	-2.33
Variance 2			-0.05	-0.00	-1.89			0.02	-1.52

Notes

Sample time @ 1245. Sunny 92.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-25 13:26:52

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft  
  
Pump placement from TOC 49.6 ft

Well Information:

Well ID MW-7  
Well diameter 2 in  
Well Total Depth 54.8 ft  
Screen Length 10 ft  
Depth to Water 19.80 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.6 in  
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	13:15:25	300.03	22.98	4.48	49.02	1.23	19.85	7.33	276.60
Last 5	13:20:25	600.03	22.84	4.48	49.80	1.10	19.85	7.32	275.90
Last 5	13:25:25	900.03	22.82	4.47	50.54	0.93	19.85	7.35	275.99
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.14	-0.00	0.78			-0.02	-0.70
Variance 2			-0.01	-0.01	0.75			0.03	0.10

Notes

Sample time @ 1330. Sunny 92.

Grab Samples

## ANALYTICAL REPORT

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

Laboratory Job ID: 180-99452-1  
Client Project/Site: CCR - Plant Daniel

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

Attn: Ms. Lauren Petty



Authorized for release by:  
12/17/2019 4:00:20 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

PA Lab ID: 02-00416





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# Case Narrative

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

Job ID: 180-99452-1

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**Job ID: 180-99452-1**

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**Laboratory: Eurofins TestAmerica, Pittsburgh**

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**Narrative**

**Job Narrative  
180-99452-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 12/3/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

**GC Semi VOA**

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

**Metals**

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

**General Chemistry**

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

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# Definitions/Glossary

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

Job ID: 180-99452-1

## Qualifiers

### Metals

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

## Glossary

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

# Accreditation/Certification Summary

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

Job ID: 180-99452-1

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

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

# Sample Summary

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

Job ID: 180-99452-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-99452-1	MW-1	Water	11/29/19 12:35	12/03/19 10:00	
180-99452-2	MW-3	Water	11/29/19 11:55	12/03/19 10:00	
180-99452-3	MW-7	Water	11/29/19 13:10	12/03/19 10:00	
180-99452-4	MW-8	Water	11/29/19 10:10	12/03/19 10:00	
180-99452-5	MW-9	Water	11/29/19 11:05	12/03/19 10:00	
180-99452-6	DUP-01	Water	11/29/19 10:55	12/03/19 10:00	

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# Method Summary

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

Job ID: 180-99452-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

#### Protocol References:

EPA = US Environmental Protection Agency

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

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

#### Laboratory References:

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

# Lab Chronicle

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

Job ID: 180-99452-1

## Client Sample ID: MW-1

Date Collected: 11/29/19 12:35

Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			301430	12/14/19 16:00	MJH	TAL PIT
Instrument ID: CHIC2100A										

## Client Sample ID: MW-3

Date Collected: 11/29/19 11:55

Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			301430	12/14/19 16:16	MJH	TAL PIT
Instrument ID: CHIC2100A										
Total Recoverable	Prep	3005A			50 mL	50 mL	300803	12/09/19 11:10	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			300983	12/10/19 12:16	RSK	TAL PIT
Instrument ID: A										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	300277	12/04/19 10:43	AVS	TAL PIT
Instrument ID: NOEQUIP										

## Client Sample ID: MW-7

Date Collected: 11/29/19 13:10

Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	300803	12/09/19 11:10	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			300983	12/10/19 12:32	RSK	TAL PIT
Instrument ID: A										

## Client Sample ID: MW-8

Date Collected: 11/29/19 10:10

Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	300803	12/09/19 11:10	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			300983	12/10/19 12:36	RSK	TAL PIT
Instrument ID: A										

## Client Sample ID: MW-9

Date Collected: 11/29/19 11:05

Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			301430	12/14/19 16:32	MJH	TAL PIT
Instrument ID: CHIC2100A										



# Lab Chronicle

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

Job ID: 180-99452-1

**Client Sample ID: DUP-01**

**Lab Sample ID: 180-99452-6**

**Date Collected: 11/29/19 10:55**

**Matrix: Water**

**Date Received: 12/03/19 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			301430	12/14/19 16:47	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	300803	12/09/19 11:10	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020 Instrument ID: A		1			300983	12/10/19 12:39	RSK	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	300277	12/04/19 10:43	AVS	TAL PIT

**Laboratory References:**

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

**Analyst References:**

Lab: TAL PIT

Batch Type: Prep

KEM = Kimberly Mahoney

Batch Type: Analysis

AVS = Abbey Smith

MJH = Matthew Hartman

RSK = Robert Kurtz

# Client Sample Results

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

Job ID: 180-99452-1

## Client Sample ID: MW-1

Date Collected: 11/29/19 12:35  
Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-1

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	9.09		1.00	0.380	mg/L			12/14/19 16:00	1

## Client Sample ID: MW-3

Date Collected: 11/29/19 11:55  
Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-2

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.331		0.100	0.0263	mg/L			12/14/19 16:16	1
Sulfate	107		1.00	0.380	mg/L			12/14/19 16:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.123		0.0500	0.0386	mg/L		12/09/19 11:10	12/10/19 12:16	1
Calcium	35.8		0.250	0.127	mg/L		12/09/19 11:10	12/10/19 12:16	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180		10.0	10.0	mg/L			12/04/19 10:43	1

## Client Sample ID: MW-7

Date Collected: 11/29/19 13:10  
Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0432	J	0.0500	0.0386	mg/L		12/09/19 11:10	12/10/19 12:32	1

## Client Sample ID: MW-8

Date Collected: 11/29/19 10:10  
Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	3.10		0.500	0.127	mg/L		12/09/19 11:10	12/10/19 12:36	1

## Client Sample ID: MW-9

Date Collected: 11/29/19 11:05  
Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-5

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.42		1.00	0.320	mg/L			12/14/19 16:32	1

## Client Sample ID: DUP-01

Date Collected: 11/29/19 10:55  
Date Received: 12/03/19 10:00

## Lab Sample ID: 180-99452-6

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	103		1.00	0.380	mg/L			12/14/19 16:47	1
Fluoride	0.286		0.100	0.0263	mg/L			12/14/19 16:47	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-99452-1

**Client Sample ID: DUP-01**  
**Date Collected: 11/29/19 10:55**  
**Date Received: 12/03/19 10:00**

**Lab Sample ID: 180-99452-6**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.112		0.0800	0.0386	mg/L		12/09/19 11:10	12/10/19 12:39	1
Calcium	34.7		0.500	0.127	mg/L		12/09/19 11:10	12/10/19 12:39	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	176		10.0	10.0	mg/L			12/04/19 10:43	1



# QC Sample Results

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

Job ID: 180-99452-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID: MB 180-301430/6**  
**Matrix: Water**  
**Analysis Batch: 301430**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.320		1.00	0.320	mg/L			12/14/19 06:05	1
Sulfate	<0.380		1.00	0.380	mg/L			12/14/19 06:05	1
Fluoride	<0.0263		0.100	0.0263	mg/L			12/14/19 06:05	1

**Lab Sample ID: LCS 180-301430/5**  
**Matrix: Water**  
**Analysis Batch: 301430**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.33		mg/L		101	90 - 110
Sulfate	25.0	25.14		mg/L		101	90 - 110
Fluoride	1.25	1.377		mg/L		110	90 - 110

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

**Lab Sample ID: MB 180-300803/1-A**  
**Matrix: Water**  
**Analysis Batch: 300983**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 300803**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0500	0.0386	mg/L		12/09/19 11:10	12/10/19 11:59	1
Calcium	<0.127		0.250	0.127	mg/L		12/09/19 11:10	12/10/19 11:59	1

**Lab Sample ID: LCS 180-300803/2-A**  
**Matrix: Water**  
**Analysis Batch: 300983**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 300803**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.382		mg/L		111	80 - 120
Calcium	25.0	24.90		mg/L		100	80 - 120

**Lab Sample ID: 180-99452-2 MS**  
**Matrix: Water**  
**Analysis Batch: 300983**

**Client Sample ID: MW-3**  
**Prep Type: Total Recoverable**  
**Prep Batch: 300803**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.123		1.25	1.480		mg/L		109	75 - 125
Calcium	35.8		25.0	62.03		mg/L		105	75 - 125

**Lab Sample ID: 180-99452-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 300983**

**Client Sample ID: MW-3**  
**Prep Type: Total Recoverable**  
**Prep Batch: 300803**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.123		1.25	1.491		mg/L		109	75 - 125	1	20
Calcium	35.8		25.0	61.25		mg/L		102	75 - 125	1	20

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-99452-1

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

**Lab Sample ID: MB 180-300277/2**  
**Matrix: Water**  
**Analysis Batch: 300277**

**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			12/04/19 10:43	1

**Lab Sample ID: LCS 180-300277/1**  
**Matrix: Water**  
**Analysis Batch: 300277**

**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	188	178.0		mg/L		95	80 - 120



# QC Association Summary

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

Job ID: 180-99452-1

## HPLC/IC

### Analysis Batch: 301430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-99452-1	MW-1	Total/NA	Water	EPA 300.0 R2.1	
180-99452-2	MW-3	Total/NA	Water	EPA 300.0 R2.1	
180-99452-5	MW-9	Total/NA	Water	EPA 300.0 R2.1	
180-99452-6	DUP-01	Total/NA	Water	EPA 300.0 R2.1	
MB 180-301430/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-301430/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Prep Batch: 300803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-99452-2	MW-3	Total Recoverable	Water	3005A	
180-99452-3	MW-7	Total Recoverable	Water	3005A	
180-99452-4	MW-8	Total Recoverable	Water	3005A	
180-99452-6	DUP-01	Total Recoverable	Water	3005A	
MB 180-300803/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-300803/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-99452-2 MS	MW-3	Total Recoverable	Water	3005A	
180-99452-2 MSD	MW-3	Total Recoverable	Water	3005A	

### Analysis Batch: 300983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-99452-2	MW-3	Total Recoverable	Water	EPA 6020	300803
180-99452-3	MW-7	Total Recoverable	Water	EPA 6020	300803
180-99452-4	MW-8	Total Recoverable	Water	EPA 6020	300803
180-99452-6	DUP-01	Total Recoverable	Water	EPA 6020	300803
MB 180-300803/1-A	Method Blank	Total Recoverable	Water	EPA 6020	300803
LCS 180-300803/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	300803
180-99452-2 MS	MW-3	Total Recoverable	Water	EPA 6020	300803
180-99452-2 MSD	MW-3	Total Recoverable	Water	EPA 6020	300803

## General Chemistry

### Analysis Batch: 300277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-99452-2	MW-3	Total/NA	Water	SM 2540C	
180-99452-6	DUP-01	Total/NA	Water	SM 2540C	
MB 180-300277/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-300277/1	Lab Control Sample	Total/NA	Water	SM 2540C	







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Uncorrected temp \_\_\_\_\_  
 Thermometer ID \_\_\_\_\_  
 Initials CF  
 0  
 J

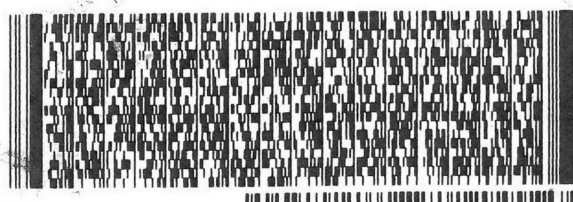
L-WI-SR-001 effective 11/8/18

15238  
 PIT  
 PA-US

**XH AGCA**

TUE - 03 DEC 10:30A  
 PRIORITY OVERNIGHT

TRK# 7784 9950 7847  
 0201



180-99452 Waybill

PITTSBURGH PA 15238  
 REF: (000) 000-0000  
 DEPT:

10 TEST AMERICA  
 301 ALPHA DR

ORIGIN ID:VPSA (850) 336-0192  
 RDH ENVIRONMENTAL  
 5720 DOVE DR  
 PACE, FL 32571  
 UNITED STATES US  
 SHIP DATE: 01  
 ACTWGT: 37.60  
 CAD: 6995154  
 DIMS: 22x14x1  
 BILL THIRD PA

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-99452-1

**Login Number: 99452**

**List Source: Eurofins TestAmerica, Pittsburgh**

**List Number: 1**

**Creator: Watson, Debbie**

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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Product Name: Low-Flow System

Date: 2019-11-29 10:06:08

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 56 ft  
  
Pump placement from TOC 50.8 ft

Well Information:

Well ID MW-8  
Well diameter 2 in  
Well Total Depth 55.8 ft  
Screen Length 10 ft  
Depth to Water 19.82 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7299517 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.96 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:49:35	300.07	21.60	4.37	83.68	2.19	19.90	6.91	129.88
Last 5	09:54:34	600.02	21.73	4.41	78.59	1.96	19.90	6.91	132.79
Last 5	09:59:34	900.02	21.81	4.43	76.82	1.95	19.90	6.88	133.98
Last 5	10:04:34	1200.02	21.87	4.45	76.03	1.87	19.90	6.83	134.73
Last 5									
Variance 0			0.13	0.04	-5.09			-0.00	2.91
Variance 1			0.08	0.03	-1.77			-0.02	1.18
Variance 2			0.06	0.02	-0.79			-0.05	0.75

Notes

Sample time @ 1010. Sunny 65.

Grab Samples

Product Name: Low-Flow System

Date: 2019-11-29 11:03:33

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft  
  
Pump placement from TOC 51.2 ft

Well Information:

Well ID MW-9  
Well diameter 2 in  
Well Total Depth 56.2 ft  
Screen Length 10 ft  
Depth to Water 19.50 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.36 in  
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:42:02	300.02	21.28	4.77	44.90	1.82	19.53	2.08	118.36
Last 5	10:47:02	600.02	21.31	4.76	45.36	1.65	19.53	2.41	114.75
Last 5	10:52:02	900.02	21.30	4.76	45.19	1.63	19.53	2.57	114.31
Last 5	10:57:02	1200.02	21.33	4.76	45.01	1.66	19.53	2.67	114.29
Last 5	11:02:02	1500.02	21.35	4.76	44.73	1.65	19.53	2.77	114.63
Variance 0			-0.00	-0.00	-0.17			0.17	-0.44
Variance 1			0.02	-0.00	-0.19			0.10	-0.02
Variance 2			0.02	0.00	-0.28			0.10	0.34

Notes

Sample time @ 1105. Sunny 65.

Grab Samples

Product Name: Low-Flow System

Date: 2019-11-29 11:54:52

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 65 ft

Pump placement from TOC 49.3 ft

Well Information:

Well ID MW-3  
Well diameter 2 in  
Well Total Depth 54.3 ft  
Screen Length 10 ft  
Depth to Water 23.23 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7701225 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.48 in  
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:32:17	300.02	22.99	4.26	240.20	2.80	23.27	4.93	142.59
Last 5	11:37:17	600.02	22.98	4.27	262.73	2.28	23.27	4.86	141.59
Last 5	11:42:17	900.02	22.98	4.27	261.82	2.01	23.27	4.88	141.27
Last 5	11:47:17	1200.02	22.99	4.28	270.67	1.93	23.27	4.86	140.84
Last 5	11:52:18	1501.02	22.98	4.28	261.09	1.90	23.27	4.88	140.55
Variance 0			0.00	0.00	-0.91			0.01	-0.32
Variance 1			0.01	0.01	8.85			-0.02	-0.43
Variance 2			-0.01	0.00	-9.58			0.03	-0.29

Notes

Sample time @ 1155. Sunny 68. DUP-01@ fake time 1055.

Grab Samples

Product Name: Low-Flow System

Date: 2019-11-29 12:33:52

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft

Pump placement from TOC 48.3 ft

Well Information:

Well ID MW-1  
Well diameter 2 in  
Well Total Depth 53.3 ft  
Screen Length 10 ft  
Depth to Water 21.62 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.36 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:17:06	300.02	21.49	4.81	55.60	1.78	21.65	8.44	137.92
Last 5	12:22:06	600.02	21.46	4.77	55.74	1.50	21.65	8.47	137.30
Last 5	12:27:06	900.02	21.44	4.76	55.90	1.31	21.65	8.49	137.78
Last 5	12:32:06	1200.02	21.46	4.75	56.05	1.28	21.65	8.48	138.76
Last 5									
Variance 0			-0.02	-0.04	0.14			0.03	-0.62
Variance 1			-0.02	-0.01	0.16			0.02	0.49
Variance 2			0.02	-0.01	0.15			-0.01	0.97

Notes

Sample time @ 1235. Sunny 70.

Grab Samples



Product Name: Low-Flow System

Date: 2019-11-29 13:09:19

Project Information:

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

Pump Information:

Pump Model/Type QED  
Tubing Type PE  
Tubing Diameter .17 in  
Tubing Length 60 ft  
  
Pump placement from TOC 49.6 ft

Well Information:

Well ID MW-7  
Well diameter 2 in  
Well Total Depth 54.8 ft  
Screen Length 10 ft  
Depth to Water 19.85 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.7478054 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.6 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:52:00	300.02	21.93	4.51	49.29	1.48	19.90	7.51	144.64
Last 5	12:57:00	600.02	21.91	4.50	50.23	1.33	19.90	7.53	144.34
Last 5	13:02:00	900.02	21.95	4.50	50.28	1.30	19.90	7.53	145.30
Last 5	13:07:00	1200.02	21.95	4.50	50.36	1.23	19.90	7.54	146.78
Last 5									
Variance 0			-0.02	-0.01	0.94			0.02	-0.30
Variance 1			0.04	0.00	0.05			0.00	0.96
Variance 2			-0.00	-0.01	0.09			0.01	1.48

Notes

Sample time @ 1310. Sunny 70.

Grab Samples

# Appendix B

**1st**  
**Semi-Annual**  
**Monitoring Event**

# Intrawell Prediction Limit - Significant Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 1/3/2020, 2:01 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	MW-3	1.31	n/a	6/7/2019	6.91	Yes	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-8	10.23	n/a	6/7/2019	11.3	Yes	8	0	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	7.53	n/a	6/7/2019	8.98	Yes	17	5.882	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	1.4	n/a	6/7/2019	19.2	Yes	17	100	n/a	0.005914	NP Intra (NDs) 1 of 2
Total Dissolved Solids...	MW-3	71.98	n/a	6/7/2019	76	Yes	8	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-8	57.86	n/a	4/19/2019	71	Yes	8	12.5	x^2	0.001075	Param Intra 1 of 2

# Intrawell Prediction Limit - All Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 1/3/2020, 2:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	MW-1	0.05	n/a	4/19/2019	0.05ND	No	7	85.71	n/a	0.02765	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-10	0.05	n/a	4/19/2019	0.05ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-2	0.05	n/a	4/19/2019	0.05ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-3	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-4	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-5	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-6	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-7	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-8	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-9	0.05	n/a	4/19/2019	0.05ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-1	8.293	n/a	4/19/2019	3.26	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-10	4.778	n/a	4/19/2019	1.03	No	8	0	sqrt(x)	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-2	1.162	n/a	4/19/2019	0.942	No	8	0	No	0.001075	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>MW-3</b>	<b>1.31</b>	<b>n/a</b>	<b>6/7/2019</b>	<b>6.91</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	MW-4	2.113	n/a	4/19/2019	1.88	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-5	2.606	n/a	4/19/2019	1.7	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-6	1.763	n/a	4/19/2019	0.998	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-7	2.082	n/a	4/19/2019	1.34	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-8	3.389	n/a	4/19/2019	2.99	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-9	1.047	n/a	4/19/2019	1	No	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-1	12.54	n/a	4/19/2019	2.65	No	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-10	7.793	n/a	4/19/2019	4.41	No	8	12.5	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-2	9.842	n/a	4/19/2019	8.38	No	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-3	11	n/a	4/19/2019	9.34	No	8	0	n/a	0.02144	NP Intra (normality) ...
Chloride (mg/L)	MW-4	14.63	n/a	4/19/2019	7.82	No	8	0	n/a	0.02144	NP Intra (normality) ...
Chloride (mg/L)	MW-5	11.34	n/a	4/19/2019	6.57	No	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-6	9.581	n/a	4/19/2019	5.99	No	8	12.5	x^2	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-7	17.75	n/a	4/19/2019	10.6	No	8	0	No	0.001075	Param Intra 1 of 2
<b>Chloride (mg/L)</b>	<b>MW-8</b>	<b>10.23</b>	<b>n/a</b>	<b>6/7/2019</b>	<b>11.3</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Chloride (mg/L)	MW-9	8.998	n/a	4/19/2019	7.55	No	8	0	No	0.001075	Param Intra 1 of 2
Fluoride (mg/L)	MW-1	0.1	n/a	4/19/2019	0.1ND	No	8	50	n/a	0.02144	NP Intra (normality) ...
Fluoride (mg/L)	MW-10	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-2	0.1	n/a	4/19/2019	0.0267	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-3	0.1	n/a	6/7/2019	0.0937	No	8	25	n/a	0.02144	NP Intra (normality) ...
Fluoride (mg/L)	MW-4	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-5	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-6	0.1	n/a	4/19/2019	0.1ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-7	0.1	n/a	4/19/2019	0.1ND	No	8	62.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-8	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-9	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
pH (pH)	MW-1	5.912	4.402	4/19/2019	4.89	No	17	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-10	5.744	4.416	4/19/2019	5.13	No	8	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-2	5.755	4.417	4/19/2019	4.85	No	17	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-3	4.856	4.185	4/19/2019	4.38	No	17	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-4	5.17	4.593	4/19/2019	4.91	No	17	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-5	4.928	4.527	4/19/2019	4.86	No	8	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-6	4.858	4.4	4/19/2019	4.72	No	8	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-7	5.329	3.681	4/19/2019	4.51	No	8	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-8	5.234	4.049	4/19/2019	4.63	No	7	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-9	5.063	4.722	4/19/2019	4.94	No	8	0	No	0.000...	Param Intra 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-1</b>	<b>7.53</b>	<b>n/a</b>	<b>6/7/2019</b>	<b>8.98</b>	<b>Yes</b>	<b>17</b>	<b>5.882</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Sulfate (mg/L)	MW-10	5	n/a	4/19/2019	0.702	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-2	5	n/a	4/19/2019	0.468	No	17	94.12	n/a	0.005914	NP Intra (NDs) 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-3</b>	<b>1.4</b>	<b>n/a</b>	<b>6/7/2019</b>	<b>19.2</b>	<b>Yes</b>	<b>17</b>	<b>100</b>	<b>n/a</b>	<b>0.005914</b>	<b>NP Intra (NDs) 1 of 2</b>
Sulfate (mg/L)	MW-4	5	n/a	4/19/2019	2.1	No	17	100	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-5	5	n/a	4/19/2019	3.82	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-6	5.647	n/a	4/19/2019	1.96	No	8	12.5	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-7	5	n/a	4/19/2019	0.449	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-8	5	n/a	4/19/2019	0.906	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-9	5	n/a	4/19/2019	2.3	No	8	62.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Total Dissolved Solids...	MW-1	136.8	n/a	4/19/2019	38	No	8	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-10	69.92	n/a	4/19/2019	20	No	8	12.5	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-2	54.63	n/a	4/19/2019	29	No	8	12.5	No	0.001075	Param Intra 1 of 2
<b>Total Dissolved Solids...</b>	<b>MW-3</b>	<b>71.98</b>	<b>n/a</b>	<b>6/7/2019</b>	<b>76</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Total Dissolved Solids...	MW-4	81.27	n/a	4/19/2019	43	No	8	12.5	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-5	63.98	n/a	4/19/2019	34	No	8	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-6	59.31	n/a	4/19/2019	26	No	8	12.5	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-7	78.68	n/a	4/19/2019	36	No	8	0	No	0.001075	Param Intra 1 of 2

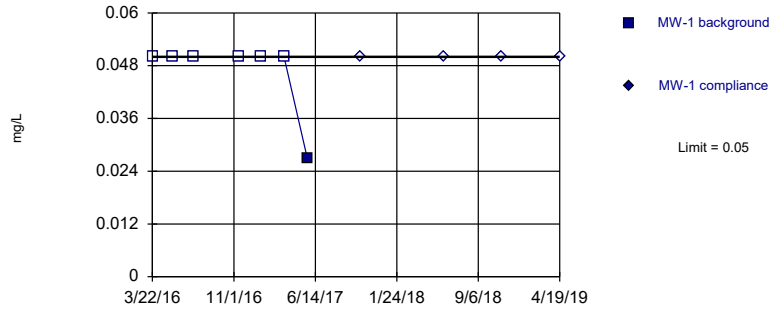
# Intrawell Prediction Limit - All Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 1/3/2020, 2:01 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids...	MW-8	57.86	n/a	4/19/2019	71	Yes	8	12.5	x^2	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-9	71.67	n/a	4/19/2019	23	No	8	12.5	No	0.001075	Param Intra 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

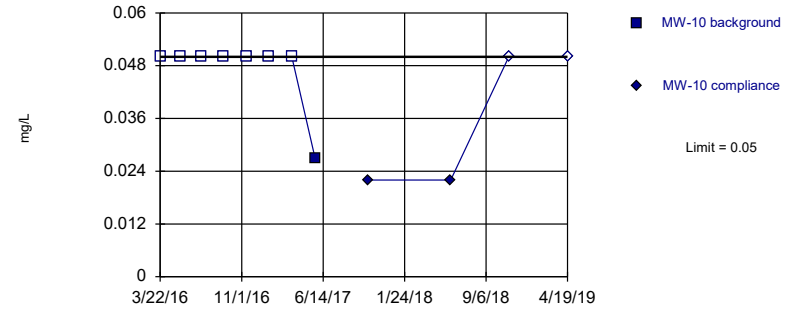


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

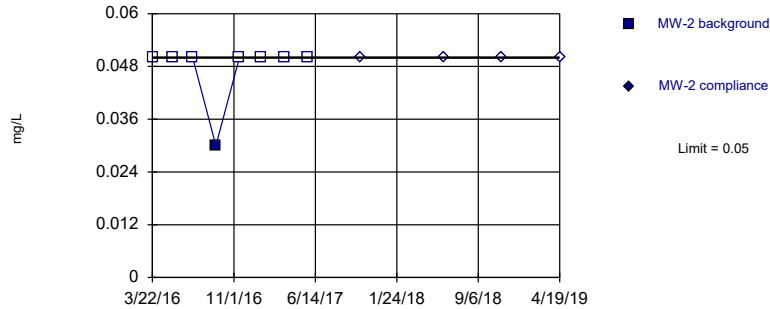


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

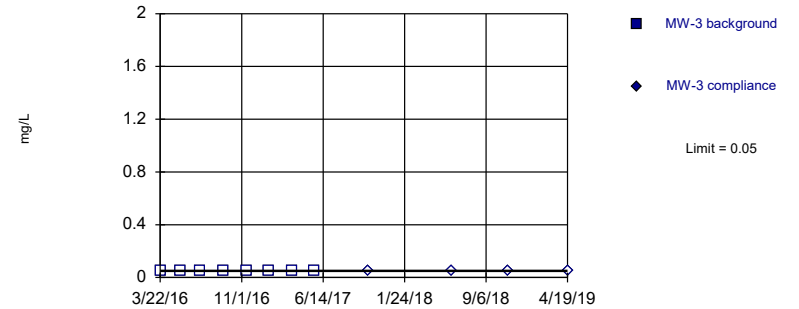


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR



# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	<0.05	
5/17/2016	<0.05	
7/12/2016	<0.05	
9/13/2016	0.055 (o)	
11/17/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	0.027 (J)	
10/18/2017		<0.05
6/2/2018		<0.05
11/8/2018		<0.05
4/19/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	<0.05	
5/16/2016	<0.05	
7/12/2016	<0.05	
9/13/2016	<0.05	
11/17/2016	<0.05	
1/17/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	0.027 (J)	
10/18/2017		0.022 (J)
6/1/2018		0.022 (J)
11/8/2018		<0.05
4/19/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/13/2016	0.03 (J)	
11/17/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	<0.05	
10/18/2017		<0.05
6/2/2018		<0.05
11/8/2018		<0.05
4/19/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

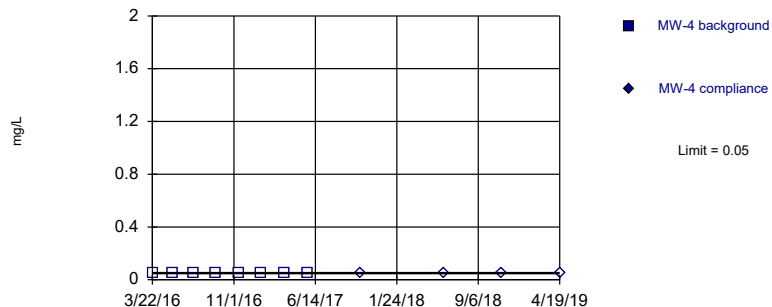
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/12/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/22/2017	<0.05	
10/17/2017		<0.05
6/2/2018		<0.05
11/7/2018		<0.05
4/19/2019		<0.05

Within Limit

### Prediction Limit Intrawell Non-parametric

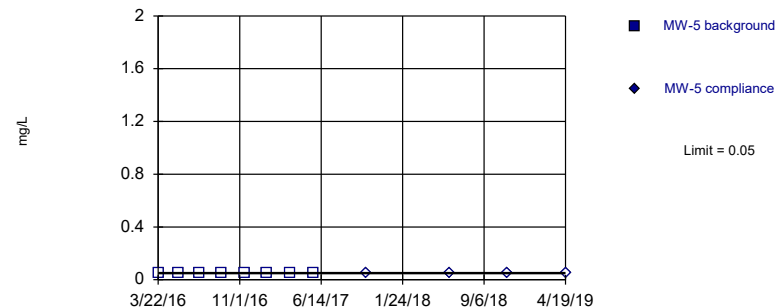


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

### Prediction Limit Intrawell Non-parametric

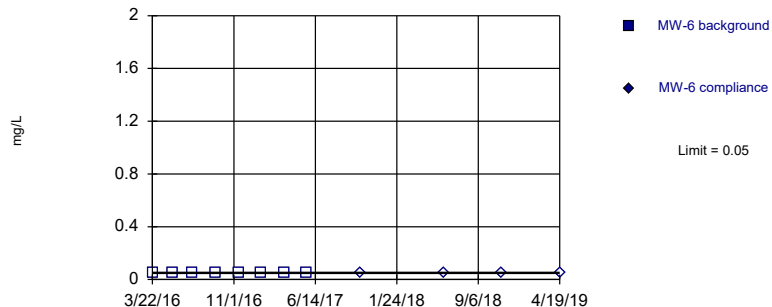


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

### Prediction Limit Intrawell Non-parametric

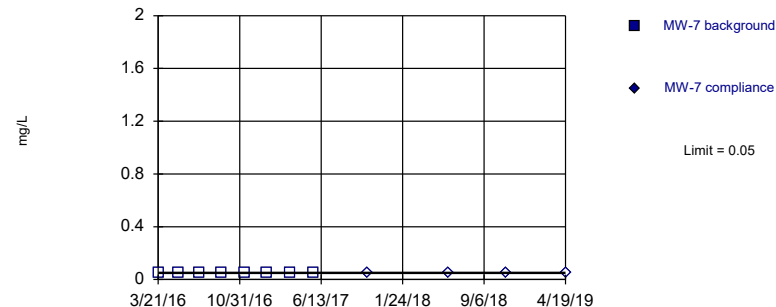


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

### Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	<0.05	
5/16/2016	<0.05	
7/12/2016	<0.05	
9/13/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	<0.05	
10/18/2017		<0.05
6/2/2018		<0.05
11/8/2018		<0.05
4/19/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	<0.05	
5/17/2016	<0.05	
7/12/2016	<0.05	
9/13/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	<0.05	
10/18/2017		<0.05
6/2/2018		<0.05
11/8/2018		<0.05
4/19/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/12/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/22/2017	<0.05	
10/18/2017		<0.05
6/2/2018		<0.05
11/8/2018		<0.05
4/19/2019		<0.05



# Prediction Limit

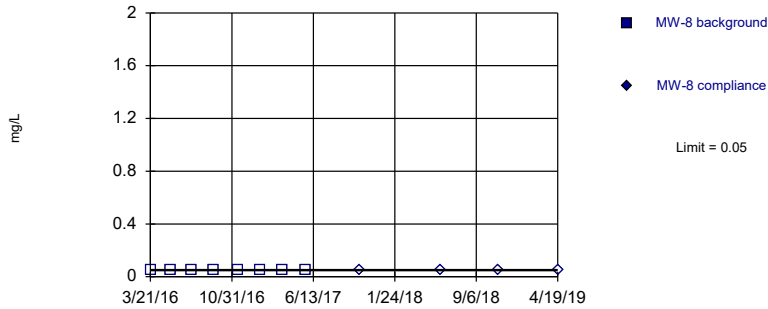
Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/12/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/22/2017	<0.05	
10/18/2017		<0.05
6/1/2018		<0.05
11/7/2018		<0.05
4/19/2019		<0.05

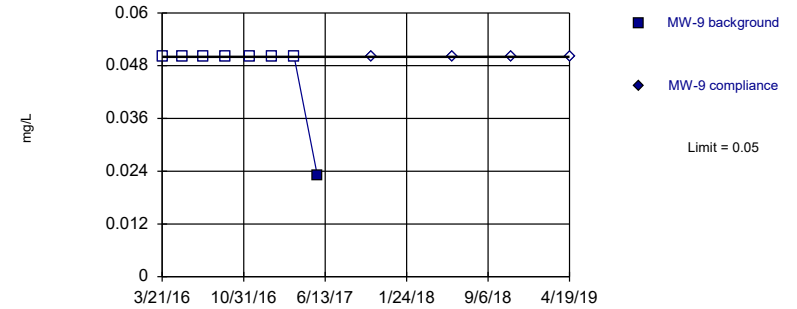
Within Limit Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

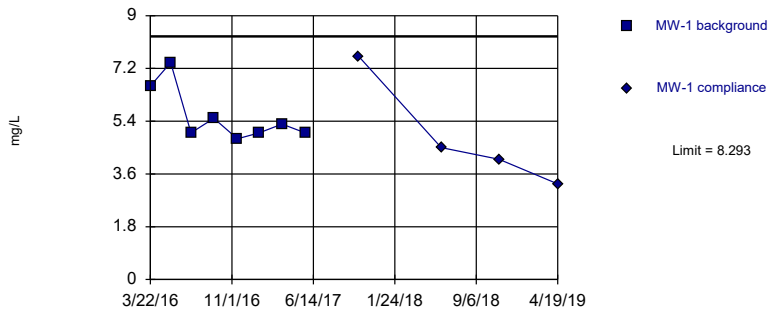
Within Limit Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

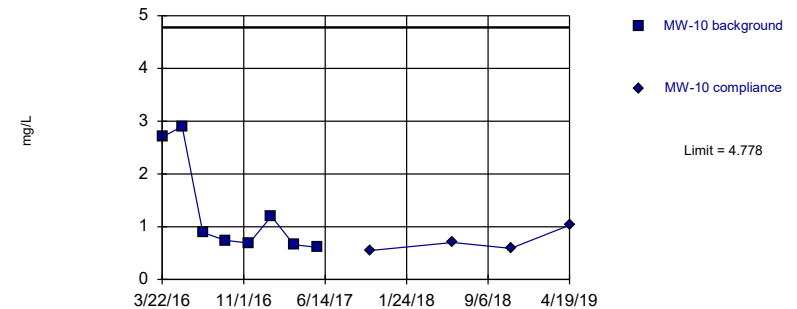
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=5.575, Std. Dev.=0.9301, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7876, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.084, Std. Dev.=0.3771, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7632, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	<0.05	
5/17/2016	<0.05	
7/11/2016	<0.05	
9/13/2016	<0.05	
11/17/2016	<0.05	
1/17/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	<0.05	
10/18/2017		<0.05
6/1/2018		<0.05
11/7/2018		<0.05
4/19/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/13/2016	<0.05	
11/17/2016	<0.05	
1/17/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	0.023 (J)	
10/18/2017		<0.05
6/1/2018		<0.05
11/8/2018		<0.05
4/19/2019		<0.05

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	6.6	
5/17/2016	7.4	
7/12/2016	5	
9/13/2016	5.5	
11/17/2016	4.8	
1/16/2017	5	
3/20/2017	5.3	
5/23/2017	5	
10/18/2017		7.6
6/2/2018		4.5
11/8/2018		4.1
4/19/2019		3.26

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

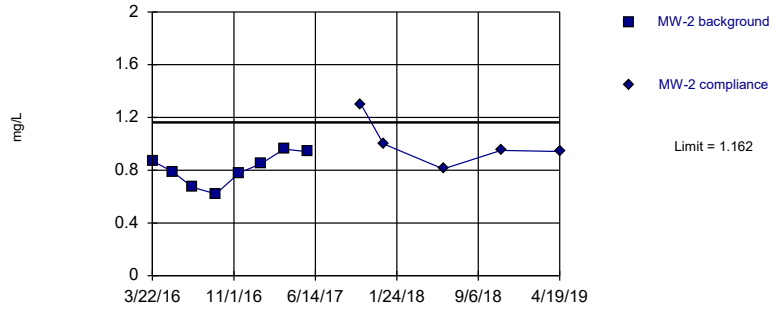
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	2.7	
5/16/2016	2.9	
7/12/2016	0.89	
9/13/2016	0.74	
11/17/2016	0.69	
1/17/2017	1.2	
3/20/2017	0.66	
5/23/2017	0.61	
10/18/2017		0.55
6/1/2018		0.7
11/8/2018		0.59
4/19/2019		1.03

Within Limit

Prediction Limit  
Intrawell Parametric

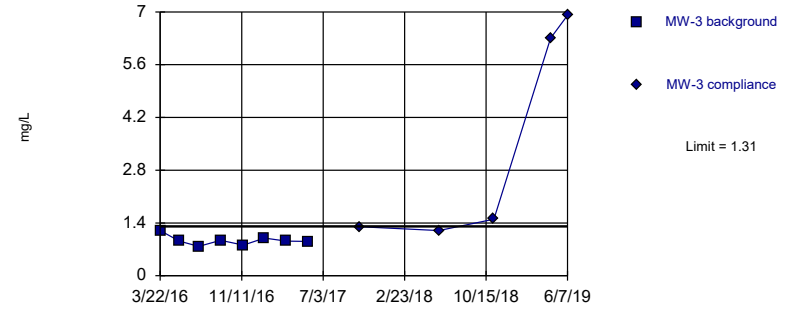


Background Data Summary: Mean=0.81, Std. Dev.=0.1205, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9474, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric

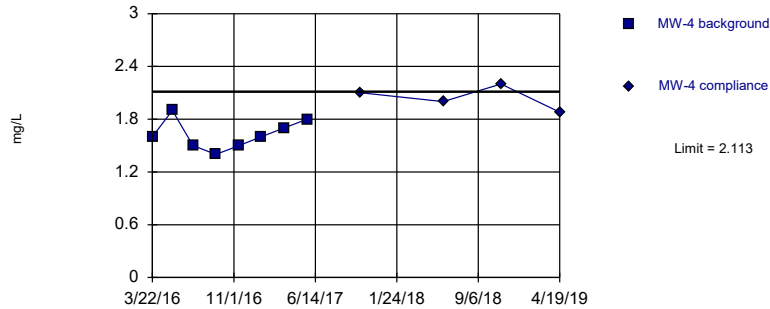


Background Data Summary: Mean=0.935, Std. Dev.=0.1283, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8863, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

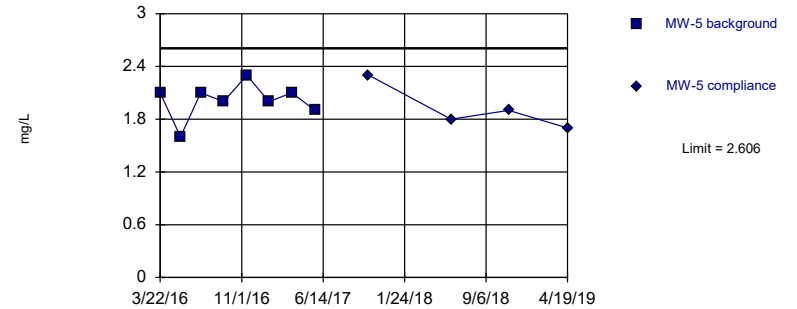


Background Data Summary: Mean=1.625, Std. Dev.=0.1669, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9587, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=2.013, Std. Dev.=0.2031, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9006, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	0.87	
5/16/2016	0.79	
7/11/2016	0.67	
9/13/2016	0.62	
11/17/2016	0.78	
1/16/2017	0.85	
3/20/2017	0.96	
5/23/2017	0.94	
10/18/2017		1.3
12/19/2017		1 (RS)
6/2/2018		0.81
11/8/2018		0.95
4/19/2019		0.942



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	1.2	
5/16/2016	0.92	
7/11/2016	0.78	
9/12/2016	0.94	
11/16/2016	0.81	
1/16/2017	1	
3/20/2017	0.92	
5/22/2017	0.91	
10/17/2017		1.3
6/2/2018		1.2
11/7/2018		1.5
4/19/2019		6.3
6/7/2019		6.91

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	1.6	
5/16/2016	1.9	
7/12/2016	1.5	
9/13/2016	1.4	
11/16/2016	1.5	
1/16/2017	1.6	
3/20/2017	1.7	
5/23/2017	1.8	
10/18/2017		2.1
6/2/2018		2
11/8/2018		2.2
4/19/2019		1.88

# Prediction Limit

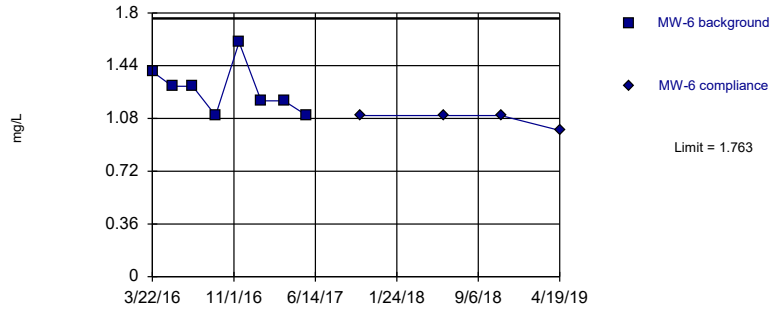
Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	2.1	
5/17/2016	1.6	
7/12/2016	2.1	
9/13/2016	2	
11/16/2016	2.3	
1/16/2017	2	
3/20/2017	2.1	
5/23/2017	1.9	
10/18/2017		2.3
6/2/2018		1.8
11/8/2018		1.9
4/19/2019		1.7

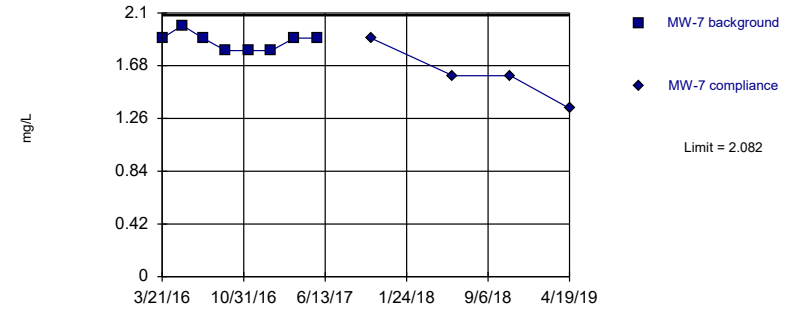
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=1.275, Std. Dev.=0.1669, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.907, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

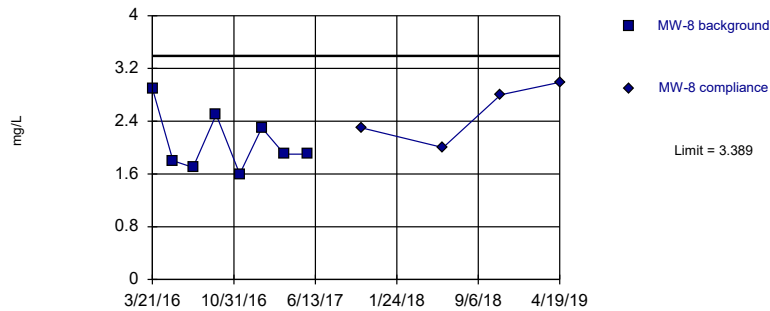
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=1.875, Std. Dev.=0.07071, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8268, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

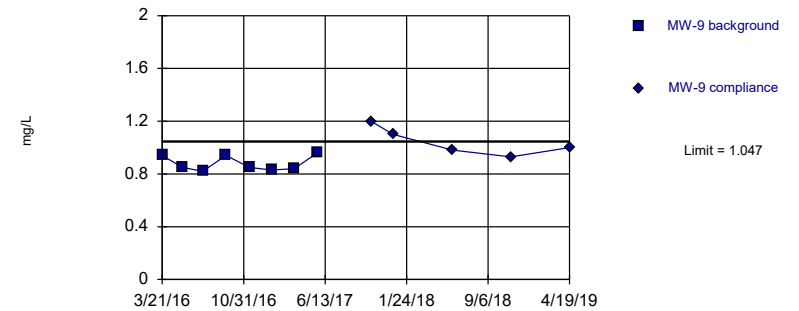
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=2.075, Std. Dev.=0.4496, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8977, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=0.8788, Std. Dev.=0.05743, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8125, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	1.4	
5/16/2016	1.3	
7/11/2016	1.3	
9/12/2016	1.1	
11/16/2016	1.6	
1/16/2017	1.2	
3/20/2017	1.2	
5/22/2017	1.1	
10/18/2017		1.1
6/2/2018		1.1
11/8/2018		1.1
4/19/2019		0.998

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	1.9	
5/16/2016	2	
7/11/2016	1.9	
9/12/2016	1.8	
11/16/2016	1.8	
1/16/2017	1.8	
3/20/2017	1.9	
5/22/2017	1.9	
10/18/2017		1.9
6/1/2018		1.6
11/7/2018		1.6
4/19/2019		1.34

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	2.9	
5/17/2016	1.8	
7/11/2016	1.7	
9/13/2016	2.5	
11/17/2016	1.6	
1/17/2017	2.3	
3/20/2017	1.9	
5/23/2017	1.9	
10/18/2017		2.3
6/1/2018		2
11/7/2018		2.8
4/19/2019		2.99

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

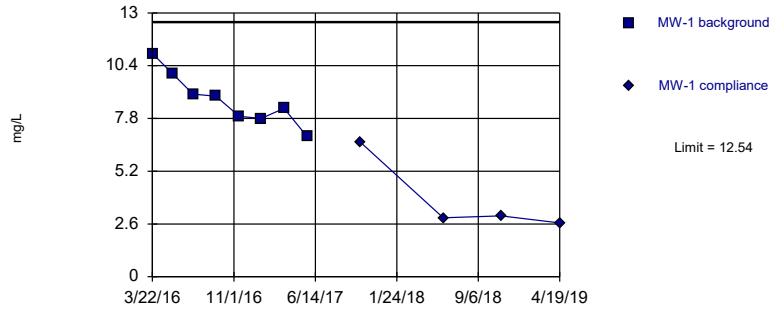
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	MW-9	MW-9
3/21/2016	0.94	
5/16/2016	0.85	
7/11/2016	0.82	
9/13/2016	0.94	
11/17/2016	0.85	
1/17/2017	0.83	
3/20/2017	0.84	
5/23/2017	0.96	
10/18/2017		1.2
12/19/2017		1.1 (RS)
6/1/2018		0.98
11/8/2018		0.93
4/19/2019		1



Within Limit

Prediction Limit  
Intrawell Parametric

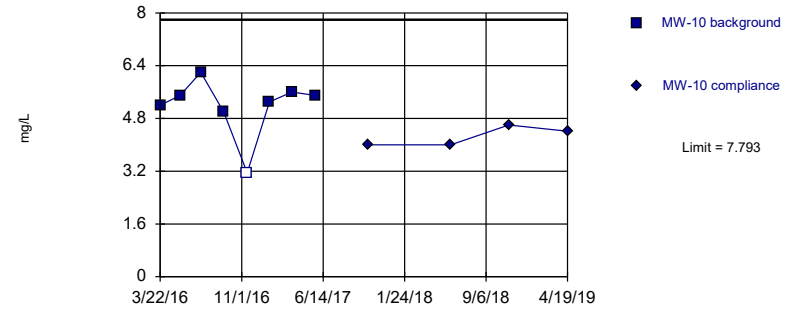


Background Data Summary: Mean=8.725, Std. Dev.=1.307, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9685, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

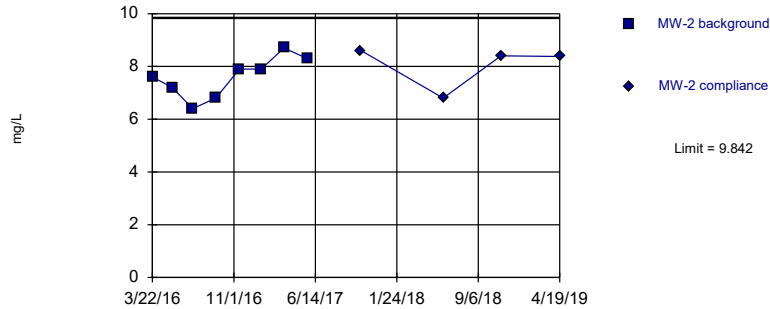


Background Data Summary: Mean=5.181, Std. Dev.=0.8936, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7884, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

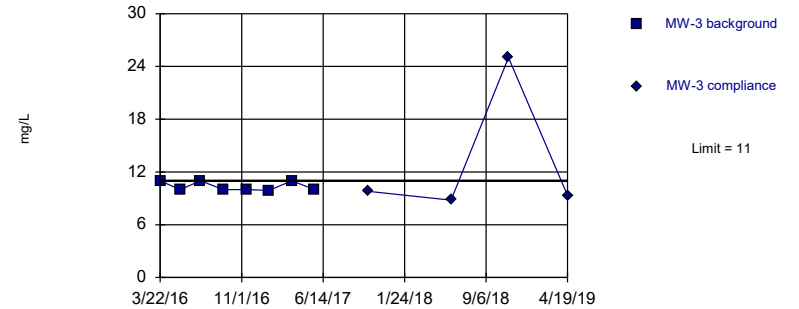


Background Data Summary: Mean=7.6, Std. Dev.=0.7672, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9761, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Chloride Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	11	
5/17/2016	10	
7/12/2016	9	
9/13/2016	8.9	
11/17/2016	7.9	
1/16/2017	7.8	
3/20/2017	8.3	
5/23/2017	6.9	
10/18/2017		6.6
6/2/2018		2.9
11/8/2018		3
4/19/2019		2.65

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	5.2	
5/16/2016	5.5	
7/12/2016	6.2	
9/13/2016	5	
11/17/2016	<6.3	
1/17/2017	5.3	
3/20/2017	5.6	
5/23/2017	5.5	
10/18/2017		4
6/1/2018		4
11/8/2018		4.6
4/19/2019		4.41

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	7.6	
5/16/2016	7.2	
7/11/2016	6.4	
9/13/2016	6.8	
11/17/2016	7.9	
1/16/2017	7.9	
3/20/2017	8.7	
5/23/2017	8.3	
10/18/2017		8.6
6/2/2018		6.8
11/8/2018		8.4
4/19/2019		8.38

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

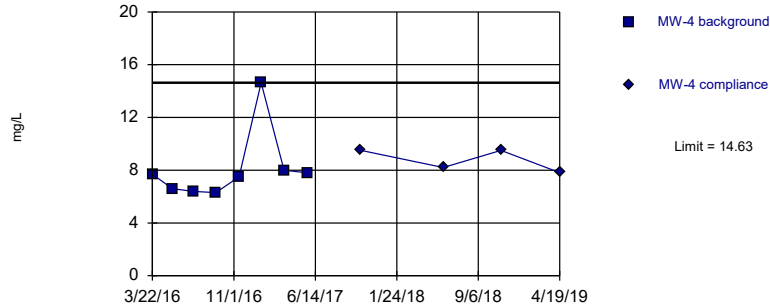
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	11	
5/16/2016	10	
7/11/2016	11	
9/12/2016	10	
11/16/2016	10	
1/16/2017	9.9	
3/20/2017	11	
5/22/2017	10	
10/17/2017		9.8
6/2/2018		8.8
11/7/2018		25
4/19/2019		9.34

Within Limit

Prediction Limit  
Intrawell Non-parametric

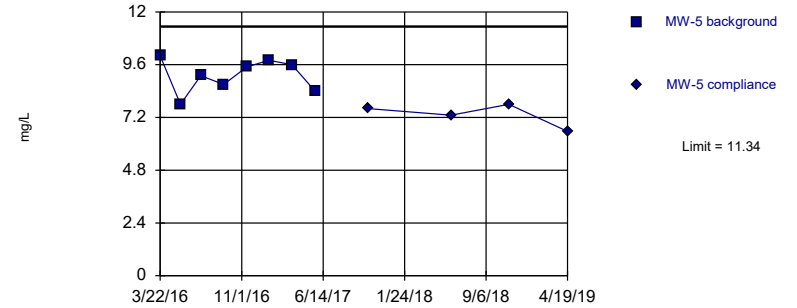


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Chloride Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

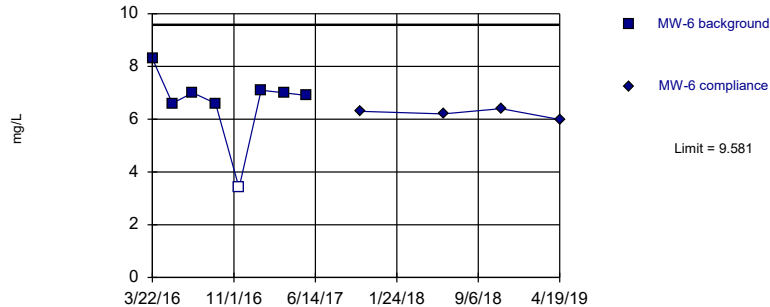


Background Data Summary: Mean=9.113, Std. Dev.=0.7605, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9428, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 1:54 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

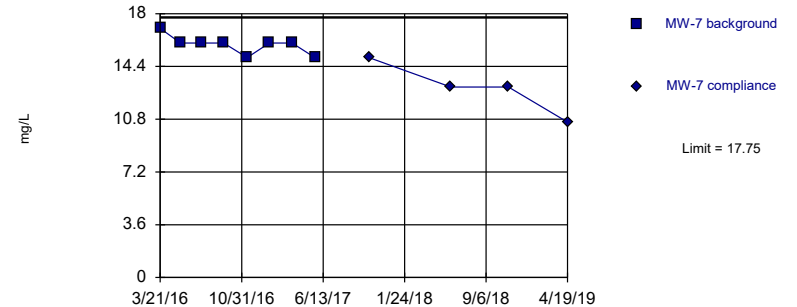


Background Data Summary (based on square transformation): Mean=45.45, Std. Dev.=15.85, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8159, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=15.88, Std. Dev.=0.6409, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8108, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	7.7	
5/16/2016	6.6	
7/12/2016	6.4	
9/13/2016	6.3	
11/16/2016	7.5	
1/16/2017	14.63 (D)	
3/20/2017	8	
5/23/2017	7.8	
10/18/2017		9.5
6/2/2018		8.2
11/8/2018		9.5
4/19/2019		7.82

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	10	
5/17/2016	7.8	
7/12/2016	9.1	
9/13/2016	8.7	
11/16/2016	9.5	
1/16/2017	9.8	
3/20/2017	9.6	
5/23/2017	8.4	
10/18/2017		7.6
6/2/2018		7.3
11/8/2018		7.8
4/19/2019		6.57



# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	8.3	
5/16/2016	6.6	
7/11/2016	7	
9/12/2016	6.6	
11/16/2016	<6.8	
1/16/2017	7.1	
3/20/2017	7	
5/22/2017	6.9	
10/18/2017		6.3
6/2/2018		6.2
11/8/2018		6.4
4/19/2019		5.99

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

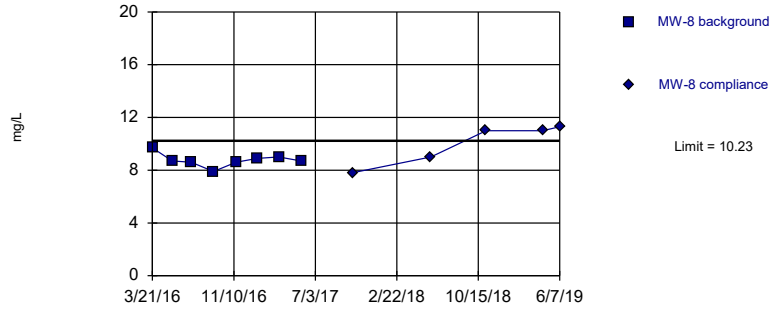
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	17	
5/16/2016	16	
7/11/2016	16	
9/12/2016	16	
11/16/2016	15	
1/16/2017	16	
3/20/2017	16	
5/22/2017	15	
10/18/2017		15
6/1/2018		13
11/7/2018		13
4/19/2019		10.6

Exceeds Limit

Prediction Limit  
Intrawell Parametric

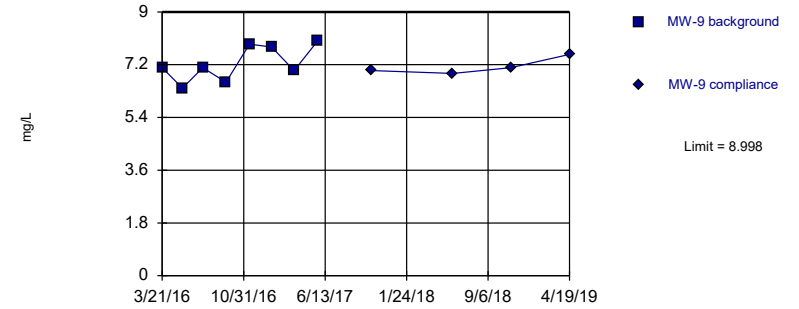


Background Data Summary: Mean=8.763, Std. Dev.=0.5012, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9145, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

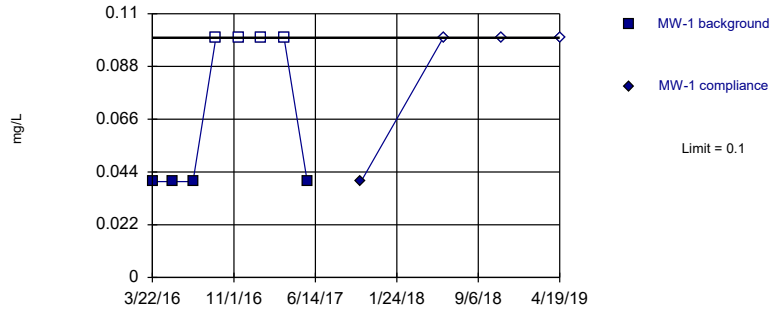


Background Data Summary: Mean=7.238, Std. Dev.=0.6022, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.909, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

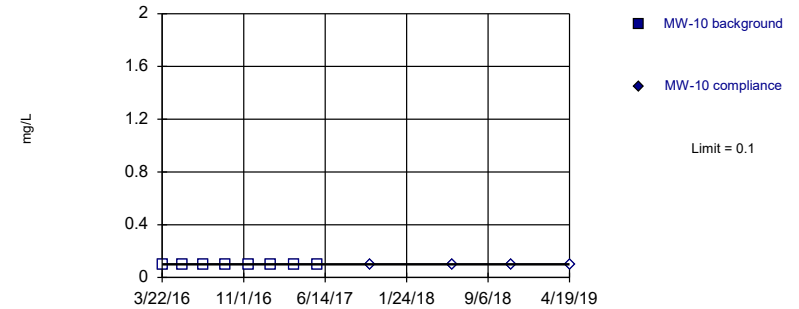


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 50% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	9.7	
5/17/2016	8.7	
7/11/2016	8.6	
9/13/2016	7.9	
11/17/2016	8.6	
1/17/2017	8.9	
3/20/2017	9	
5/23/2017	8.7	
10/18/2017		7.8
6/1/2018		9
11/7/2018		11
4/19/2019		11
6/7/2019		11.3

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	7.1	
5/16/2016	6.4	
7/11/2016	7.1	
9/13/2016	6.6	
11/17/2016	7.9	
1/17/2017	7.8	
3/20/2017	7	
5/23/2017	8	
10/18/2017		7
6/1/2018		6.9
11/8/2018		7.1
4/19/2019		7.55

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	0.04 (J)	
5/17/2016	0.04 (J)	
7/12/2016	0.04 (J)	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	0.04 (J)	
10/18/2017		0.04 (J)
6/2/2018		<0.1
11/8/2018		<0.1
4/19/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

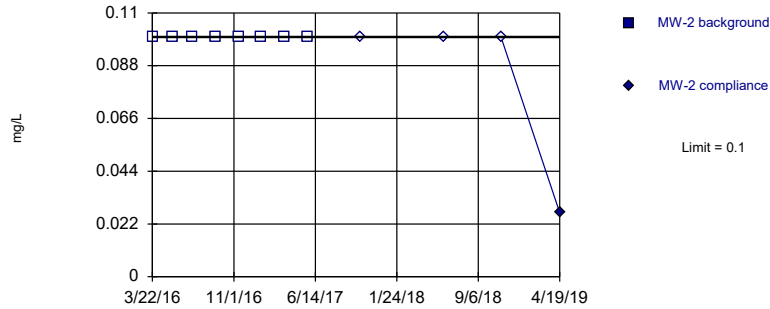
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	<0.1	
5/16/2016	<0.1	
7/12/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/17/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017		<0.1
6/1/2018		<0.1
11/8/2018		<0.1
4/19/2019		<0.1

Within Limit

Prediction Limit  
 Intrawell Non-parametric

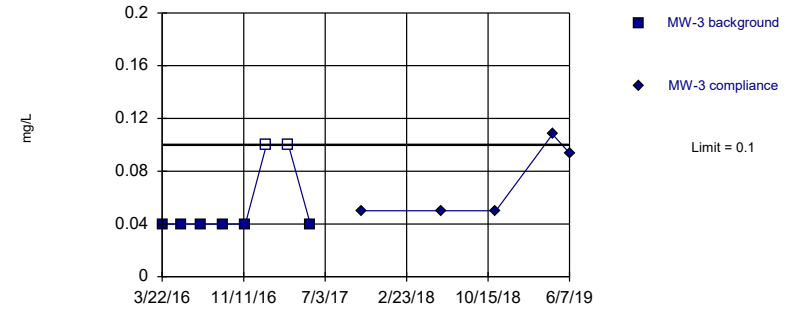


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

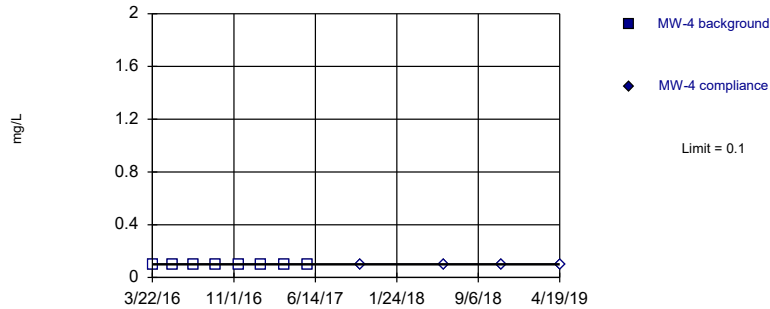


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 25% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

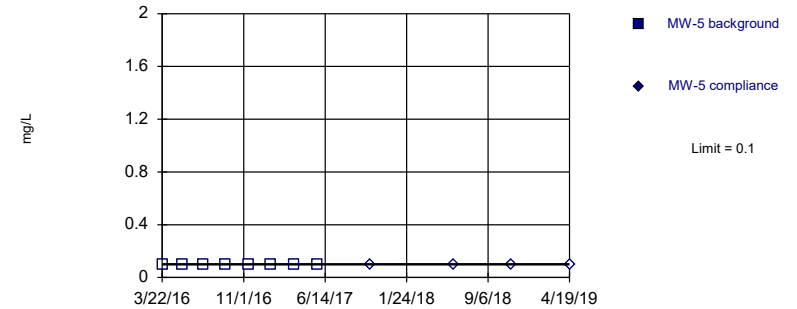


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR



# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	<0.1	
5/16/2016	<0.1	
7/11/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017		<0.1
6/2/2018		<0.1
11/8/2018		<0.1
4/19/2019		0.0267 (J)

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	0.04 (J)	
5/16/2016	0.04 (J)	
7/11/2016	0.04 (J)	
9/12/2016	0.04 (J)	
11/16/2016	0.04 (J)	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/22/2017	0.04 (J)	
10/17/2017		0.05 (J)
6/2/2018		0.05 (J)
11/7/2018		0.05 (J)
4/19/2019		0.108
6/7/2019		0.0937 (J)

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	<0.1	
5/16/2016	<0.1	
7/12/2016	<0.1	
9/13/2016	<0.1	
11/16/2016	<0.1	
1/16/2017	<0.1 (D)	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017		<0.1
6/2/2018		<0.1
11/8/2018		<0.1
4/19/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

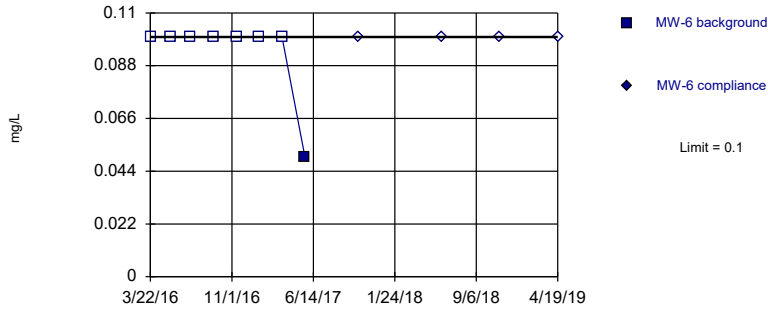
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	<0.1	
5/17/2016	<0.1	
7/12/2016	<0.1	
9/13/2016	<0.1	
11/16/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017		<0.1
6/2/2018		<0.1
11/8/2018		<0.1
4/19/2019		<0.1

Within Limit

Prediction Limit  
Intrawell Non-parametric

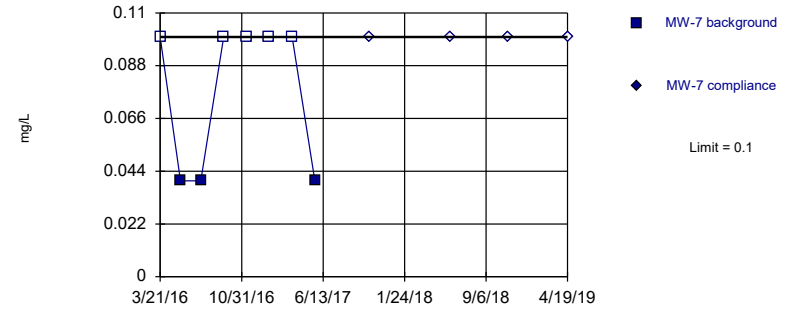


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

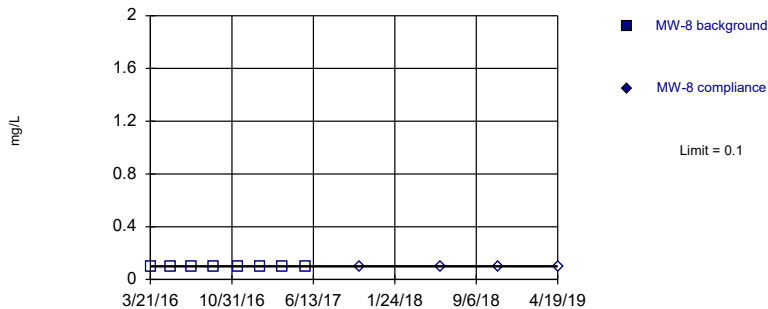


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

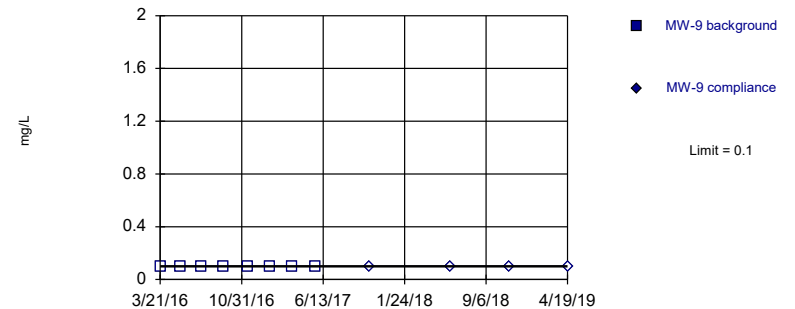


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	<0.1	
5/16/2016	<0.1	
7/11/2016	<0.1	
9/12/2016	<0.1	
11/16/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/22/2017	0.05 (J)	
10/18/2017		<0.1
6/2/2018		<0.1
11/8/2018		<0.1
4/19/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	<0.1	
5/16/2016	0.04 (J)	
7/11/2016	0.04 (J)	
9/12/2016	<0.1	
11/16/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/22/2017	0.04 (J)	
10/18/2017		<0.1
6/1/2018		<0.1
11/7/2018		<0.1
4/19/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	<0.1	
5/17/2016	<0.1	
7/11/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/17/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017		<0.1
6/1/2018		<0.1
11/7/2018		<0.1
4/19/2019		<0.1



# Prediction Limit

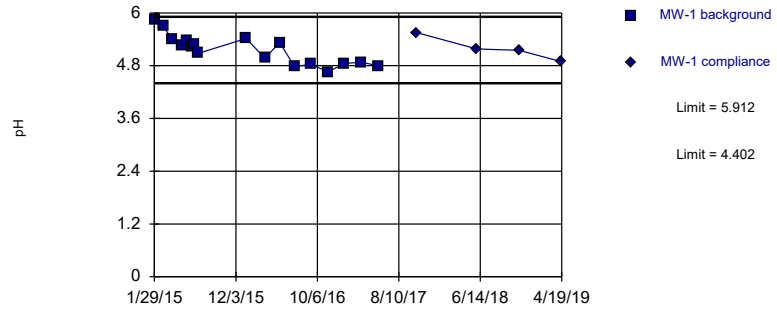
Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	<0.1	
5/16/2016	<0.1	
7/11/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/17/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017		<0.1
6/1/2018		<0.1
11/8/2018		<0.1
4/19/2019		<0.1

Within Limits Prediction Limit  
Intrawell Parametric



# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
1/29/2015	5.84	
3/3/2015	5.7	
4/7/2015	5.39	
5/14/2015	5.26	
6/3/2015	5.37	
6/18/2015	5.23	
6/30/2015	5.28	
7/15/2015	5.08	
1/11/2016	5.42	
3/22/2016	4.97	
5/17/2016	5.33	
7/12/2016	4.78	
9/13/2016	4.83	
11/17/2016	4.66	
1/16/2017	4.85	
3/20/2017	4.88	
5/23/2017	4.8	
10/18/2017		5.55
6/2/2018		5.18
11/8/2018		5.15
4/19/2019		4.89

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	5.34	
5/16/2016	5.48	
7/12/2016	4.95	
9/13/2016	4.95	
11/17/2016	4.86	
1/17/2017	5.18	
3/20/2017	4.97	
5/23/2017	4.91	
10/18/2017		4.97
6/1/2018		5.07
11/8/2018		5.09
4/19/2019		5.13

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
1/29/2015	5.68	
3/3/2015	5.61	
4/7/2015	5.43	
5/14/2015	5.37	
6/3/2015	5.29	
6/18/2015	5.22	
6/30/2015	5.07	
7/15/2015	5.17	
1/11/2016	4.96	
3/22/2016	4.81	
5/16/2016	4.82	
7/11/2016	4.88	
9/13/2016	4.86	
11/17/2016	4.79	
1/16/2017	4.79	
3/20/2017	4.87	
5/23/2017	4.84	
10/18/2017		4.92
6/2/2018		4.88
11/8/2018		4.92
4/19/2019		4.85

# Prediction Limit

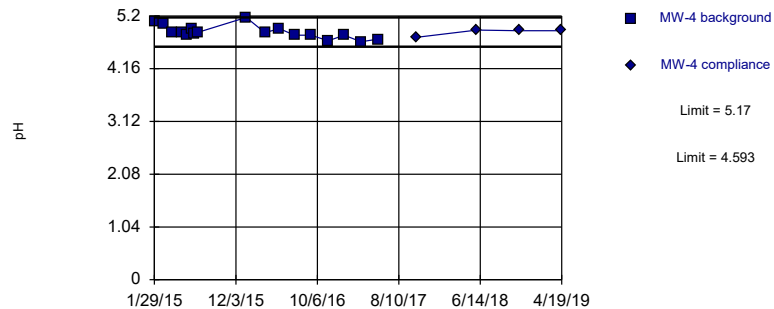
Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
1/29/2015	4.63	
3/3/2015	4.69	
4/7/2015	4.46	
5/14/2015	4.5	
6/3/2015	4.45	
6/18/2015	4.51	
6/30/2015	4.48	
7/15/2015	4.7	
1/11/2016	4.9	
3/22/2016	4.51	
5/16/2016	4.54	
7/11/2016	4.59	
9/12/2016	4.46	
11/16/2016	4.34	
1/16/2017	4.39	
3/20/2017	4.26	
5/22/2017	4.44	
10/17/2017		4.51
6/2/2018		4.51
11/7/2018		4.46
4/19/2019		4.38

Within Limits

Prediction Limit  
Intrawell Parametric

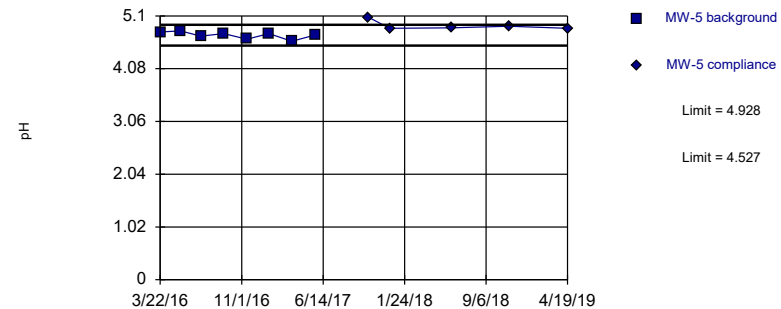


Background Data Summary: Mean=4.882, Std. Dev.=0.129, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.851. Kappa = 2.235 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

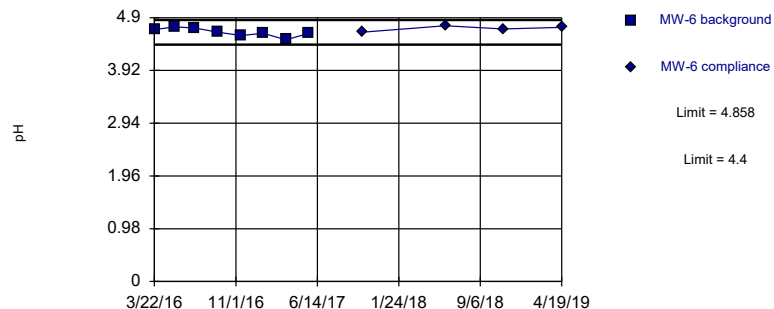


Background Data Summary: Mean=4.728, Std. Dev.=0.06861, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9373, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

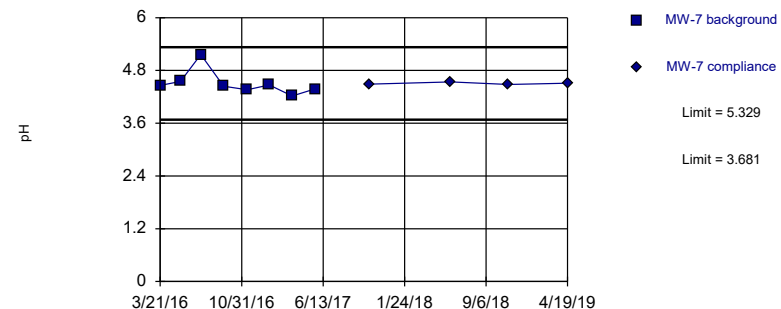


Background Data Summary: Mean=4.629, Std. Dev.=0.07827, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9596, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=4.505, Std. Dev.=0.2819, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7496, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
1/29/2015	5.09	
3/3/2015	5.05	
4/7/2015	4.87	
5/14/2015	4.88	
6/3/2015	4.82	
6/18/2015	4.95	
6/30/2015	4.86	
7/15/2015	4.88	
1/11/2016	5.17	
3/22/2016	4.87	
5/16/2016	4.95	
7/12/2016	4.82	
9/13/2016	4.82	
11/16/2016	4.71	
1/16/2017	4.82	
3/20/2017	4.69	
5/23/2017	4.74	
10/18/2017		4.78
6/2/2018		4.92
11/8/2018		4.91
4/19/2019		4.91



# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	4.79	
5/17/2016	4.81	
7/12/2016	4.71	
9/13/2016	4.76	
11/16/2016	4.65	
1/16/2017	4.76	
3/20/2017	4.61	
5/23/2017	4.73	
10/18/2017		5.07
12/15/2017		4.86 (R)
6/2/2018		4.87
11/8/2018		4.9
4/19/2019		4.86

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	4.68	
5/16/2016	4.73	
7/11/2016	4.71	
9/12/2016	4.63	
11/16/2016	4.57	
1/16/2017	4.61	
3/20/2017	4.49	
5/22/2017	4.61	
10/18/2017		4.63
6/2/2018		4.75
11/8/2018		4.69
4/19/2019		4.72

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

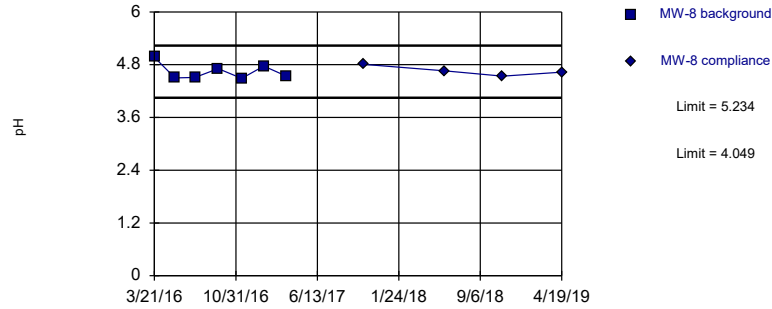
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	4.46	
5/16/2016	4.55	
7/11/2016	5.16	
9/12/2016	4.44	
11/16/2016	4.36	
1/16/2017	4.47	
3/20/2017	4.22	
5/22/2017	4.38	
10/18/2017		4.49
6/1/2018		4.54
11/7/2018		4.48
4/19/2019		4.51

Within Limits

Prediction Limit  
Intrawell Parametric

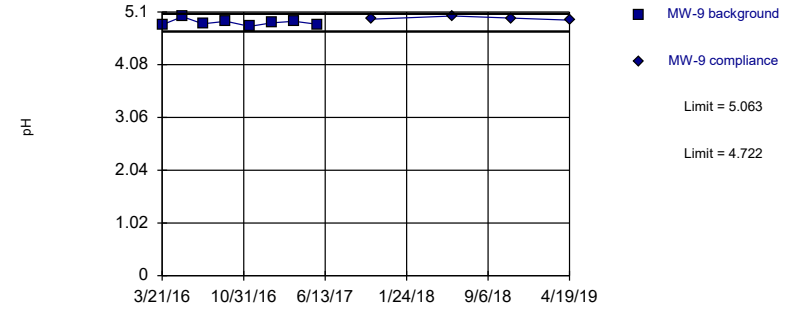


Background Data Summary: Mean=4.641, Std. Dev.=0.1824, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8379, critical = 0.73. Kappa = 3.249 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

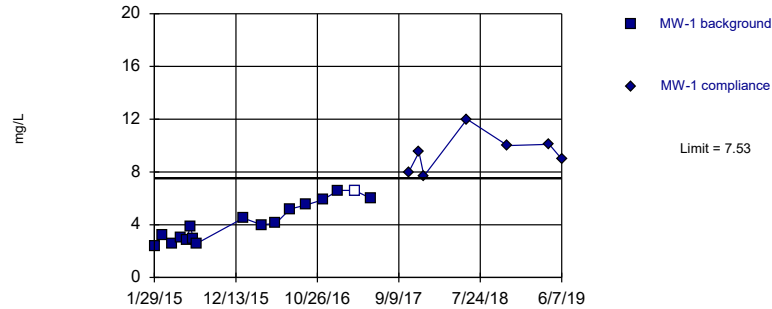


Background Data Summary: Mean=4.893, Std. Dev.=0.05849, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9234, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric

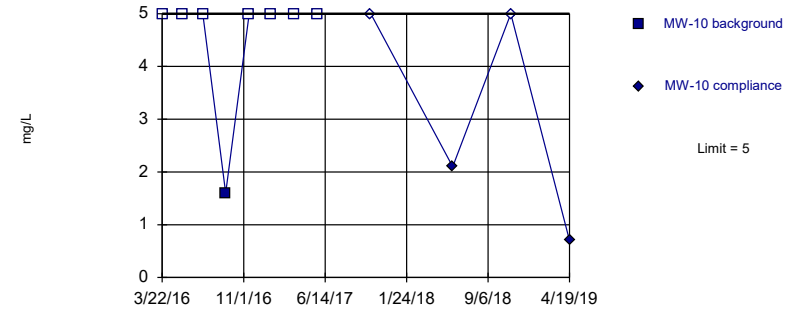


Background Data Summary: Mean=4.224, Std. Dev.=1.479, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9013, critical = 0.851. Kappa = 2.235 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 1/3/2020 1:55 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	4.97	
5/17/2016	4.5	
7/11/2016	4.51	
9/13/2016	4.71	
11/17/2016	4.49	
1/17/2017	4.77	
3/20/2017	4.54	
5/23/2017	7.14 (o)	
10/18/2017		4.81
6/1/2018		4.66
11/7/2018		4.54
4/19/2019		4.63

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	4.85	
5/16/2016	5.01	
7/11/2016	4.87	
9/13/2016	4.92	
11/17/2016	4.82	
1/17/2017	4.89	
3/20/2017	4.92	
5/23/2017	4.86	
10/18/2017		4.96
6/1/2018		5.02
11/8/2018		4.98
4/19/2019		4.94

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
1/29/2015	2.4 (J)	
3/3/2015	3.2 (J)	
4/7/2015	2.6 (J)	
5/14/2015	3 (J)	
6/3/2015	2.8 (J)	
6/18/2015	3.9 (J)	
6/30/2015	2.9 (J)	
7/15/2015	2.6 (J)	
1/11/2016	4.5 (J)	
3/22/2016	4 (J)	
5/17/2016	4.1 (J)	
7/12/2016	5.2	
9/13/2016	5.5	
11/17/2016	5.9	
1/16/2017	6.6	
3/20/2017	<6.6	
5/23/2017	6	
10/18/2017		8
11/27/2017		9.5
12/16/2017		7.7 (RS)
6/2/2018		12
11/8/2018		10
4/19/2019		10.1
6/7/2019		8.98

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

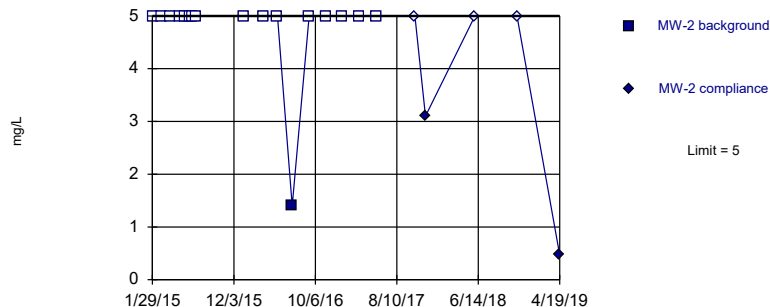
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	MW-10	MW-10
3/22/2016	<5	
5/16/2016	<5	
7/12/2016	<5	
9/13/2016	1.6 (J)	
11/17/2016	<5	
1/17/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017		<5
6/1/2018		2.1 (J)
11/8/2018		<5
4/19/2019		0.702 (J)



Within Limit

Prediction Limit  
Intrawell Non-parametric

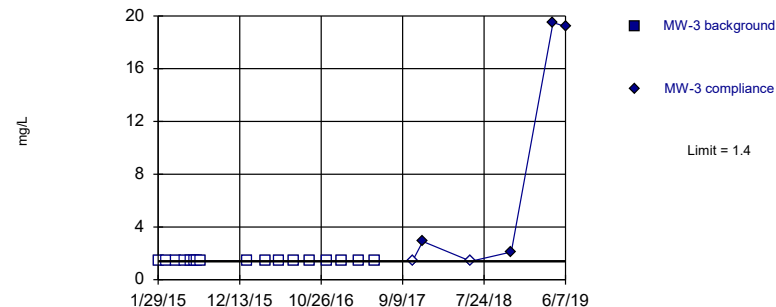


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric

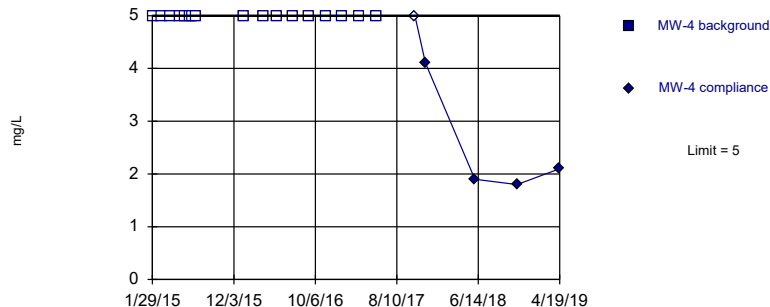


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 17) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

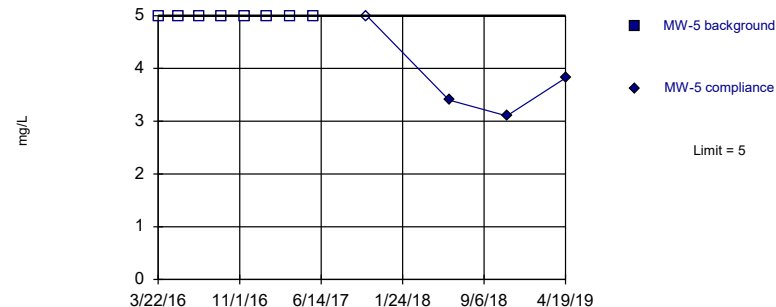


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 17) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
1/29/2015	<5	
3/3/2015	<5	
4/7/2015	<5	
5/14/2015	<5	
6/3/2015	<5	
6/18/2015	<5	
6/30/2015	<5	
7/15/2015	<5	
1/11/2016	<5	
3/22/2016	<5	
5/16/2016	<5	
7/11/2016	1.4 (J)	
9/13/2016	<5	
11/17/2016	<5	
1/16/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017		<5
11/27/2017		3.1
6/2/2018		<5
11/8/2018		<5
4/19/2019		0.468 (J)

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
1/29/2015	<1.4	
3/3/2015	<1.4	
4/7/2015	<1.4	
5/14/2015	<1.4	
6/3/2015	<1.4	
6/18/2015	<1.4	
6/30/2015	<1.4	
7/15/2015	<1.4	
1/11/2016	<1.4	
3/22/2016	<1.4	
5/16/2016	<1.4	
7/11/2016	<1.4	
9/12/2016	<1.4	
11/16/2016	<1.4	
1/16/2017	<1.4	
3/20/2017	<1.4	
5/22/2017	<1.4	
10/17/2017		<1.4
11/27/2017		2.9
6/2/2018		<1.4
11/7/2018		2.1 (J)
4/19/2019		19.5
6/7/2019		19.2

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
1/29/2015	<5	
3/3/2015	<5	
4/7/2015	<5	
5/14/2015	<5	
6/3/2015	<5	
6/18/2015	<5	
6/30/2015	<5	
7/15/2015	<5	
1/11/2016	<5	
3/22/2016	<5	
5/16/2016	<5	
7/12/2016	<5	
9/13/2016	<5	
11/16/2016	<5	
1/16/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017		<5
11/27/2017		4.1
6/2/2018		1.9 (J)
11/8/2018		1.8 (J)
4/19/2019		2.1

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

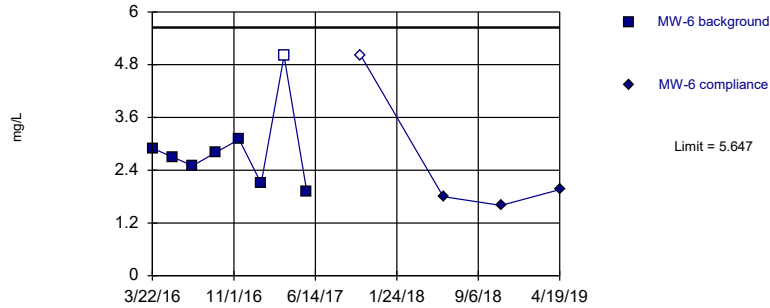
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	<5	
5/17/2016	<5	
7/12/2016	<5	
9/13/2016	<5	
11/16/2016	<5	
1/16/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017		<5
6/2/2018		3.4 (J)
11/8/2018		3.1 (J)
4/19/2019		3.82

Within Limit

Prediction Limit  
Intrawell Parametric

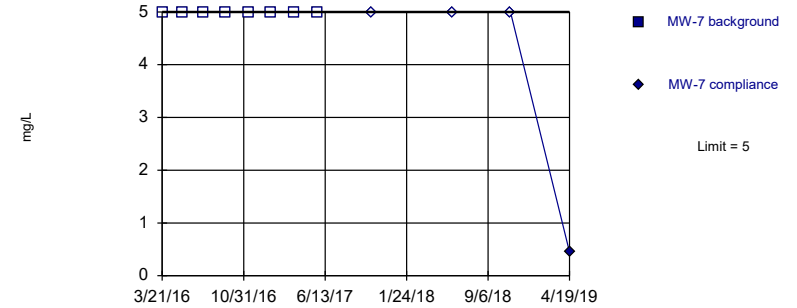


Background Data Summary: Mean=2.875, Std. Dev.=0.9483, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.817, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

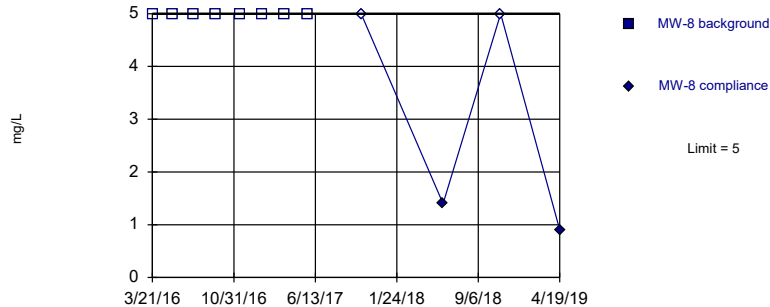


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

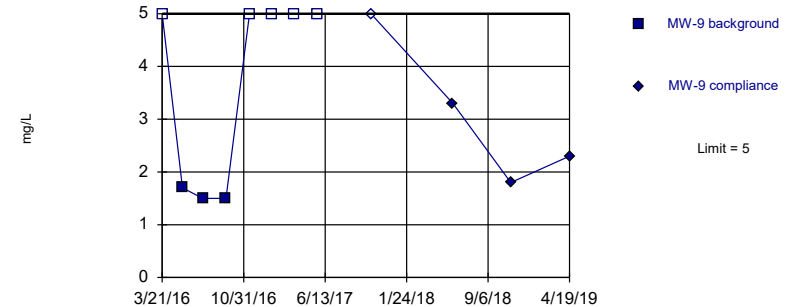


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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 8 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	2.9 (J)	
5/16/2016	2.7 (J)	
7/11/2016	2.5 (J)	
9/12/2016	2.8 (J)	
11/16/2016	3.1 (J)	
1/16/2017	2.1	
3/20/2017	<5	
5/22/2017	1.9 (J)	
10/18/2017		<5
6/2/2018		1.8 (J)
11/8/2018		1.6 (J)
4/19/2019		1.96

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	<5	
5/16/2016	<5	
7/11/2016	<5	
9/12/2016	<5	
11/16/2016	<5	
1/16/2017	<5	
3/20/2017	<5	
5/22/2017	<5	
10/18/2017		<5
6/1/2018		<5
11/7/2018		<5
4/19/2019		0.449 (J)



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	<5	
5/17/2016	<5	
7/11/2016	<5	
9/13/2016	<5	
11/17/2016	<5	
1/17/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017		<5
6/1/2018		1.4 (J)
11/7/2018		<5
4/19/2019		0.906 (J)

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

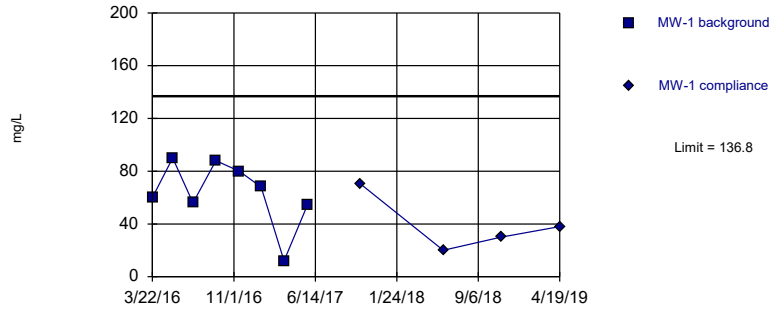
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	<5	
5/16/2016	1.7 (J)	
7/11/2016	1.5 (J)	
9/13/2016	1.5 (J)	
11/17/2016	<5	
1/17/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017		<5
6/1/2018		3.3 (J)
11/8/2018		1.8 (J)
4/19/2019		2.3

Within Limit

Prediction Limit  
Intrawell Parametric

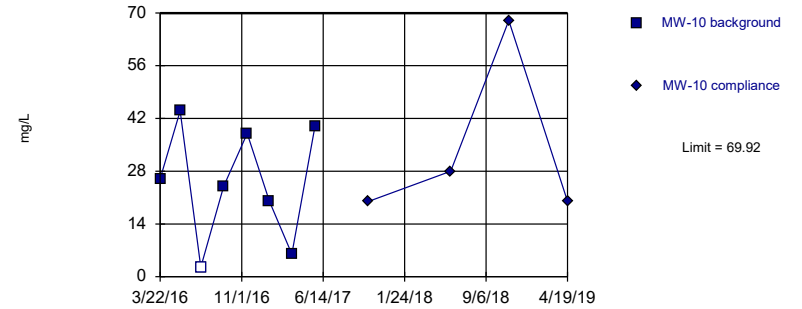


Background Data Summary: Mean=63.5, Std. Dev.=25.09, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8893, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

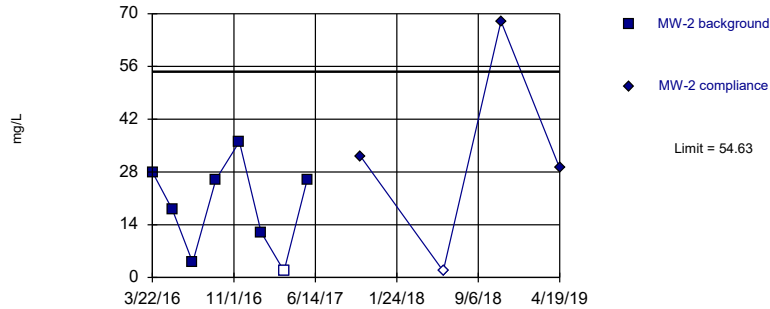


Background Data Summary: Mean=25.06, Std. Dev.=15.35, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9281, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

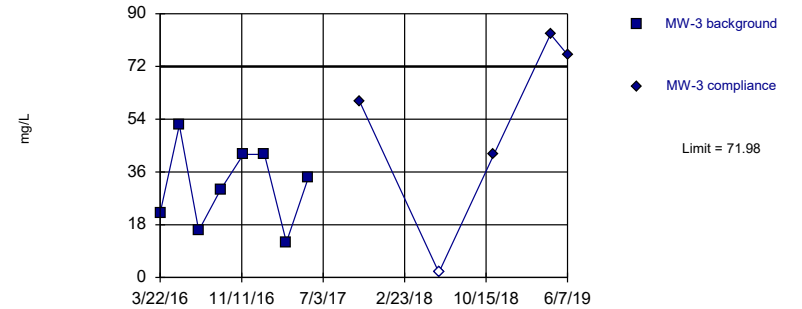


Background Data Summary: Mean=18.96, Std. Dev.=12.2, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9364, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=31.25, Std. Dev.=13.94, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.961, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	60	
5/17/2016	90	
7/12/2016	56	
9/13/2016	88	
11/17/2016	80	
1/16/2017	68 (D)	
3/20/2017	12	
5/23/2017	54	
10/18/2017		70
6/2/2018		20
11/8/2018		30
4/19/2019		38

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	26	
5/16/2016	44	
7/12/2016	<5	
9/13/2016	24	
11/17/2016	38	
1/17/2017	20 (D)	
3/20/2017	6	
5/23/2017	40	
10/18/2017		20
6/1/2018		28
11/8/2018		68
4/19/2019		20

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	28	
5/16/2016	18	
7/11/2016	4 (J)	
9/13/2016	26	
11/17/2016	36	
1/16/2017	12	
3/20/2017	<3.4	
5/23/2017	26	
10/18/2017		32
6/2/2018		<3.4
11/8/2018		68
4/19/2019		29

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

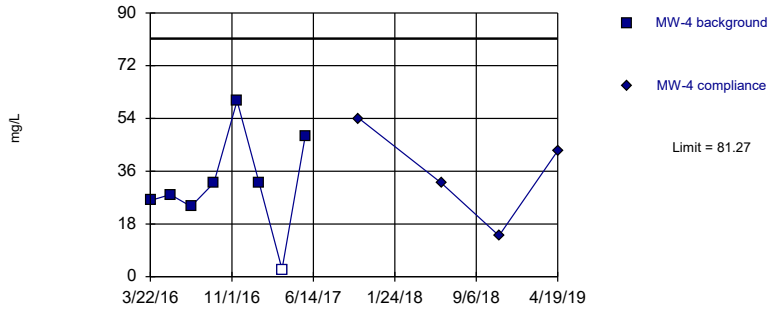
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	22	
5/16/2016	52	
7/11/2016	16	
9/12/2016	30	
11/16/2016	42	
1/16/2017	42	
3/20/2017	12	
5/22/2017	34	
10/17/2017		60
6/2/2018		<3.4
11/7/2018		42
4/19/2019		83
6/7/2019		76

Within Limit

Prediction Limit  
Intrawell Parametric

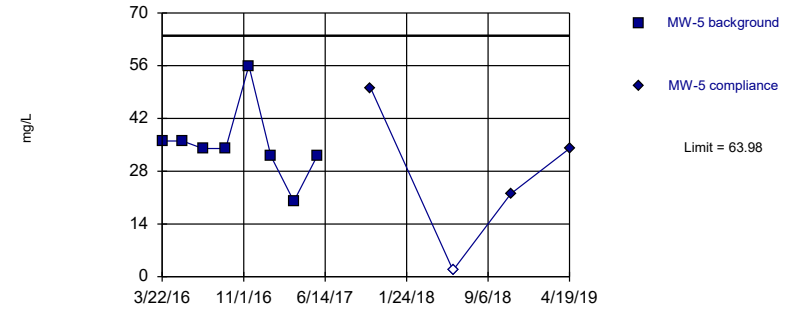


Background Data Summary: Mean=31.56, Std. Dev.=17.01, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9416, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

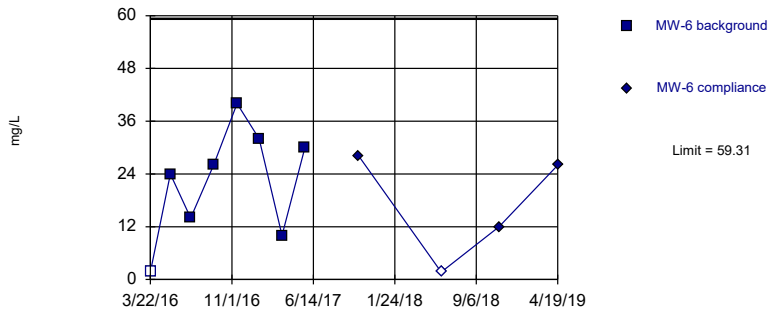


Background Data Summary: Mean=35, Std. Dev.=9.914, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8199, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

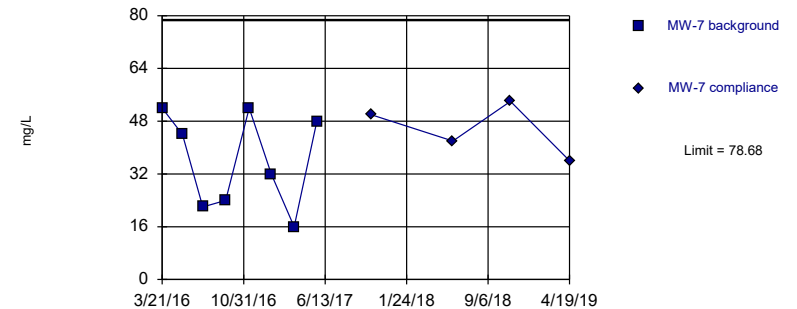


Background Data Summary: Mean=22.21, Std. Dev.=12.69, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9681, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=36.25, Std. Dev.=14.52, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR



# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	26	
5/16/2016	28	
7/12/2016	24	
9/13/2016	32	
11/16/2016	60	
1/16/2017	32	
3/20/2017	<5	
5/23/2017	48	
10/18/2017		54
6/2/2018		32
11/8/2018		14
4/19/2019		43

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:01 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	36	
5/17/2016	36	
7/12/2016	34	
9/13/2016	34	
11/16/2016	56	
1/16/2017	32	
3/20/2017	20	
5/23/2017	32	
10/18/2017		50
6/2/2018		<3.4
11/8/2018		22
4/19/2019		34

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:02 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	<3.4	
5/16/2016	24	
7/11/2016	14	
9/12/2016	26	
11/16/2016	40	
1/16/2017	32	
3/20/2017	10	
5/22/2017	30	
10/18/2017		28
6/2/2018		<3.4
11/8/2018		12
4/19/2019		26

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:02 PM View: IntraWell PL

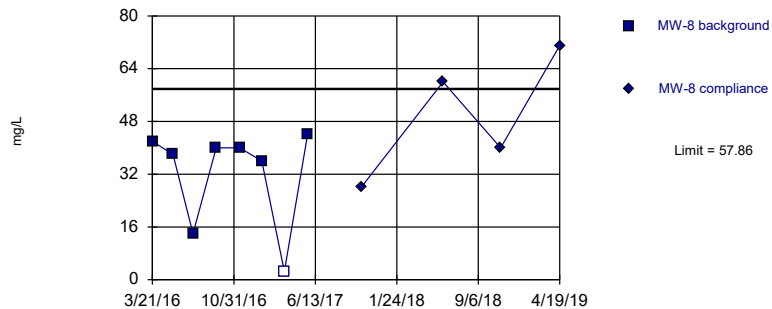
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	52	
5/16/2016	44	
7/11/2016	22	
9/12/2016	24	
11/16/2016	52	
1/16/2017	32	
3/20/2017	16	
5/22/2017	48	
10/18/2017		50
6/1/2018		42
11/7/2018		54
4/19/2019		36

Exceeds Limit

Prediction Limit  
 Intrawell Parametric

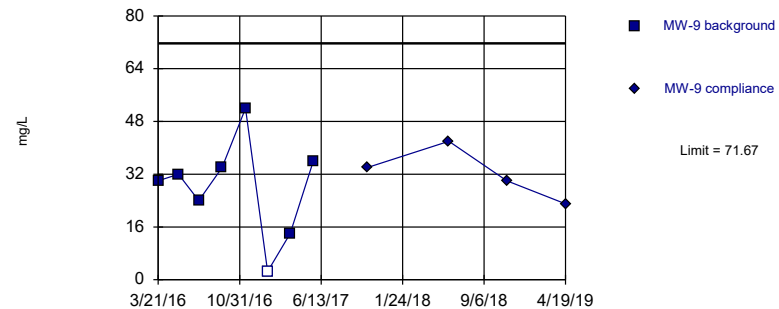


Background Data Summary (based on square transformation): Mean=1230, Std. Dev.=724.5, n=8, 12.5% NDs.  
 Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8105, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Parametric



Background Data Summary: Mean=28.06, Std. Dev.=14.92, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9648, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 1:56 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:02 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	42	
5/17/2016	38	
7/11/2016	14	
9/13/2016	40	
11/17/2016	40	
1/17/2017	36	
3/20/2017	<5	
5/23/2017	44	
10/18/2017		28
6/1/2018		60
11/7/2018		40
4/19/2019		71

# Prediction Limit

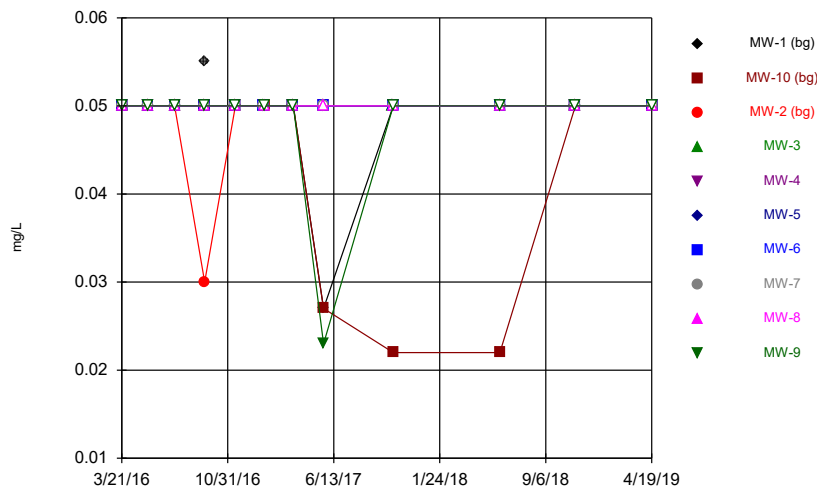
Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:02 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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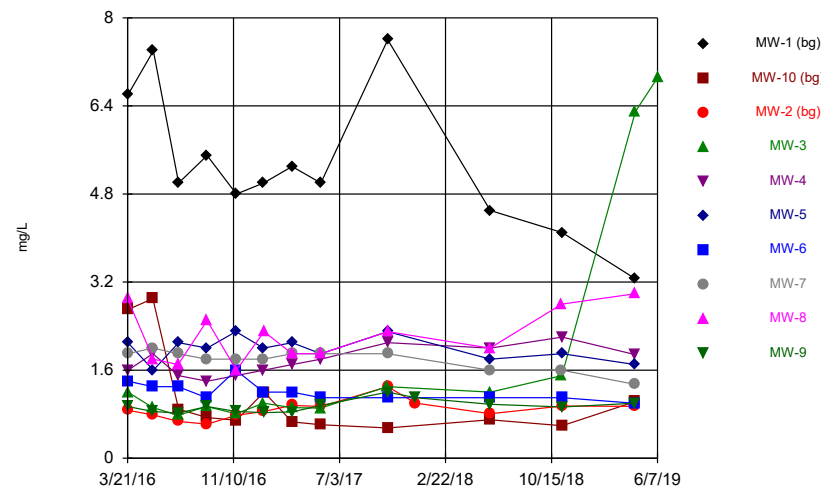
	MW-9	MW-9
3/21/2016	30	
5/16/2016	32	
7/11/2016	24	
9/13/2016	34	
11/17/2016	52	
1/17/2017	<5 (D)	
3/20/2017	14	
5/23/2017	36	
10/18/2017		34
6/1/2018		42
11/8/2018		30
4/19/2019		23

### Time Series



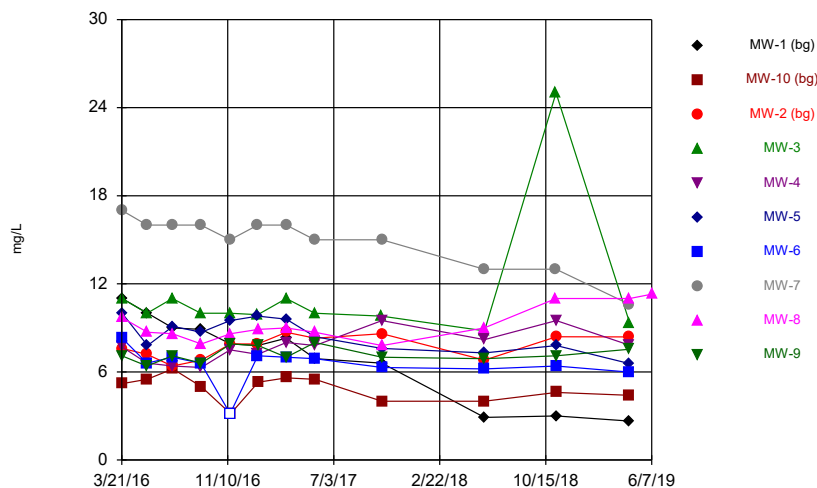
Constituent: Boron Analysis Run 1/3/2020 2:22 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Time Series



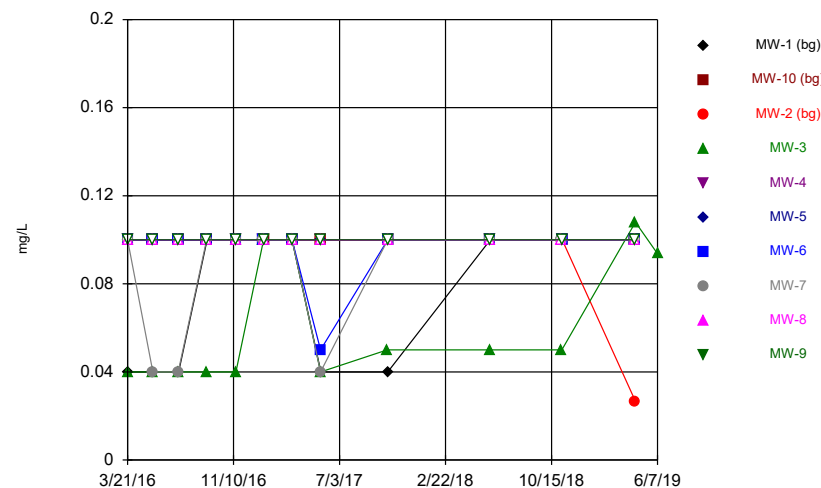
Constituent: Calcium Analysis Run 1/3/2020 2:22 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Time Series



Constituent: Chloride Analysis Run 1/3/2020 2:22 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

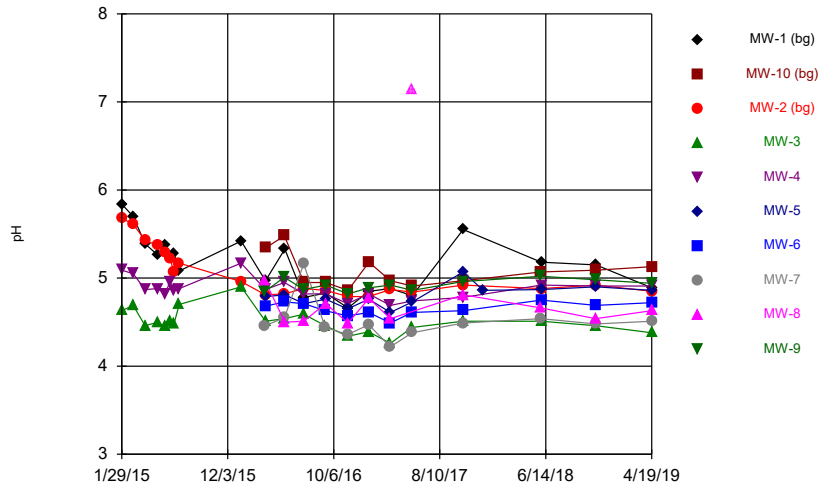
### Time Series



Constituent: Fluoride Analysis Run 1/3/2020 2:22 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR



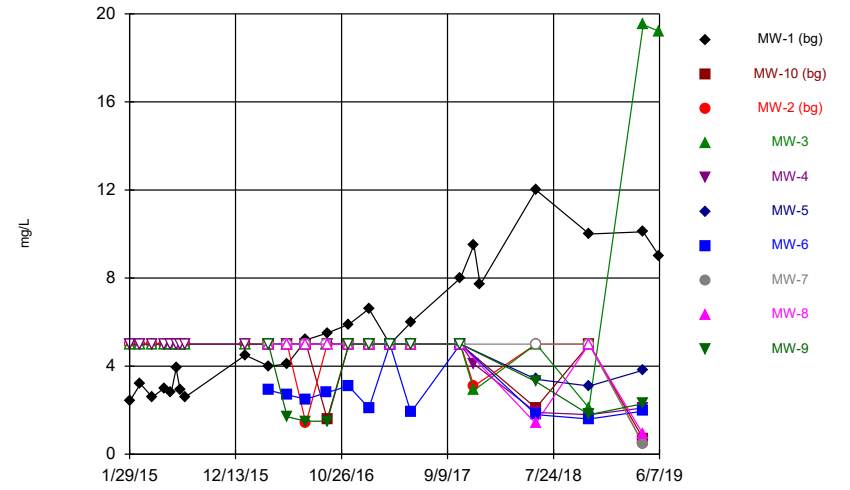
### Time Series



Constituent: pH Analysis Run 1/3/2020 2:22 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

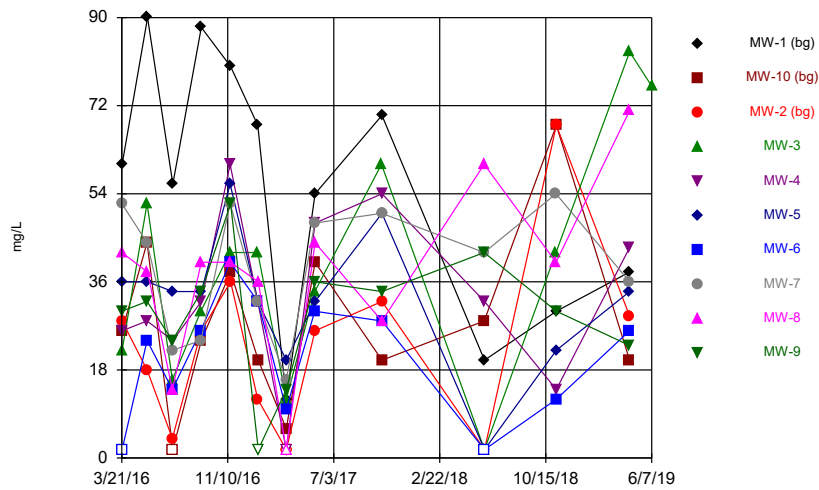
### Time Series



Constituent: Sulfate Analysis Run 1/3/2020 2:23 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

### Time Series



Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:23 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

**2nd**  
**Semi-Annual**  
**Monitoring Event**

# Intrawell Prediction Limit - Significant Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 1/3/2020, 2:13 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	MW-3	0.05	n/a	11/29/2019	0.123	Yes	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-3	1.615	n/a	11/29/2019	35.8	Yes	11	0	No	0.001075	Param Intra 1 of 2
Fluoride (mg/L)	MW-3	0.108	n/a	11/29/2019	0.331	Yes	13	15.38	n/a	0.009692	NP Intra (normality) ...
Sulfate (mg/L)	MW-3	2.9	n/a	11/29/2019	107	Yes	21	90.48	n/a	0.003999	NP Intra (NDs) 1 of 2
Total Dissolved Solids...	MW-3	97.38	n/a	11/29/2019	180	Yes	13	7.692	No	0.001075	Param Intra 1 of 2

# Intrawell Prediction Limit - All Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 1/3/2020, 2:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	MW-1	0.05	n/a	9/25/2019	0.05ND	No	11	90.91	n/a	0.01276	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-10	0.05	n/a	9/25/2019	0.046	No	12	75	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-2	0.05	n/a	9/25/2019	0.05ND	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MW-3</b>	<b>0.05</b>	<b>n/a</b>	<b>11/29/2019</b>	<b>0.123</b>	<b>Yes</b>	<b>12</b>	<b>100</b>	<b>n/a</b>	<b>0.01077</b>	<b>NP Intra (NDs) 1 of 2</b>
Boron (mg/L)	MW-4	0.05	n/a	9/25/2019	0.05ND	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-5	0.05	n/a	9/25/2019	0.05ND	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-6	0.05	n/a	9/25/2019	0.05ND	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-7	0.05	n/a	11/29/2019	0.0432	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-8	0.05	n/a	9/25/2019	0.0484	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-9	0.05	n/a	9/25/2019	0.0455	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-1	8.486	n/a	9/25/2019	3.68	No	12	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-10	2.9	n/a	9/25/2019	0.625	No	12	0	n/a	0.01077	NP Intra (normality) ...
Calcium (mg/L)	MW-2	1.291	n/a	9/25/2019	0.935	No	13	0	No	0.001075	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>MW-3</b>	<b>1.615</b>	<b>n/a</b>	<b>11/29/2019</b>	<b>35.8</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	MW-4	2.392	n/a	9/25/2019	2.18	No	12	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-5	2.514	n/a	9/25/2019	1.85	No	12	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-6	1.619	n/a	9/25/2019	1.09	No	12	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-7	2.241	n/a	9/25/2019	1.25	No	12	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-8	3.407	n/a	11/29/2019	3.1	No	12	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-9	1.211	n/a	9/25/2019	1.06	No	13	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-1	13.99	n/a	9/25/2019	2.93	No	12	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-10	6.981	n/a	9/25/2019	4.69	No	12	8.333	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-2	9.666	n/a	9/25/2019	8.26	No	12	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-3	25	n/a	9/25/2019	9.57	No	12	0	n/a	0.01077	NP Intra (normality) ...
Chloride (mg/L)	MW-4	10.27	n/a	9/25/2019	8.94	No	12	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-5	11.23	n/a	9/25/2019	6.59	No	12	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-6	9.273	n/a	9/25/2019	6.72	No	12	8.333	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-7	19.33	n/a	9/25/2019	8.59	No	12	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-8	12.03	n/a	9/25/2019	11.2	No	13	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-9	8.442	n/a	11/29/2019	8.42	No	12	0	No	0.001075	Param Intra 1 of 2
Fluoride (mg/L)	MW-1	0.1	n/a	9/25/2019	0.1ND	No	12	58.33	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-10	0.1	n/a	9/25/2019	0.0267	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-2	0.1	n/a	9/25/2019	0.1ND	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>MW-3</b>	<b>0.108</b>	<b>n/a</b>	<b>11/29/2019</b>	<b>0.331</b>	<b>Yes</b>	<b>13</b>	<b>15.38</b>	<b>n/a</b>	<b>0.009692</b>	<b>NP Intra (normality) ...</b>
Fluoride (mg/L)	MW-4	0.1	n/a	9/25/2019	0.1ND	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-5	0.1	n/a	9/25/2019	0.1ND	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-6	0.1	n/a	9/25/2019	0.1ND	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-7	0.1	n/a	9/25/2019	0.1ND	No	12	75	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-8	0.1	n/a	9/25/2019	0.0277	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-9	0.1	n/a	9/25/2019	0.0313	No	12	100	n/a	0.01077	NP Intra (NDs) 1 of 2
pH (pH)	MW-1	5.85	4.477	9/25/2019	4.83	No	21	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-10	5.527	4.623	9/25/2019	4.9	No	12	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-2	5.68	4.79	9/25/2019	4.79	No	21	0	n/a	0.007998	NP Intra (normality) ...
pH (pH)	MW-3	4.806	4.214	9/25/2019	4.27	No	21	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-4	5.135	4.628	9/25/2019	4.79	No	21	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-5	5.084	4.513	9/25/2019	4.82	No	13	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-6	4.838	4.466	9/25/2019	4.67	No	12	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-7	5.16	4.22	9/25/2019	4.47	No	12	0	n/a	0.02155	NP Intra (normality) ...
pH (pH)	MW-8	5.04	4.257	9/24/2019	4.57	No	11	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-9	5.078	4.762	9/24/2019	4.86	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	13.54	n/a	11/29/2019	9.09	No	10	10	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-10	5	n/a	9/25/2019	0.648	No	12	75	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-2	5	n/a	9/25/2019	0.436	No	22	86.36	n/a	0.003707	NP Intra (NDs) 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-3</b>	<b>2.9</b>	<b>n/a</b>	<b>11/29/2019</b>	<b>107</b>	<b>Yes</b>	<b>21</b>	<b>90.48</b>	<b>n/a</b>	<b>0.003999</b>	<b>NP Intra (NDs) 1 of 2</b>
Sulfate (mg/L)	MW-4	5	n/a	9/25/2019	2.3	No	22	81.82	n/a	0.003707	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-5	5	n/a	9/25/2019	3.52	No	12	75	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-6	3.559	n/a	9/25/2019	1.98	No	12	16.67	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-7	5	n/a	9/25/2019	1.57	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-8	1.4	n/a	9/25/2019	1ND	No	12	83.33	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-9	3.344	n/a	9/25/2019	1ND	No	12	50	x^(1/3)	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-1	118.8	n/a	9/25/2019	52	No	12	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-10	71.38	n/a	9/25/2019	29	No	12	8.333	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-2	66.3	n/a	9/25/2019	27	No	12	16.67	No	0.001075	Param Intra 1 of 2
<b>Total Dissolved Solids...</b>	<b>MW-3</b>	<b>97.38</b>	<b>n/a</b>	<b>11/29/2019</b>	<b>180</b>	<b>Yes</b>	<b>13</b>	<b>7.692</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Total Dissolved Solids...	MW-4	73.02	n/a	9/25/2019	44	No	12	8.333	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-5	66.18	n/a	9/25/2019	42	No	12	8.333	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-6	48.08	n/a	9/25/2019	46	No	12	16.67	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-7	71.5	n/a	9/25/2019	42	No	12	0	No	0.001075	Param Intra 1 of 2

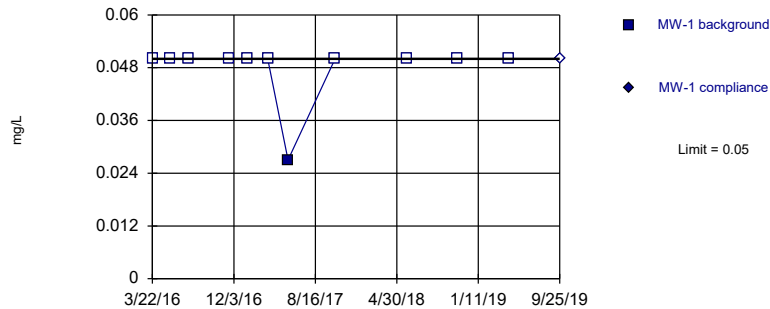
# Intrawell Prediction Limit - All Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 1/3/2020, 2:13 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids...	MW-8	82.12	n/a	9/25/2019	61	No	12	8.333	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids...	MW-9	60.73	n/a	9/25/2019	33	No	12	8.333	No	0.001075	Param Intra 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

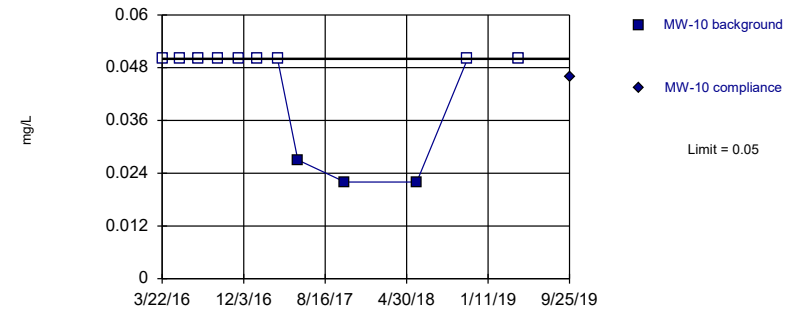


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

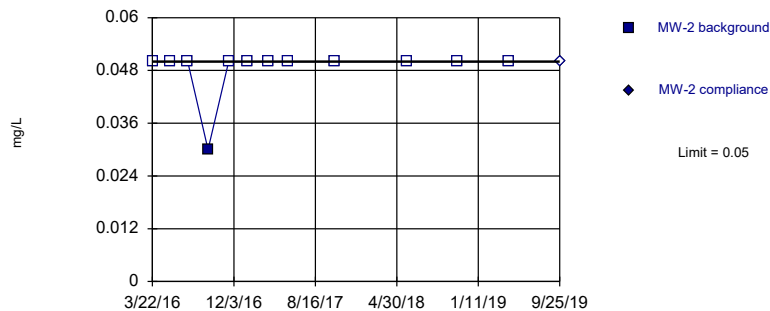


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

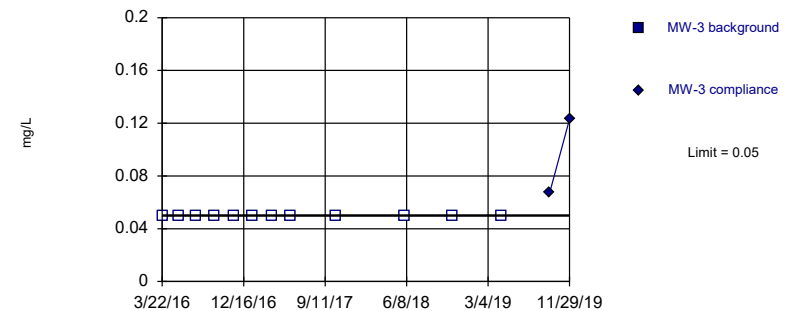


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric



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

Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	<0.05	
5/17/2016	<0.05	
7/12/2016	<0.05	
9/13/2016	0.055 (o)	
11/17/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	0.027 (J)	
10/18/2017	<0.05	
6/2/2018	<0.05	
11/8/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	<0.05	
5/16/2016	<0.05	
7/12/2016	<0.05	
9/13/2016	<0.05	
11/17/2016	<0.05	
1/17/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	0.027 (J)	
10/18/2017	0.022 (J)	
6/1/2018	0.022 (J)	
11/8/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		0.046 (J)



# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/13/2016	0.03 (J)	
11/17/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	<0.05	
10/18/2017	<0.05	
6/2/2018	<0.05	
11/8/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

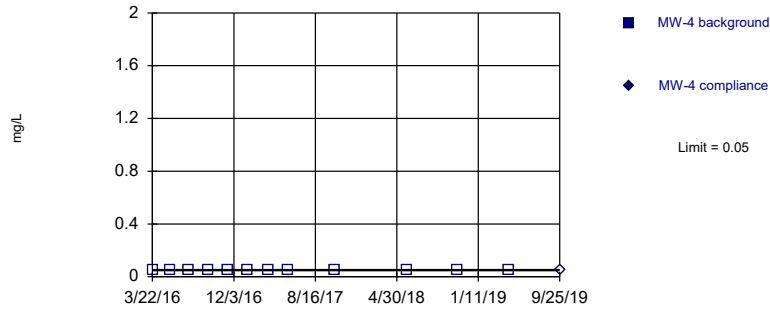
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/12/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/22/2017	<0.05	
10/17/2017	<0.05	
6/2/2018	<0.05	
11/7/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		0.0677
11/29/2019		0.123

Within Limit

Prediction Limit  
Intrawell Non-parametric

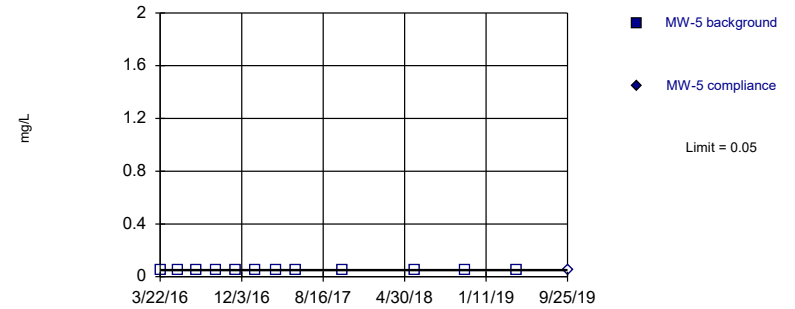


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

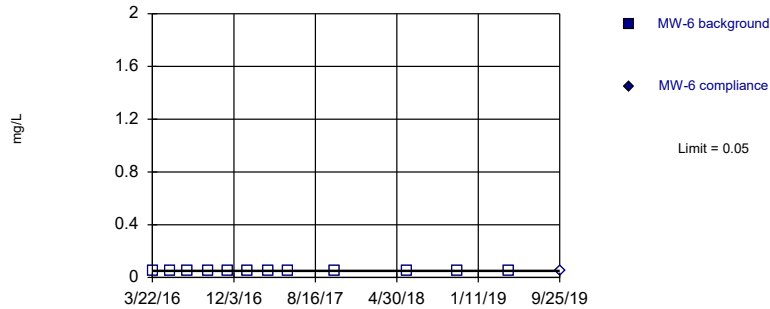


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Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

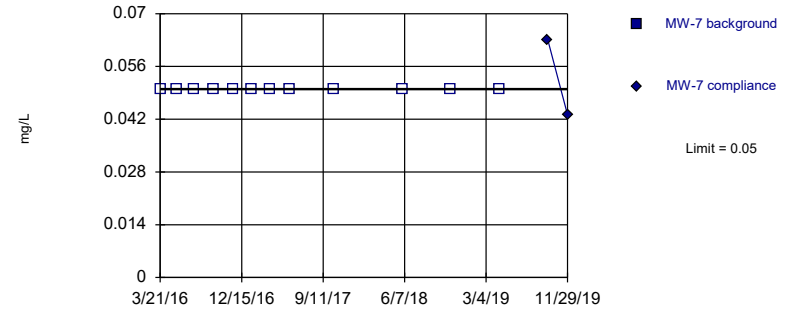


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Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric



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

Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	<0.05	
5/16/2016	<0.05	
7/12/2016	<0.05	
9/13/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	<0.05	
10/18/2017	<0.05	
6/2/2018	<0.05	
11/8/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	<0.05	
5/17/2016	<0.05	
7/12/2016	<0.05	
9/13/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	<0.05	
10/18/2017	<0.05	
6/2/2018	<0.05	
11/8/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		<0.05

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/12/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/22/2017	<0.05	
10/18/2017	<0.05	
6/2/2018	<0.05	
11/8/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		<0.05

# Prediction Limit

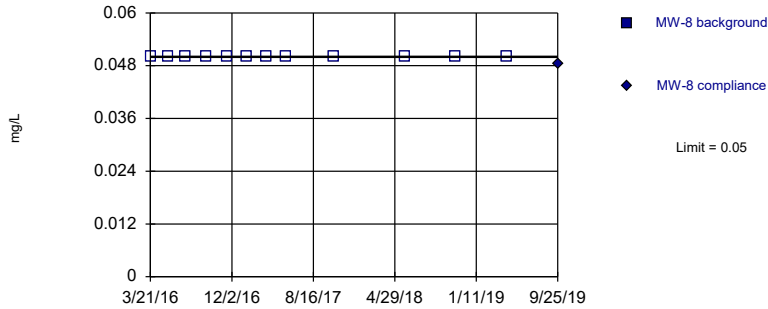
Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/12/2016	<0.05	
11/16/2016	<0.05	
1/16/2017	<0.05	
3/20/2017	<0.05	
5/22/2017	<0.05	
10/18/2017	<0.05	
6/1/2018	<0.05	
11/7/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		0.063
11/29/2019		0.0432 (J)

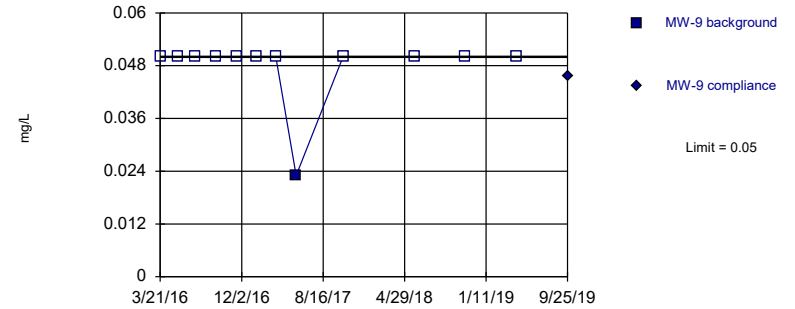
Within Limit  
Prediction Limit  
Intrawell Non-parametric



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

Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

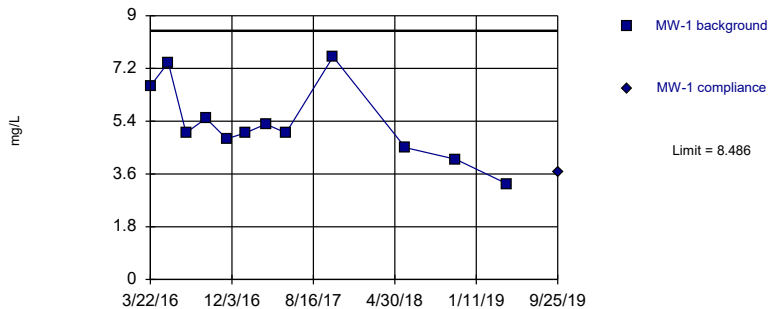
Within Limit  
Prediction Limit  
Intrawell Non-parametric



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

Constituent: Boron Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

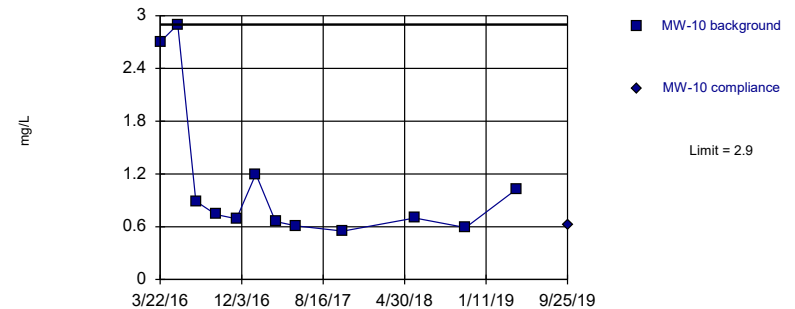
Within Limit  
Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=5.338, Std. Dev.=1.285, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9272, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:09 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR



# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	<0.05	
5/17/2016	<0.05	
7/11/2016	<0.05	
9/13/2016	<0.05	
11/17/2016	<0.05	
1/17/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	<0.05	
10/18/2017	<0.05	
6/1/2018	<0.05	
11/7/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		0.0484 (J)

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	<0.05	
5/16/2016	<0.05	
7/11/2016	<0.05	
9/13/2016	<0.05	
11/17/2016	<0.05	
1/17/2017	<0.05	
3/20/2017	<0.05	
5/23/2017	0.023 (J)	
10/18/2017	<0.05	
6/1/2018	<0.05	
11/8/2018	<0.05	
4/19/2019	<0.05	
9/25/2019		0.0455 (J)

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	6.6	
5/17/2016	7.4	
7/12/2016	5	
9/13/2016	5.5	
11/17/2016	4.8	
1/16/2017	5	
3/20/2017	5.3	
5/23/2017	5	
10/18/2017	7.6	
6/2/2018	4.5	
11/8/2018	4.1	
4/19/2019	3.26	
9/25/2019		3.68

# Prediction Limit

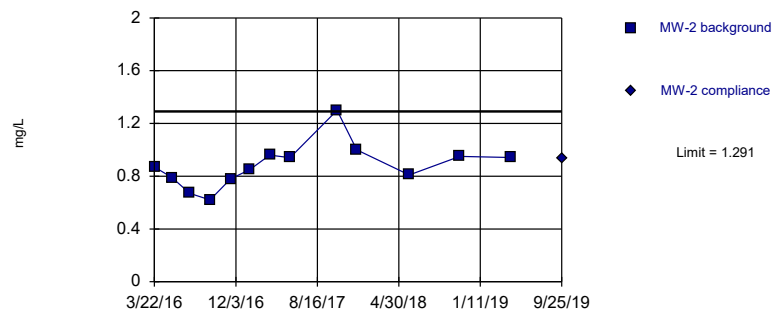
Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	2.7	
5/16/2016	2.9	
7/12/2016	0.89	
9/13/2016	0.74	
11/17/2016	0.69	
1/17/2017	1.2	
3/20/2017	0.66	
5/23/2017	0.61	
10/18/2017	0.55	
6/1/2018	0.7	
11/8/2018	0.59	
4/19/2019	1.03	
9/25/2019		0.625

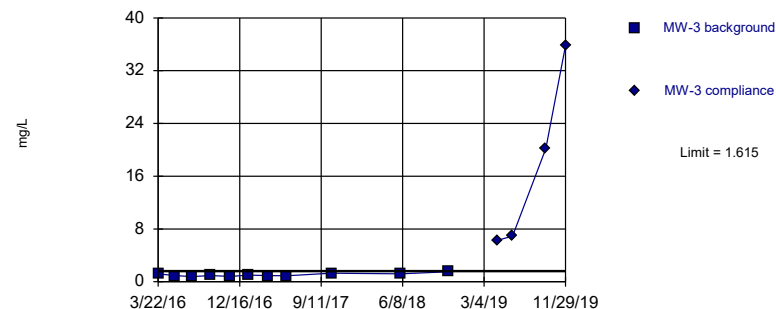
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=0.8832, Std. Dev.=0.1696, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9225, critical = 0.814. Kappa = 2.402 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

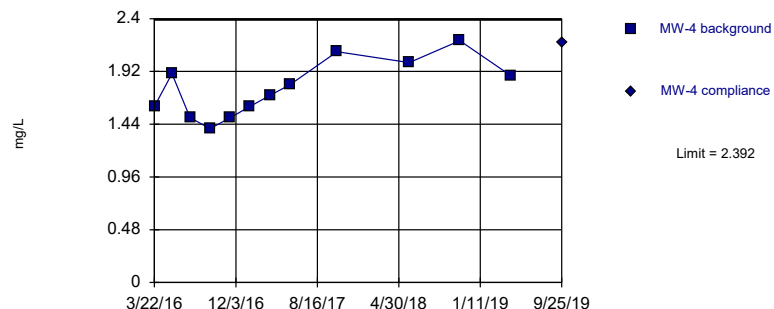
Exceeds Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=1.044, Std. Dev.=0.2254, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9016, critical = 0.792. Kappa = 2.535 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

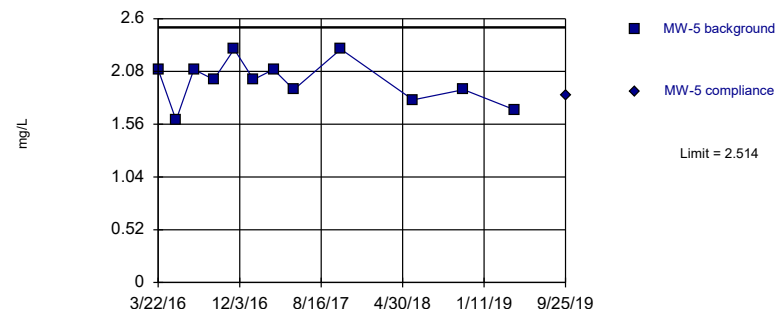
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=1.765, Std. Dev.=0.2561, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9575, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=1.983, Std. Dev.=0.2167, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9574, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	0.87	
5/16/2016	0.79	
7/11/2016	0.67	
9/13/2016	0.62	
11/17/2016	0.78	
1/16/2017	0.85	
3/20/2017	0.96	
5/23/2017	0.94	
10/18/2017	1.3	
12/19/2017	1 (RS)	
6/2/2018	0.81	
11/8/2018	0.95	
4/19/2019	0.942	
9/25/2019		0.935

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	1.2	
5/16/2016	0.92	
7/11/2016	0.78	
9/12/2016	0.94	
11/16/2016	0.81	
1/16/2017	1	
3/20/2017	0.92	
5/22/2017	0.91	
10/17/2017	1.3	
6/2/2018	1.2	
11/7/2018	1.5	
4/19/2019		6.3
6/7/2019		6.91
9/25/2019		20.2
11/29/2019		35.8

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	1.6	
5/16/2016	1.9	
7/12/2016	1.5	
9/13/2016	1.4	
11/16/2016	1.5	
1/16/2017	1.6	
3/20/2017	1.7	
5/23/2017	1.8	
10/18/2017	2.1	
6/2/2018	2	
11/8/2018	2.2	
4/19/2019	1.88	
9/25/2019		2.18



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

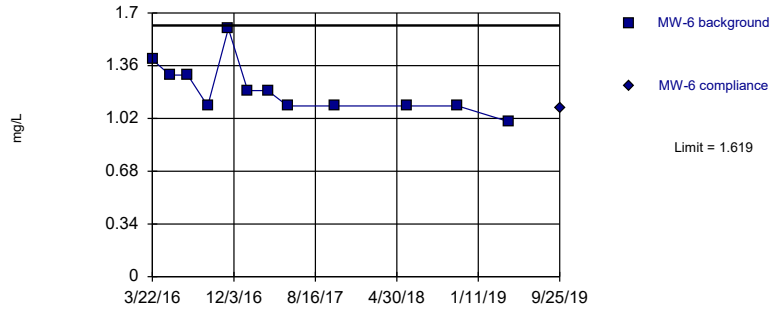
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	2.1	
5/17/2016	1.6	
7/12/2016	2.1	
9/13/2016	2	
11/16/2016	2.3	
1/16/2017	2	
3/20/2017	2.1	
5/23/2017	1.9	
10/18/2017	2.3	
6/2/2018	1.8	
11/8/2018	1.9	
4/19/2019	1.7	
9/25/2019		1.85

Within Limit

Prediction Limit  
Intrawell Parametric

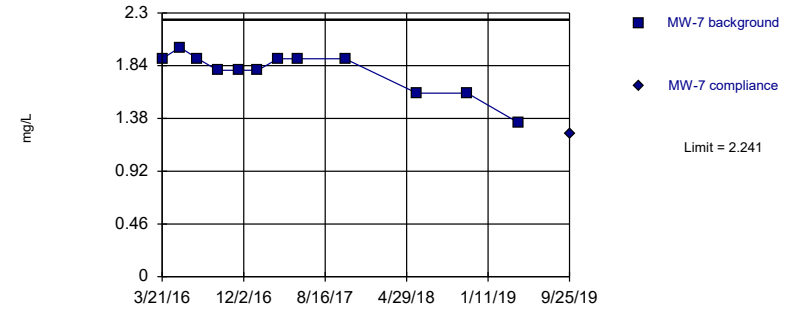


Background Data Summary: Mean=1.208, Std. Dev.=0.1679, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8731, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

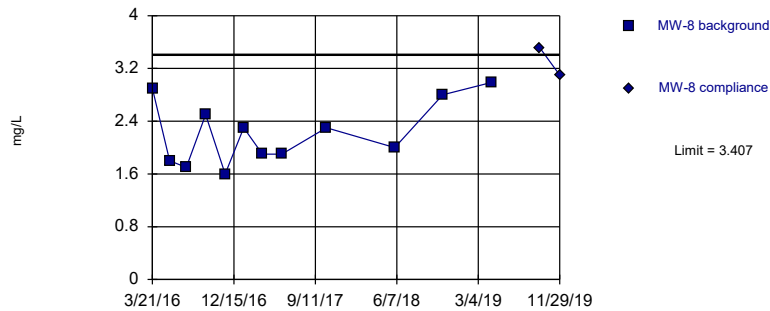


Background Data Summary: Mean=1.787, Std. Dev.=0.1857, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8253, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

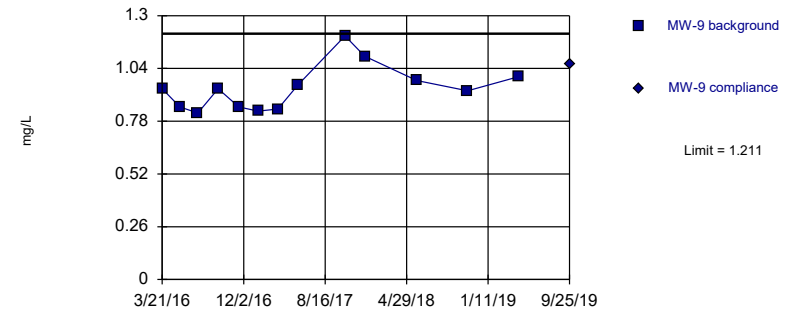


Background Data Summary: Mean=2.224, Std. Dev.=0.4831, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9189, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=0.9415, Std. Dev.=0.1124, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8878, critical = 0.814. Kappa = 2.402 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	1.4	
5/16/2016	1.3	
7/11/2016	1.3	
9/12/2016	1.1	
11/16/2016	1.6	
1/16/2017	1.2	
3/20/2017	1.2	
5/22/2017	1.1	
10/18/2017	1.1	
6/2/2018	1.1	
11/8/2018	1.1	
4/19/2019	0.998	
9/25/2019		1.09

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	1.9	
5/16/2016	2	
7/11/2016	1.9	
9/12/2016	1.8	
11/16/2016	1.8	
1/16/2017	1.8	
3/20/2017	1.9	
5/22/2017	1.9	
10/18/2017	1.9	
6/1/2018	1.6	
11/7/2018	1.6	
4/19/2019	1.34	
9/25/2019		1.25

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	2.9	
5/17/2016	1.8	
7/11/2016	1.7	
9/13/2016	2.5	
11/17/2016	1.6	
1/17/2017	2.3	
3/20/2017	1.9	
5/23/2017	1.9	
10/18/2017	2.3	
6/1/2018	2	
11/7/2018	2.8	
4/19/2019	2.99	
9/25/2019		3.51
11/29/2019		3.1

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/3/2020 2:13 PM View: Intrawell PL

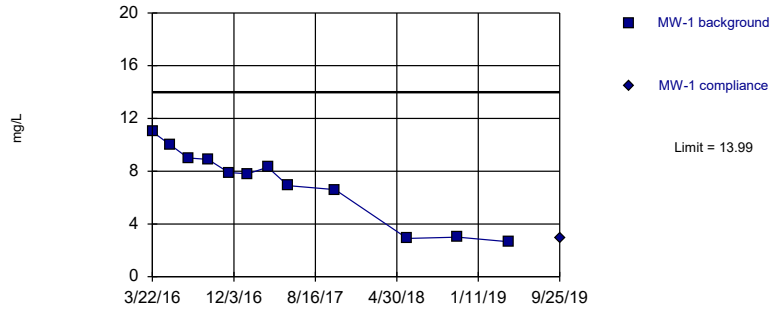
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	0.94	
5/16/2016	0.85	
7/11/2016	0.82	
9/13/2016	0.94	
11/17/2016	0.85	
1/17/2017	0.83	
3/20/2017	0.84	
5/23/2017	0.96	
10/18/2017	1.2	
12/19/2017	1.1 (RS)	
6/1/2018	0.98	
11/8/2018	0.93	
4/19/2019	1	
9/25/2019		1.06

Within Limit

Prediction Limit  
Intrawell Parametric

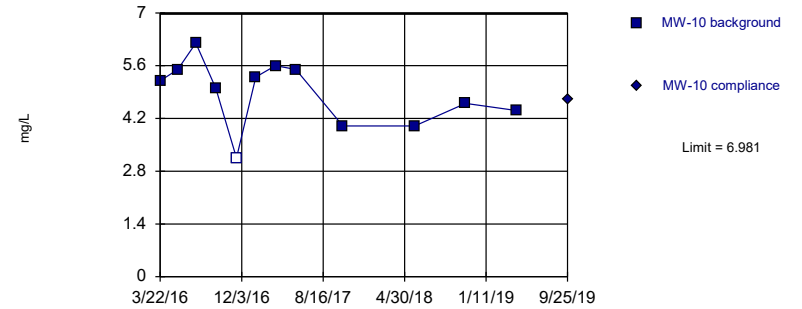


Background Data Summary: Mean=7.079, Std. Dev.=2.822, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8918, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

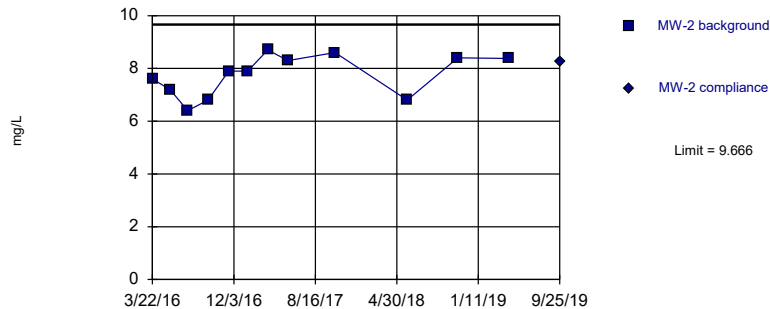


Background Data Summary: Mean=4.872, Std. Dev.=0.8614, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9587, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

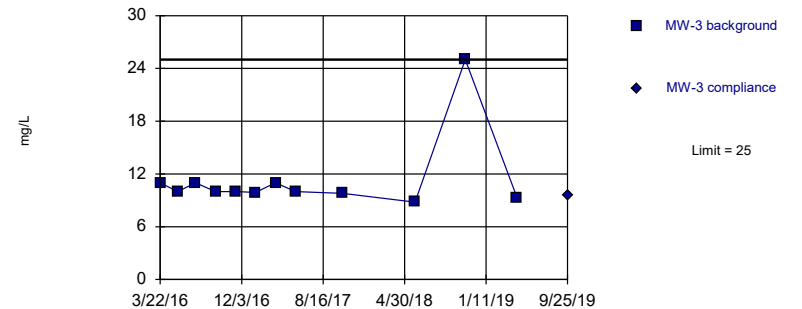


Background Data Summary: Mean=7.748, Std. Dev.=0.783, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9156, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	11	
5/17/2016	10	
7/12/2016	9	
9/13/2016	8.9	
11/17/2016	7.9	
1/16/2017	7.8	
3/20/2017	8.3	
5/23/2017	6.9	
10/18/2017	6.6	
6/2/2018	2.9	
11/8/2018	3	
4/19/2019	2.65	
9/25/2019		2.93



# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	5.2	
5/16/2016	5.5	
7/12/2016	6.2	
9/13/2016	5	
11/17/2016	<6.3	
1/17/2017	5.3	
3/20/2017	5.6	
5/23/2017	5.5	
10/18/2017	4	
6/1/2018	4	
11/8/2018	4.6	
4/19/2019	4.41	
9/25/2019		4.69

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	7.6	
5/16/2016	7.2	
7/11/2016	6.4	
9/13/2016	6.8	
11/17/2016	7.9	
1/16/2017	7.9	
3/20/2017	8.7	
5/23/2017	8.3	
10/18/2017	8.6	
6/2/2018	6.8	
11/8/2018	8.4	
4/19/2019	8.38	
9/25/2019		8.26

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

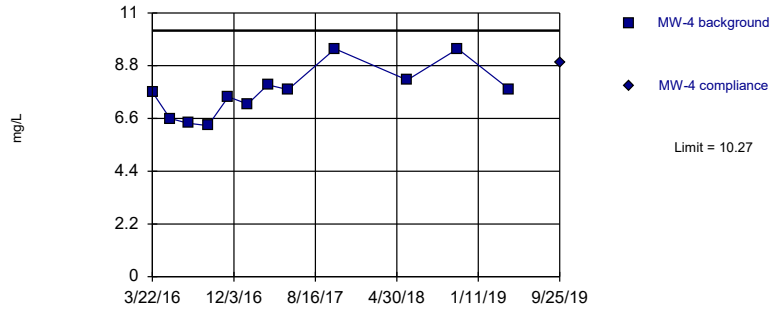
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	11	
5/16/2016	10	
7/11/2016	11	
9/12/2016	10	
11/16/2016	10	
1/16/2017	9.9	
3/20/2017	11	
5/22/2017	10	
10/17/2017	9.8	
6/2/2018	8.8	
11/7/2018	25	
4/19/2019	9.34	
9/25/2019		9.57

Within Limit

Prediction Limit  
Intrawell Parametric

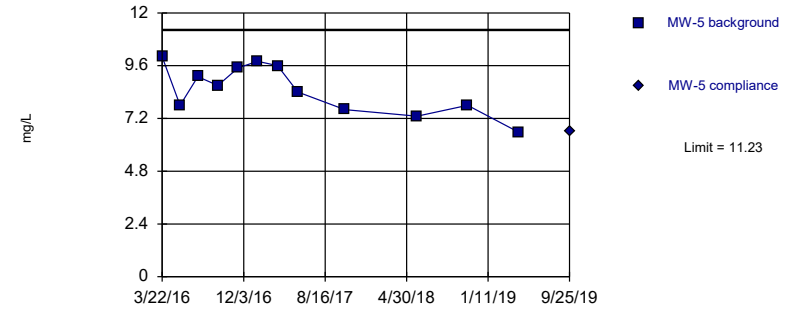


Background Data Summary: Mean=7.71, Std. Dev.=1.044, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9178, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

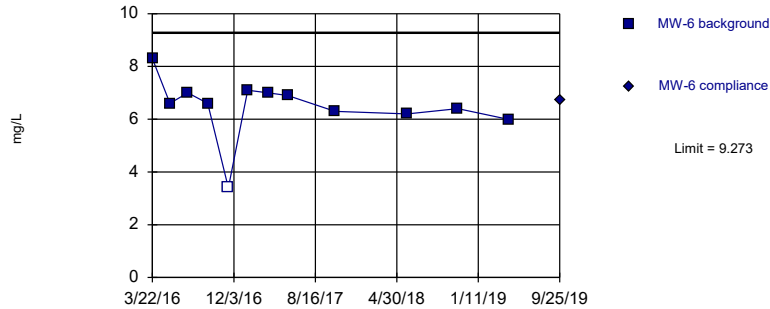


Background Data Summary: Mean=8.514, Std. Dev.=1.108, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.947, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

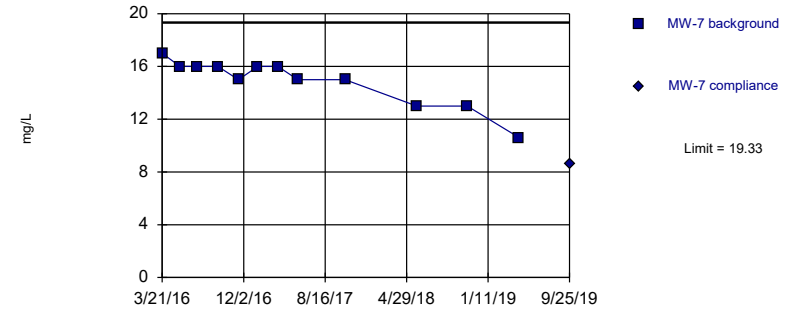


Background Data Summary: Mean=6.483, Std. Dev.=1.14, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8076, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=14.88, Std. Dev.=1.814, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8317, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	7.7	
5/16/2016	6.6	
7/12/2016	6.4	
9/13/2016	6.3	
11/16/2016	7.5	
1/16/2017	7.2	
3/20/2017	8	
5/23/2017	7.8	
10/18/2017	9.5	
6/2/2018	8.2	
11/8/2018	9.5	
4/19/2019	7.82	
9/25/2019		8.94

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	10	
5/17/2016	7.8	
7/12/2016	9.1	
9/13/2016	8.7	
11/16/2016	9.5	
1/16/2017	9.8	
3/20/2017	9.6	
5/23/2017	8.4	
10/18/2017	7.6	
6/2/2018	7.3	
11/8/2018	7.8	
4/19/2019	6.57	
9/25/2019		6.59

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	8.3	
5/16/2016	6.6	
7/11/2016	7	
9/12/2016	6.6	
11/16/2016	<6.8	
1/16/2017	7.1	
3/20/2017	7	
5/22/2017	6.9	
10/18/2017	6.3	
6/2/2018	6.2	
11/8/2018	6.4	
4/19/2019	5.99	
9/25/2019		6.72

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

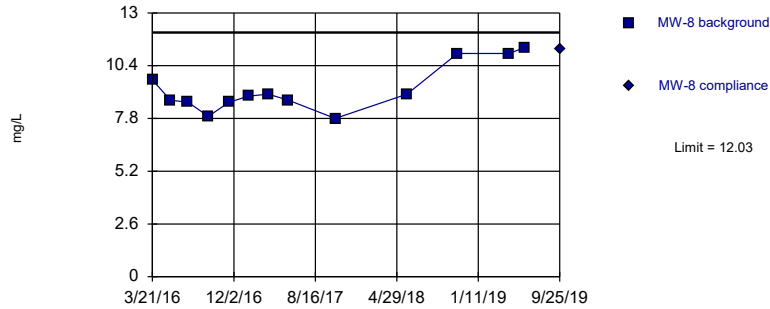
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	MW-7	MW-7
3/21/2016	17	
5/16/2016	16	
7/11/2016	16	
9/12/2016	16	
11/16/2016	15	
1/16/2017	16	
3/20/2017	16	
5/22/2017	15	
10/18/2017	15	
6/1/2018	13	
11/7/2018	13	
4/19/2019	10.6	
9/25/2019		8.59



Within Limit

Prediction Limit  
Intrawell Parametric

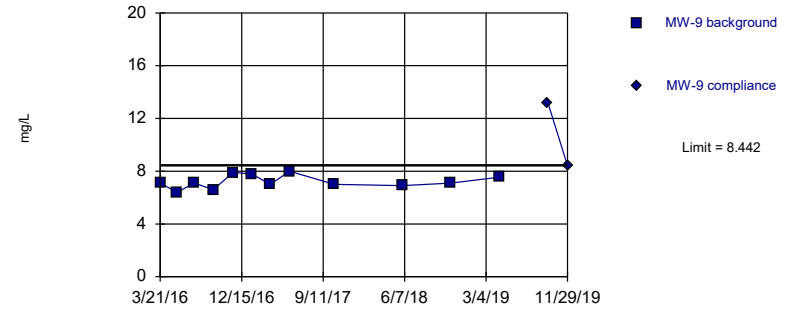


Background Data Summary: Mean=9.246, Std. Dev.=1.16, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8578, critical = 0.814. Kappa = 2.402 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

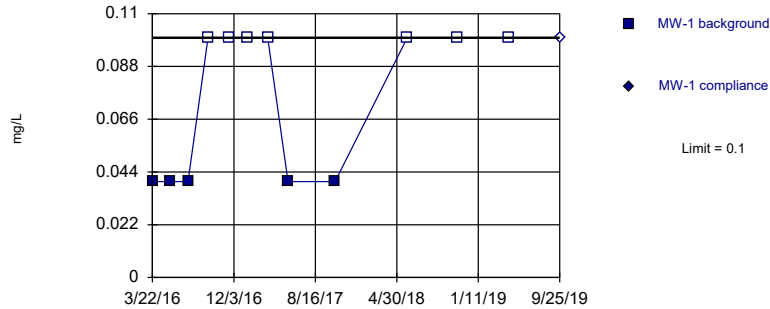


Background Data Summary: Mean=7.204, Std. Dev.=0.5056, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9285, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

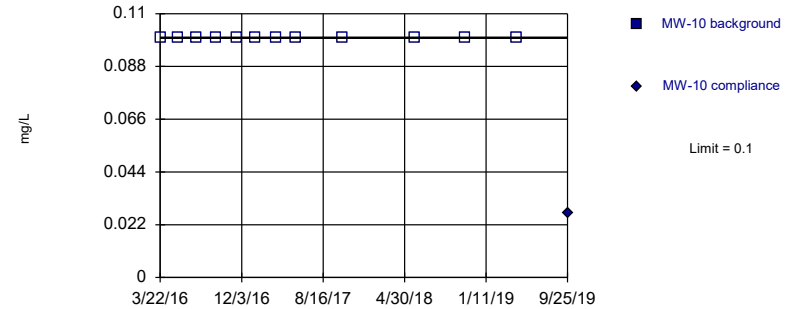


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 58.33% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric



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

Constituent: Fluoride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	9.7	
5/17/2016	8.7	
7/11/2016	8.6	
9/13/2016	7.9	
11/17/2016	8.6	
1/17/2017	8.9	
3/20/2017	9	
5/23/2017	8.7	
10/18/2017	7.8	
6/1/2018	9	
11/7/2018	11	
4/19/2019	11	
6/7/2019	11.3	
9/25/2019		11.2

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	7.1	
5/16/2016	6.4	
7/11/2016	7.1	
9/13/2016	6.6	
11/17/2016	7.9	
1/17/2017	7.8	
3/20/2017	7	
5/23/2017	8	
10/18/2017	7	
6/1/2018	6.9	
11/8/2018	7.1	
4/19/2019	7.55	
9/25/2019		13.2
11/29/2019		8.42

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	0.04 (J)	
5/17/2016	0.04 (J)	
7/12/2016	0.04 (J)	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	0.04 (J)	
10/18/2017	0.04 (J)	
6/2/2018	<0.1	
11/8/2018	<0.1	
4/19/2019	<0.1	
9/25/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

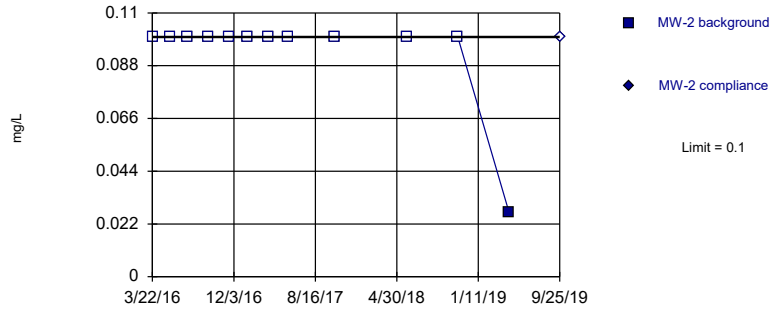
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	<0.1	
5/16/2016	<0.1	
7/12/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/17/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017	<0.1	
6/1/2018	<0.1	
11/8/2018	<0.1	
4/19/2019	<0.1	
9/25/2019		0.0267 (J)

Within Limit

Prediction Limit  
Intrawell Non-parametric

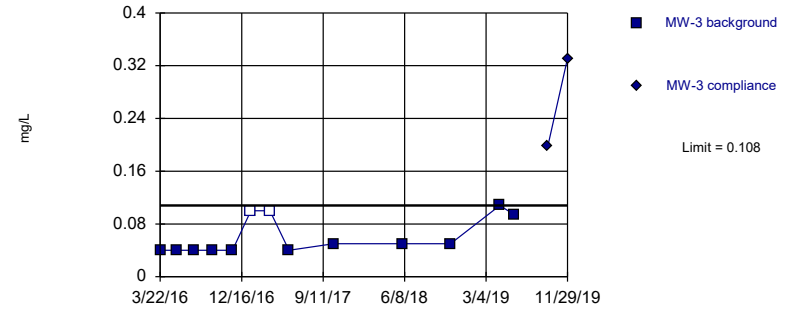


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric

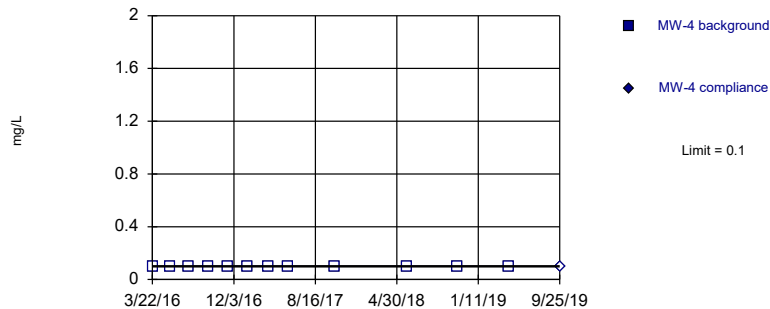


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 13 background values. 15.38% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 2:10 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

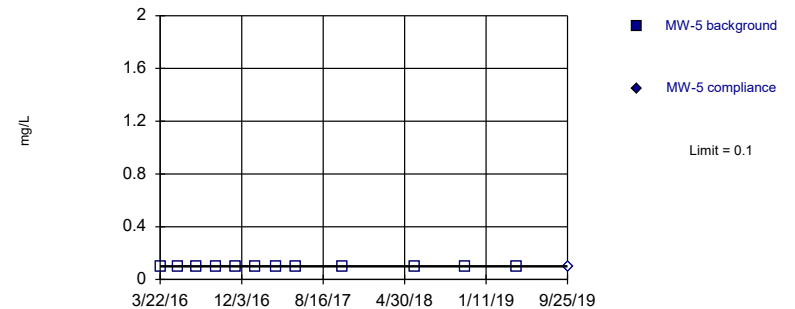


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric



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

Constituent: Fluoride Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	<0.1	
5/16/2016	<0.1	
7/11/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017	<0.1	
6/2/2018	<0.1	
11/8/2018	<0.1	
4/19/2019	0.0267 (J)	
9/25/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	0.04 (J)	
5/16/2016	0.04 (J)	
7/11/2016	0.04 (J)	
9/12/2016	0.04 (J)	
11/16/2016	0.04 (J)	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/22/2017	0.04 (J)	
10/17/2017	0.05 (J)	
6/2/2018	0.05 (J)	
11/7/2018	0.05 (J)	
4/19/2019	0.108	
6/7/2019	0.0937 (J)	
9/25/2019		0.198
11/29/2019		0.331



# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	<0.1	
5/16/2016	<0.1	
7/12/2016	<0.1	
9/13/2016	<0.1	
11/16/2016	<0.1	
1/16/2017	<0.1 (D)	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017	<0.1	
6/2/2018	<0.1	
11/8/2018	<0.1	
4/19/2019	<0.1	
9/25/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

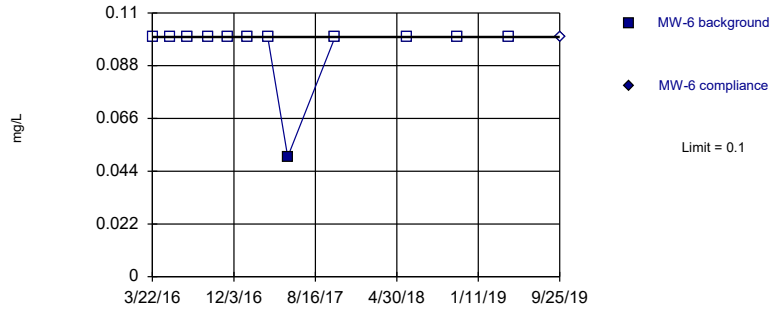
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	<0.1	
5/17/2016	<0.1	
7/12/2016	<0.1	
9/13/2016	<0.1	
11/16/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017	<0.1	
6/2/2018	<0.1	
11/8/2018	<0.1	
4/19/2019	<0.1	
9/25/2019		<0.1

Within Limit

Prediction Limit  
Intrawell Non-parametric

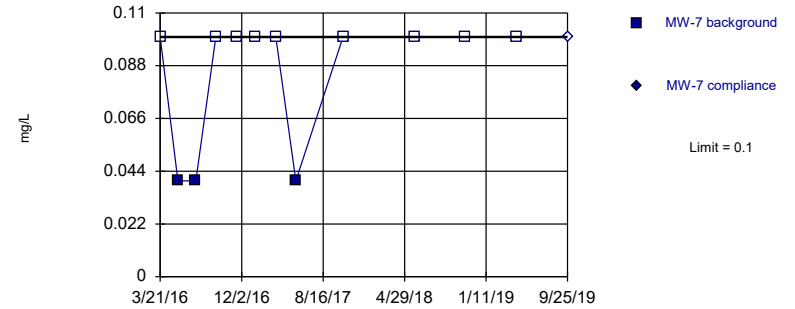


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

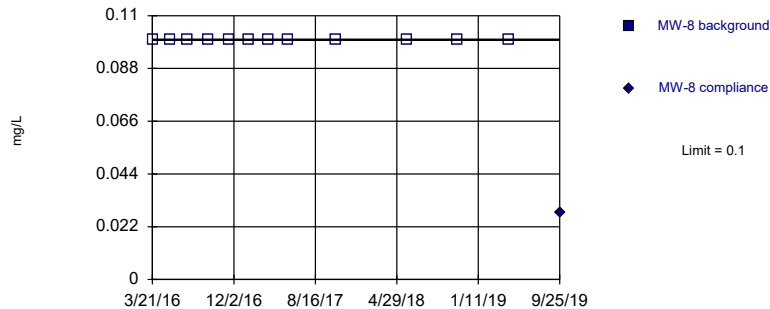


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

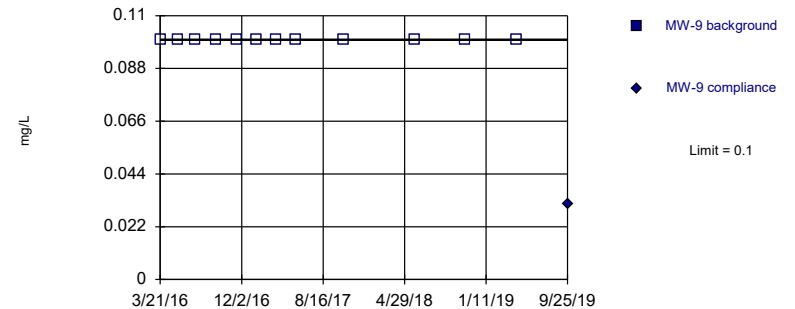


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Fluoride Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric



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

Constituent: Fluoride Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	<0.1	
5/16/2016	<0.1	
7/11/2016	<0.1	
9/12/2016	<0.1	
11/16/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/22/2017	0.05 (J)	
10/18/2017	<0.1	
6/2/2018	<0.1	
11/8/2018	<0.1	
4/19/2019	<0.1	
9/25/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	<0.1	
5/16/2016	0.04 (J)	
7/11/2016	0.04 (J)	
9/12/2016	<0.1	
11/16/2016	<0.1	
1/16/2017	<0.1	
3/20/2017	<0.1	
5/22/2017	0.04 (J)	
10/18/2017	<0.1	
6/1/2018	<0.1	
11/7/2018	<0.1	
4/19/2019	<0.1	
9/25/2019		<0.1

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	<0.1	
5/17/2016	<0.1	
7/11/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/17/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017	<0.1	
6/1/2018	<0.1	
11/7/2018	<0.1	
4/19/2019	<0.1	
9/25/2019		0.0277 (J)

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

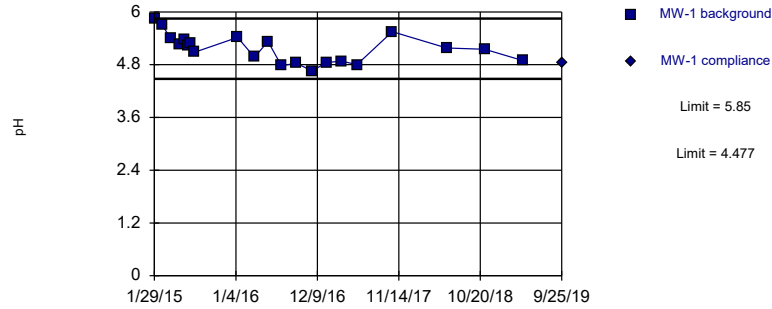
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	<0.1	
5/16/2016	<0.1	
7/11/2016	<0.1	
9/13/2016	<0.1	
11/17/2016	<0.1	
1/17/2017	<0.1	
3/20/2017	<0.1	
5/23/2017	<0.1	
10/18/2017	<0.1	
6/1/2018	<0.1	
11/8/2018	<0.1	
4/19/2019	<0.1	
9/25/2019		0.0313 (J)

Within Limits

### Prediction Limit Intrawell Parametric

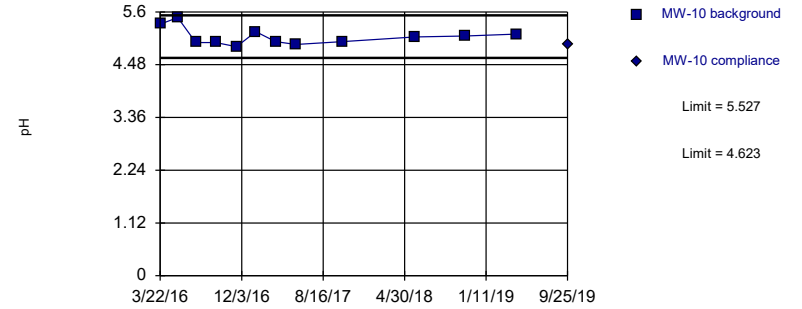


Background Data Summary: Mean=5.164, Std. Dev.=0.3203, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9637, critical = 0.873. Kappa = 2.143 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

### Prediction Limit Intrawell Parametric

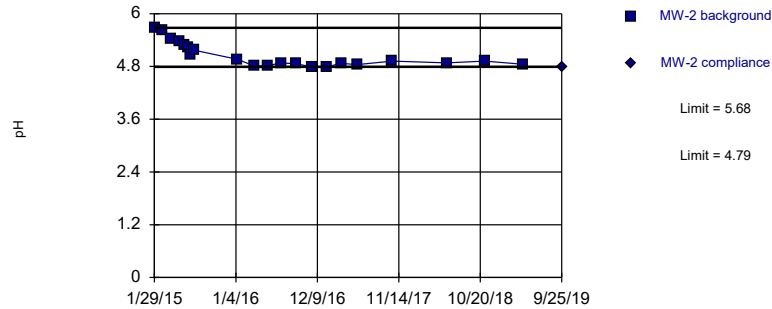


Background Data Summary: Mean=5.075, Std. Dev.=0.1847, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8934, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

### Prediction Limit Intrawell Parametric



Background Data Summary: Mean=4.51, Std. Dev.=0.1382, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9241, critical = 0.873. Kappa = 2.143 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR



# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
1/29/2015	5.84	
3/3/2015	5.7	
4/7/2015	5.39	
5/14/2015	5.26	
6/3/2015	5.37	
6/18/2015	5.23	
6/30/2015	5.28	
7/15/2015	5.08	
1/11/2016	5.42	
3/22/2016	4.97	
5/17/2016	5.33	
7/12/2016	4.78	
9/13/2016	4.83	
11/17/2016	4.66	
1/16/2017	4.85	
3/20/2017	4.88	
5/23/2017	4.8	
10/18/2017	5.55	
6/2/2018	5.18	
11/8/2018	5.15	
4/19/2019	4.89	
9/25/2019		4.83

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	5.34	
5/16/2016	5.48	
7/12/2016	4.95	
9/13/2016	4.95	
11/17/2016	4.86	
1/17/2017	5.18	
3/20/2017	4.97	
5/23/2017	4.91	
10/18/2017	4.97	
6/1/2018	5.07	
11/8/2018	5.09	
4/19/2019	5.13	
9/25/2019		4.9

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
1/29/2015	5.68	
3/3/2015	5.61	
4/7/2015	5.43	
5/14/2015	5.37	
6/3/2015	5.29	
6/18/2015	5.22	
6/30/2015	5.07	
7/15/2015	5.17	
1/11/2016	4.96	
3/22/2016	4.81	
5/16/2016	4.82	
7/11/2016	4.88	
9/13/2016	4.86	
11/17/2016	4.79	
1/16/2017	4.79	
3/20/2017	4.87	
5/23/2017	4.84	
10/18/2017	4.92	
6/2/2018	4.88	
11/8/2018	4.92	
4/19/2019	4.85	
9/25/2019		4.79

# Prediction Limit

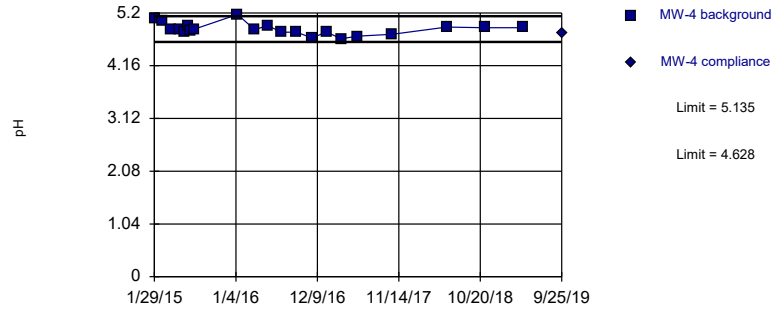
Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
1/29/2015	4.63	
3/3/2015	4.69	
4/7/2015	4.46	
5/14/2015	4.5	
6/3/2015	4.45	
6/18/2015	4.51	
6/30/2015	4.48	
7/15/2015	4.7	
1/11/2016	4.9	
3/22/2016	4.51	
5/16/2016	4.54	
7/11/2016	4.59	
9/12/2016	4.46	
11/16/2016	4.34	
1/16/2017	4.39	
3/20/2017	4.26	
5/22/2017	4.44	
10/17/2017	4.51	
6/2/2018	4.51	
11/7/2018	4.46	
4/19/2019	4.38	
9/25/2019		4.27

Within Limits

### Prediction Limit Intrawell Parametric

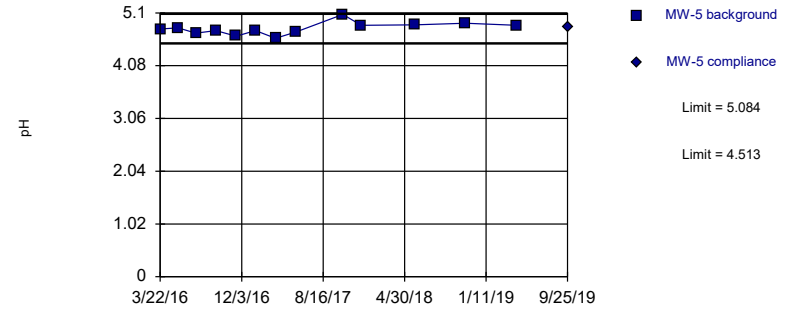


Background Data Summary: Mean=4.881, Std. Dev.=0.1183, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9469, critical = 0.873. Kappa = 2.143 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

### Prediction Limit Intrawell Parametric

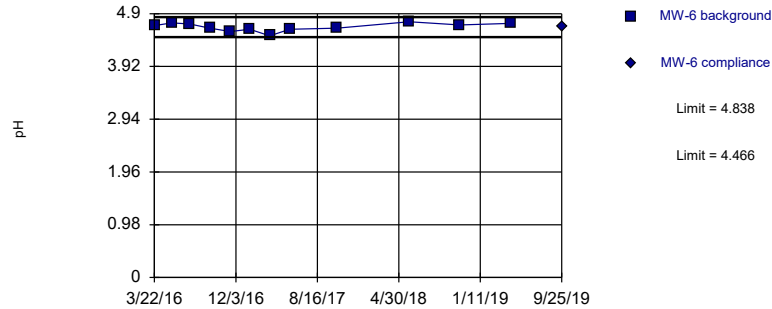


Background Data Summary: Mean=4.798, Std. Dev.=0.119, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9608, critical = 0.814. Kappa = 2.402 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

### Prediction Limit Intrawell Parametric

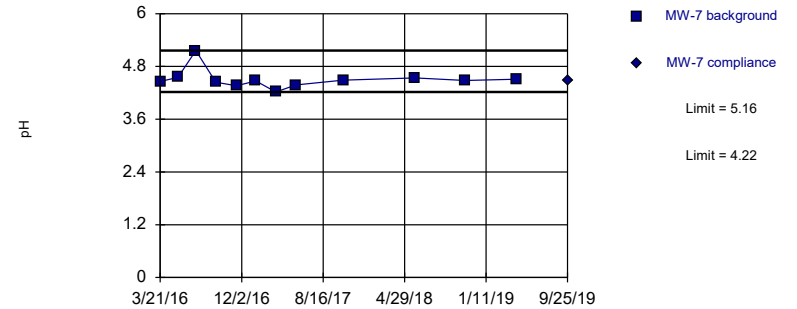


Background Data Summary: Mean=4.652, Std. Dev.=0.0759, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9417, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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 12 background values. Well-constituent pair annual alpha = 0.04286. Individual comparison alpha = 0.02155 (1 of 2).

Constituent: pH Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
1/29/2015	5.09	
3/3/2015	5.05	
4/7/2015	4.87	
5/14/2015	4.88	
6/3/2015	4.82	
6/18/2015	4.95	
6/30/2015	4.86	
7/15/2015	4.88	
1/11/2016	5.17	
3/22/2016	4.87	
5/16/2016	4.95	
7/12/2016	4.82	
9/13/2016	4.82	
11/16/2016	4.71	
1/16/2017	4.82	
3/20/2017	4.69	
5/23/2017	4.74	
10/18/2017	4.78	
6/2/2018	4.92	
11/8/2018	4.91	
4/19/2019	4.91	
9/25/2019		4.79

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	4.79	
5/17/2016	4.81	
7/12/2016	4.71	
9/13/2016	4.76	
11/16/2016	4.65	
1/16/2017	4.76	
3/20/2017	4.61	
5/23/2017	4.73	
10/18/2017	5.07	
12/15/2017	4.86 (R)	
6/2/2018	4.87	
11/8/2018	4.9	
4/19/2019	4.86	
9/25/2019		4.82

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	4.68	
5/16/2016	4.73	
7/11/2016	4.71	
9/12/2016	4.63	
11/16/2016	4.57	
1/16/2017	4.61	
3/20/2017	4.49	
5/22/2017	4.61	
10/18/2017	4.63	
6/2/2018	4.75	
11/8/2018	4.69	
4/19/2019	4.72	
9/25/2019		4.67



# Prediction Limit

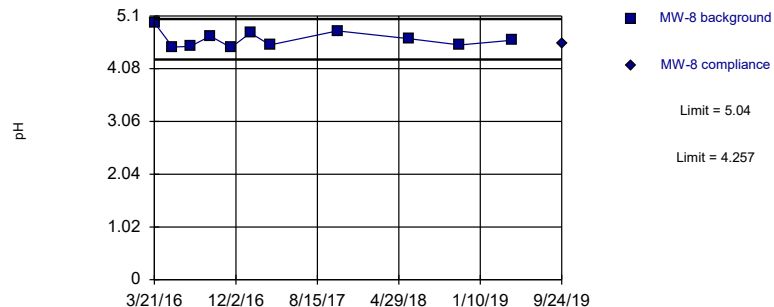
Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	4.46	
5/16/2016	4.55	
7/11/2016	5.16	
9/12/2016	4.44	
11/16/2016	4.36	
1/16/2017	4.47	
3/20/2017	4.22	
5/22/2017	4.38	
10/18/2017	4.49	
6/1/2018	4.54	
11/7/2018	4.48	
4/19/2019	4.51	
9/25/2019		4.47

Within Limits

Prediction Limit  
Intrawell Parametric

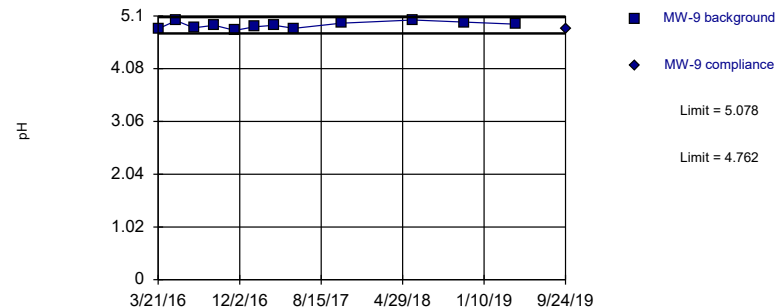


Background Data Summary: Mean=4.648, Std. Dev.=0.1544, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8994, critical = 0.792. Kappa = 2.535 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric



# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	4.97	
5/17/2016	4.5	
7/11/2016	4.51	
9/13/2016	4.71	
11/17/2016	4.49	
1/17/2017	4.77	
3/20/2017	4.54	
5/23/2017	7.14 (o)	
10/18/2017	4.81	
6/1/2018	4.66	
11/7/2018	4.54	
4/19/2019	4.63	
9/24/2019		4.57

# Prediction Limit

Constituent: pH (pH) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-9	MW-9
3/21/2016	4.85	
5/16/2016	5.01	
7/11/2016	4.87	
9/13/2016	4.92	
11/17/2016	4.82	
1/17/2017	4.89	
3/20/2017	4.92	
5/23/2017	4.86	
10/18/2017	4.96	
6/1/2018	5.02	
11/8/2018	4.98	
4/19/2019	4.94	
9/24/2019		4.86

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
1/29/2015	2.4 (J)	
3/3/2015	3.2 (J)	
4/7/2015	2.6 (J)	
5/14/2015	3 (J)	
6/3/2015	2.8 (J)	
6/18/2015	3.9 (J)	
6/30/2015	2.9 (J)	
7/15/2015	2.6 (J)	
1/11/2016	4.5 (J)	
3/22/2016	4 (J)	
5/17/2016	4.1 (J)	
7/12/2016	5.2	
9/13/2016	5.5	
11/17/2016	5.9	
1/16/2017	6.6	
3/20/2017	<6.6	
5/23/2017	6	
10/18/2017	8	
11/27/2017	9.5	
12/16/2017	7.7 (RS)	
6/2/2018	12	
11/8/2018	10	
4/19/2019	10.1	
6/7/2019	8.98	
9/25/2019		8.87
11/29/2019		9.09

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

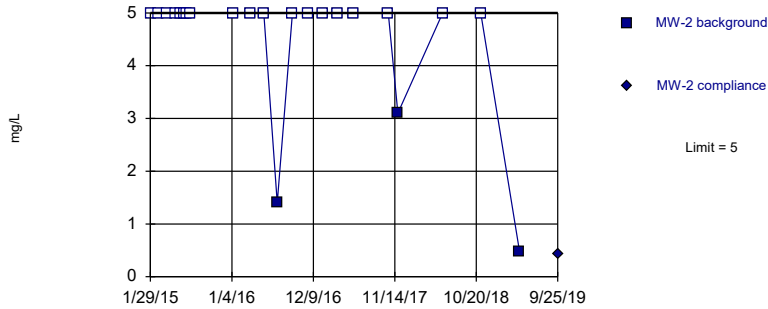
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-10	MW-10
3/22/2016	<5	
5/16/2016	<5	
7/12/2016	<5	
9/13/2016	1.6 (J)	
11/17/2016	<5	
1/17/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017	<5	
6/1/2018	2.1 (J)	
11/8/2018	<5	
4/19/2019	0.702 (J)	
9/25/2019		0.648 (J)

Within Limit

Prediction Limit  
Intrawell Non-parametric

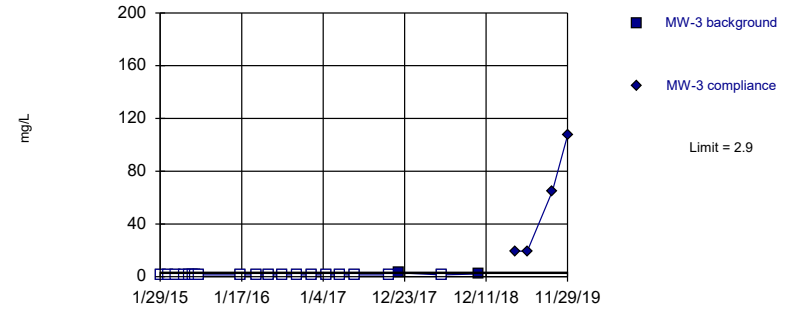


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric

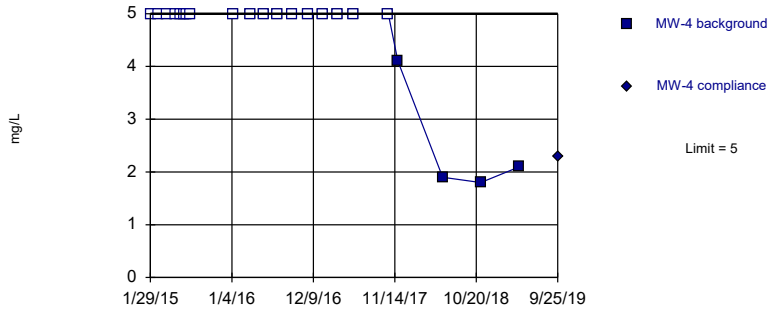


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 90.48% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

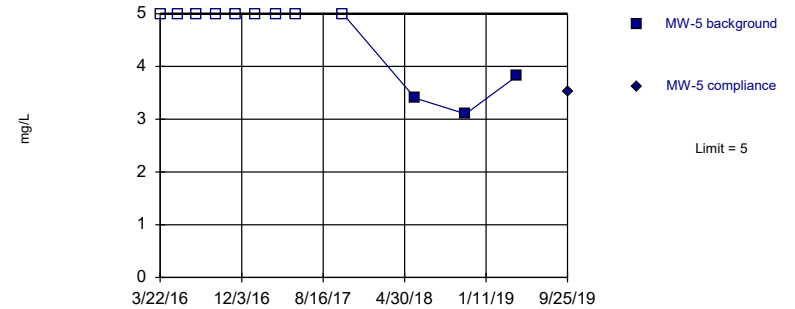


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 2:11 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

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 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
1/29/2015	<5	
3/3/2015	<5	
4/7/2015	<5	
5/14/2015	<5	
6/3/2015	<5	
6/18/2015	<5	
6/30/2015	<5	
7/15/2015	<5	
1/11/2016	<5	
3/22/2016	<5	
5/16/2016	<5	
7/11/2016	1.4 (J)	
9/13/2016	<5	
11/17/2016	<5	
1/16/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017	<5	
11/27/2017	3.1	
6/2/2018	<5	
11/8/2018	<5	
4/19/2019	0.468 (J)	
9/25/2019		0.436 (J)



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
1/29/2015	<1.4	
3/3/2015	<1.4	
4/7/2015	<1.4	
5/14/2015	<1.4	
6/3/2015	<1.4	
6/18/2015	<1.4	
6/30/2015	<1.4	
7/15/2015	<1.4	
1/11/2016	<1.4	
3/22/2016	<1.4	
5/16/2016	<1.4	
7/11/2016	<1.4	
9/12/2016	<1.4	
11/16/2016	<1.4	
1/16/2017	<1.4	
3/20/2017	<1.4	
5/22/2017	<1.4	
10/17/2017	<1.4	
11/27/2017	2.9	
6/2/2018	<1.4	
11/7/2018	2.1 (J)	
4/19/2019		19.5
6/7/2019		19.2
9/25/2019		65.1
11/29/2019		107

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
1/29/2015	<5	
3/3/2015	<5	
4/7/2015	<5	
5/14/2015	<5	
6/3/2015	<5	
6/18/2015	<5	
6/30/2015	<5	
7/15/2015	<5	
1/11/2016	<5	
3/22/2016	<5	
5/16/2016	<5	
7/12/2016	<5	
9/13/2016	<5	
11/16/2016	<5	
1/16/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017	<5	
11/27/2017	4.1	
6/2/2018	1.9 (J)	
11/8/2018	1.8 (J)	
4/19/2019	2.1	
9/25/2019		2.3

# Prediction Limit

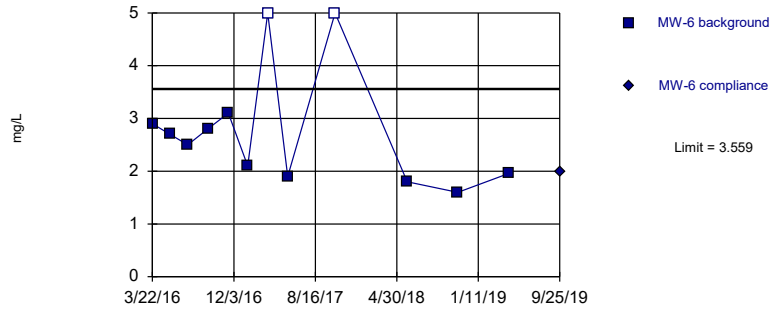
Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	<5	
5/17/2016	<5	
7/12/2016	<5	
9/13/2016	<5	
11/16/2016	<5	
1/16/2017	<5	
3/20/2017	<5	
5/23/2017	<5	
10/18/2017	<5	
6/2/2018	3.4 (J)	
11/8/2018	3.1 (J)	
4/19/2019	3.82	
9/25/2019		3.52

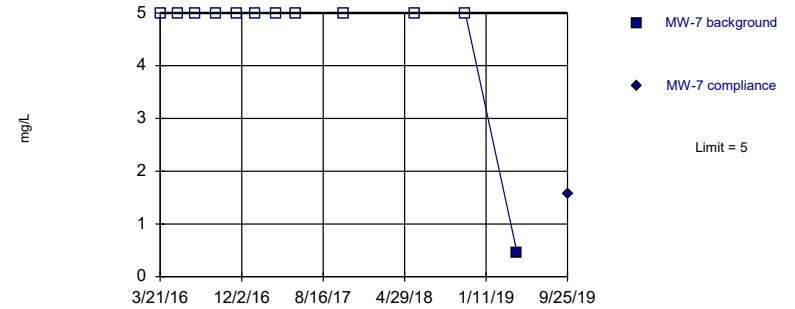
Within Limit  
 Prediction Limit  
 Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=2.336, Std. Dev.=0.4993, n=12, 16.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.82, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

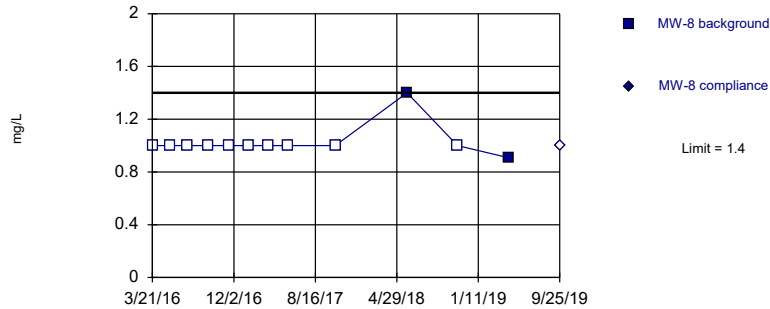
Within Limit  
 Prediction Limit  
 Intrawell Non-parametric



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

Constituent: Sulfate Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

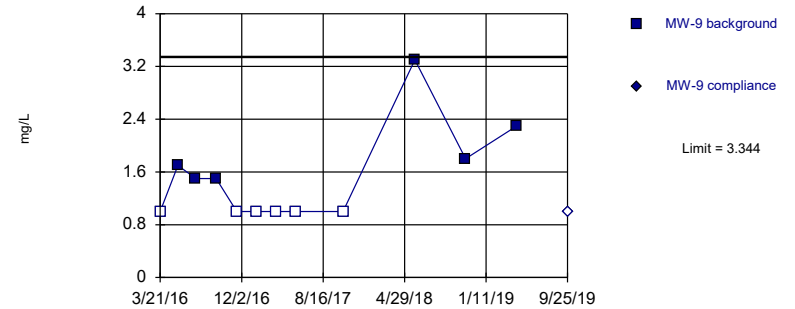
Within Limit  
 Prediction Limit  
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit  
 Prediction Limit  
 Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=1.114, Std. Dev.=0.1559, n=12, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8057, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	2.9 (J)	
5/16/2016	2.7 (J)	
7/11/2016	2.5 (J)	
9/12/2016	2.8 (J)	
11/16/2016	3.1 (J)	
1/16/2017	2.1	
3/20/2017	<5	
5/22/2017	1.9 (J)	
10/18/2017	<5	
6/2/2018	1.8 (J)	
11/8/2018	1.6 (J)	
4/19/2019	1.96	
9/25/2019		1.98

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	<5	
5/16/2016	<5	
7/11/2016	<5	
9/12/2016	<5	
11/16/2016	<5	
1/16/2017	<5	
3/20/2017	<5	
5/22/2017	<5	
10/18/2017	<5	
6/1/2018	<5	
11/7/2018	<5	
4/19/2019	0.449 (J)	
9/25/2019		1.57

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	<1	
5/17/2016	<1	
7/11/2016	<1	
9/13/2016	<1	
11/17/2016	<1	
1/17/2017	<1	
3/20/2017	<1	
5/23/2017	<1	
10/18/2017	<1	
6/1/2018	1.4 (J)	
11/7/2018	<1	
4/19/2019	0.906 (J)	
9/25/2019		<1

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

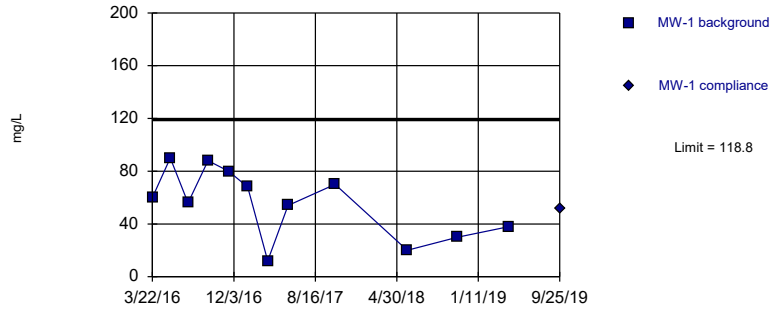
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	MW-9	MW-9
3/21/2016	<1	
5/16/2016	1.7 (J)	
7/11/2016	1.5 (J)	
9/13/2016	1.5 (J)	
11/17/2016	<1	
1/17/2017	<1	
3/20/2017	<1	
5/23/2017	<1	
10/18/2017	<1	
6/1/2018	3.3 (J)	
11/8/2018	1.8 (J)	
4/19/2019	2.3	
9/25/2019		<1



Within Limit

Prediction Limit  
Intrawell Parametric

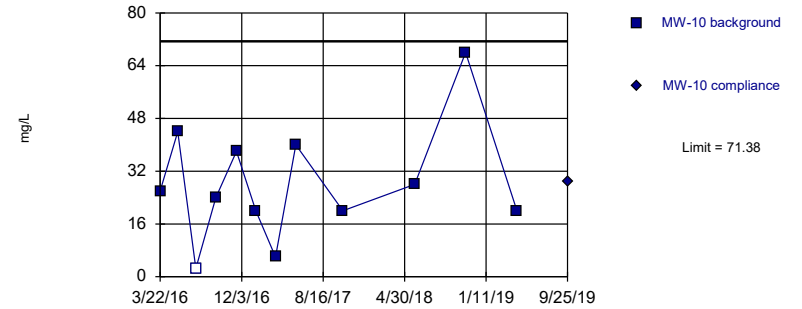


Background Data Summary: Mean=55.5, Std. Dev.=25.84, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

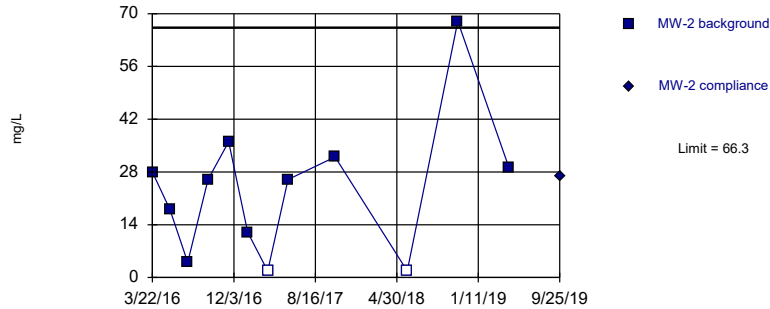


Background Data Summary: Mean=28.04, Std. Dev.=17.7, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9376, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

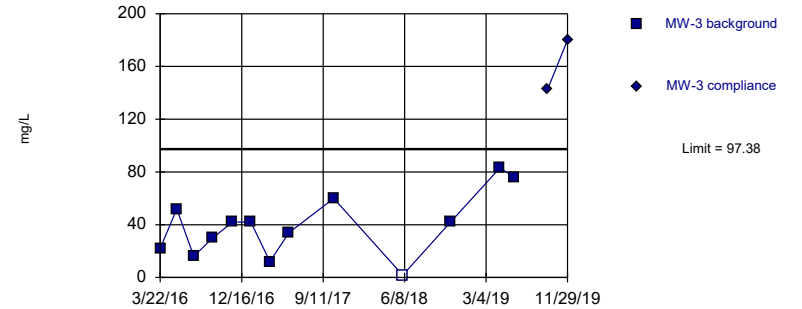


Background Data Summary (after Kaplan-Meier Adjustment): Mean=22.33, Std. Dev.=17.96, n=12, 16.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8902, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=39.44, Std. Dev.=24.12, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9706, critical = 0.814. Kappa = 2.402 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-1	MW-1
3/22/2016	60	
5/17/2016	90	
7/12/2016	56	
9/13/2016	88	
11/17/2016	80	
1/16/2017	68 (D)	
3/20/2017	12	
5/23/2017	54	
10/18/2017	70	
6/2/2018	20	
11/8/2018	30	
4/19/2019	38	
9/25/2019		52

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

---

	MW-10	MW-10
3/22/2016	26	
5/16/2016	44	
7/12/2016	<5	
9/13/2016	24	
11/17/2016	38	
1/17/2017	20 (D)	
3/20/2017	6	
5/23/2017	40	
10/18/2017	20	
6/1/2018	28	
11/8/2018	68	
4/19/2019	20	
9/25/2019		29

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-2	MW-2
3/22/2016	28	
5/16/2016	18	
7/11/2016	4 (J)	
9/13/2016	26	
11/17/2016	36	
1/16/2017	12	
3/20/2017	<3.4	
5/23/2017	26	
10/18/2017	32	
6/2/2018	<3.4	
11/8/2018	68	
4/19/2019	29	
9/25/2019		27

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: Intrawell PL

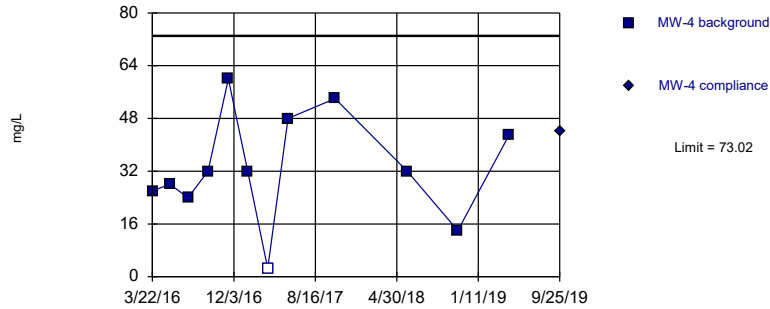
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-3	MW-3
3/22/2016	22	
5/16/2016	52	
7/11/2016	16	
9/12/2016	30	
11/16/2016	42	
1/16/2017	42	
3/20/2017	12	
5/22/2017	34	
10/17/2017	60	
6/2/2018	<3.4	
11/7/2018	42	
4/19/2019	83	
6/7/2019	76	
9/25/2019		143
11/29/2019		180

Within Limit

Prediction Limit  
Intrawell Parametric

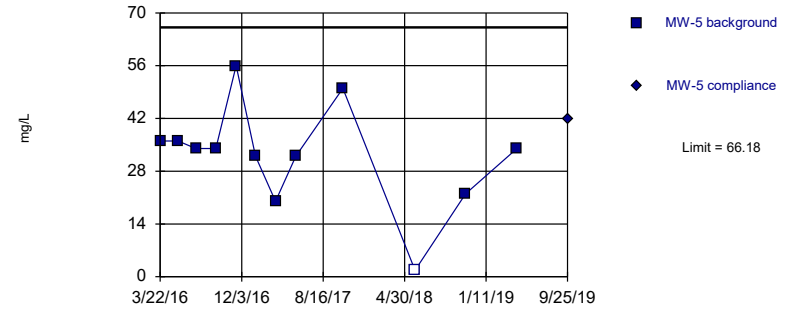


Background Data Summary: Mean=32.96, Std. Dev.=16.36, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9714, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

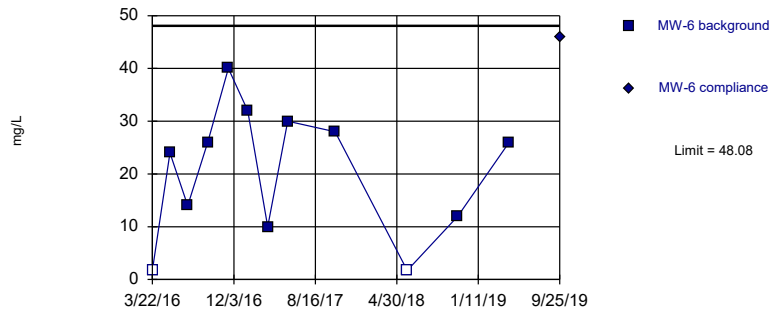


Background Data Summary: Mean=32.31, Std. Dev.=13.83, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9118, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

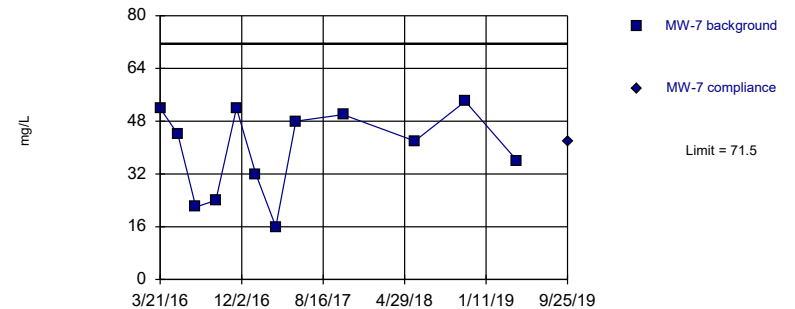


Background Data Summary (after Kaplan-Meier Adjustment): Mean=19.49, Std. Dev.=11.68, n=12, 16.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9353, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=39.33, Std. Dev.=13.14, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9016, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-4	MW-4
3/22/2016	26	
5/16/2016	28	
7/12/2016	24	
9/13/2016	32	
11/16/2016	60	
1/16/2017	32	
3/20/2017	<5	
5/23/2017	48	
10/18/2017	54	
6/2/2018	32	
11/8/2018	14	
4/19/2019	43	
9/25/2019		44

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-5	MW-5
3/22/2016	36	
5/17/2016	36	
7/12/2016	34	
9/13/2016	34	
11/16/2016	56	
1/16/2017	32	
3/20/2017	20	
5/23/2017	32	
10/18/2017	50	
6/2/2018	<3.4	
11/8/2018	22	
4/19/2019	34	
9/25/2019		42



# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-6	MW-6
3/22/2016	<3.4	
5/16/2016	24	
7/11/2016	14	
9/12/2016	26	
11/16/2016	40	
1/16/2017	32	
3/20/2017	10	
5/22/2017	30	
10/18/2017	28	
6/2/2018	<3.4	
11/8/2018	12	
4/19/2019	26	
9/25/2019		46

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

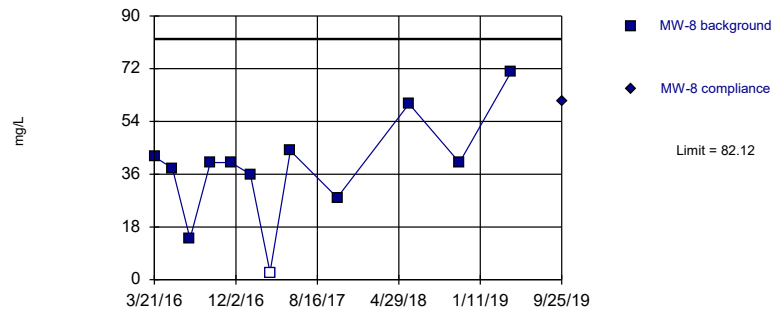
Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-7	MW-7
3/21/2016	52	
5/16/2016	44	
7/11/2016	22	
9/12/2016	24	
11/16/2016	52	
1/16/2017	32	
3/20/2017	16	
5/22/2017	48	
10/18/2017	50	
6/1/2018	42	
11/7/2018	54	
4/19/2019	36	
9/25/2019		42

Within Limit

Prediction Limit  
 Intrawell Parametric

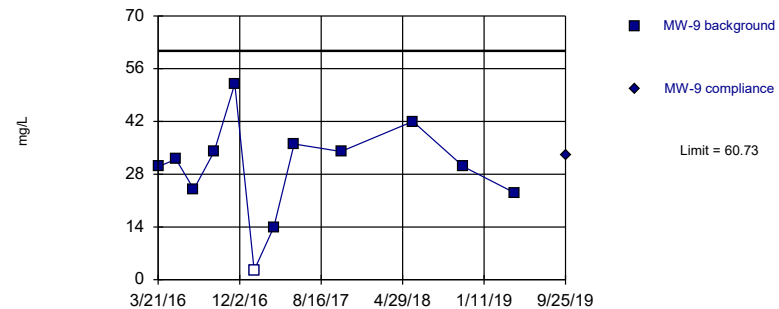


Background Data Summary: Mean=37.96, Std. Dev.=18.03, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9304, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Parametric



Background Data Summary: Mean=29.46, Std. Dev.=12.77, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9591, critical = 0.805. Kappa = 2.449 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:12 PM View: Intrawell PL  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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	MW-8	MW-8
3/21/2016	42	
5/17/2016	38	
7/11/2016	14	
9/13/2016	40	
11/17/2016	40	
1/17/2017	36	
3/20/2017	<5	
5/23/2017	44	
10/18/2017	28	
6/1/2018	60	
11/7/2018	40	
4/19/2019	71	
9/25/2019		61

# Prediction Limit

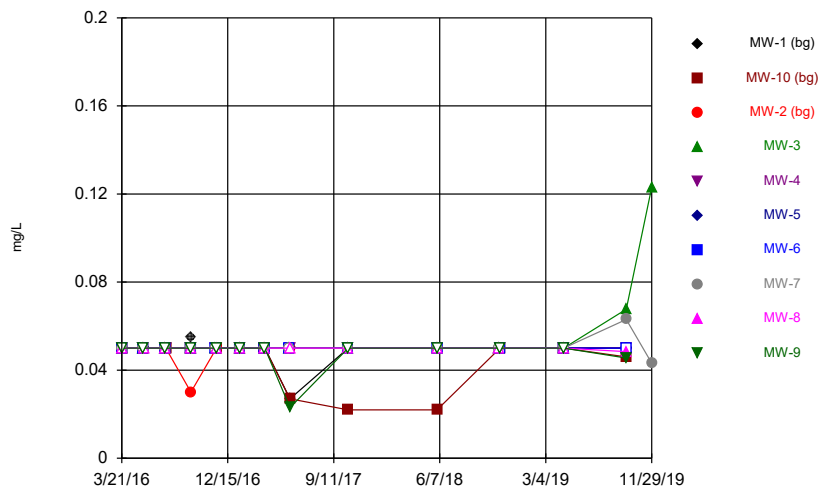
Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/3/2020 2:14 PM View: IntraWell PL

Plant Daniel Client: Southern Company Data: Gypsum CCR

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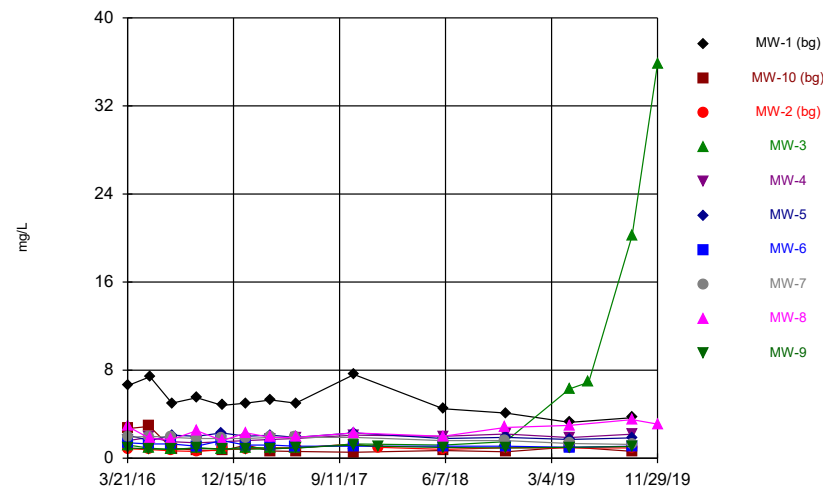
	MW-9	MW-9
3/21/2016	30	
5/16/2016	32	
7/11/2016	24	
9/13/2016	34	
11/17/2016	52	
1/17/2017	<5 (D)	
3/20/2017	14	
5/23/2017	36	
10/18/2017	34	
6/1/2018	42	
11/8/2018	30	
4/19/2019	23	
9/25/2019		33

### Time Series



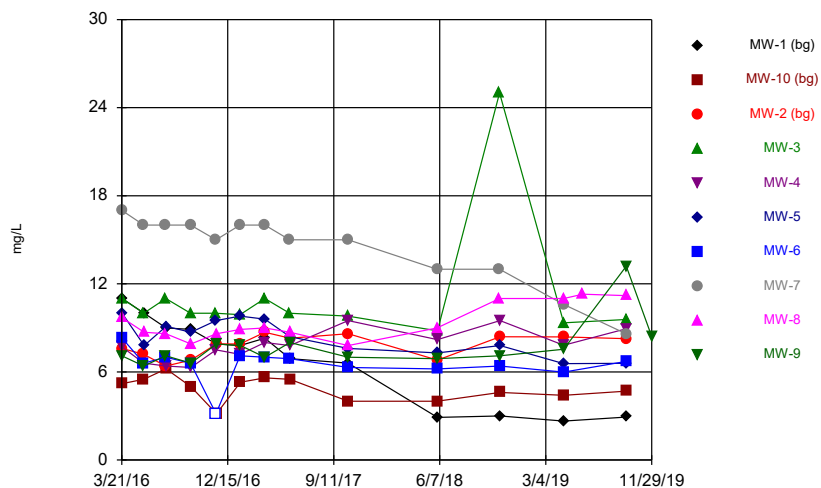
Constituent: Boron Analysis Run 1/3/2020 2:23 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Time Series



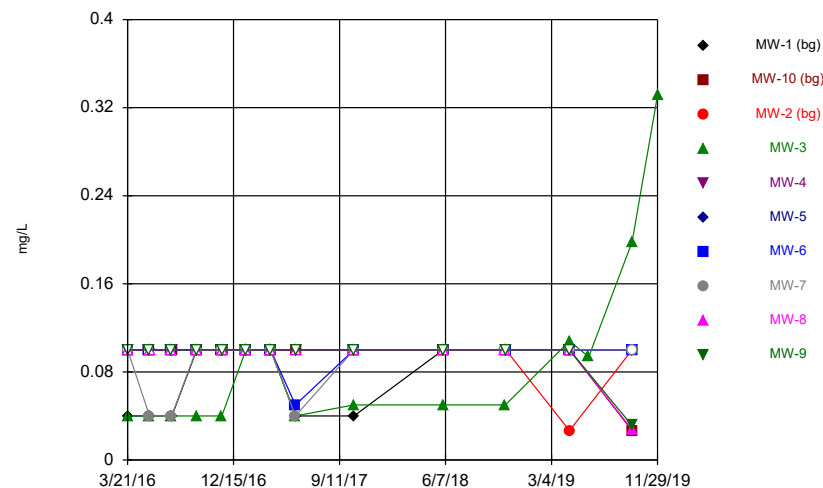
Constituent: Calcium Analysis Run 1/3/2020 2:23 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Time Series



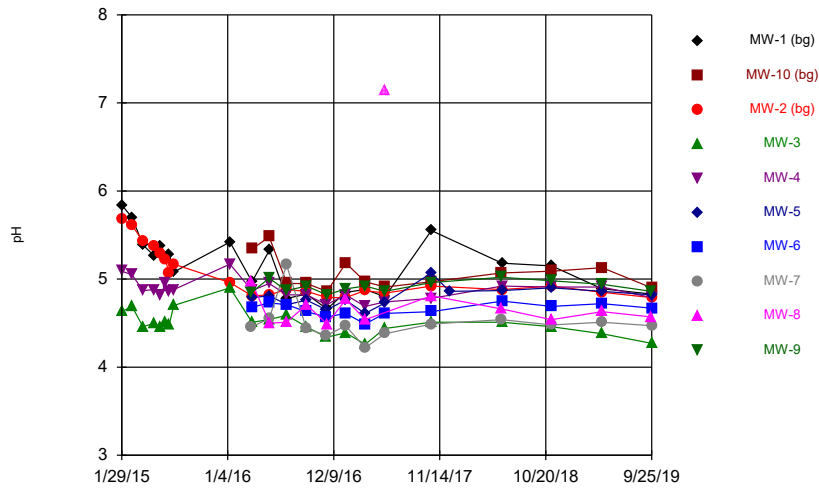
Constituent: Chloride Analysis Run 1/3/2020 2:23 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Time Series



Constituent: Fluoride Analysis Run 1/3/2020 2:24 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

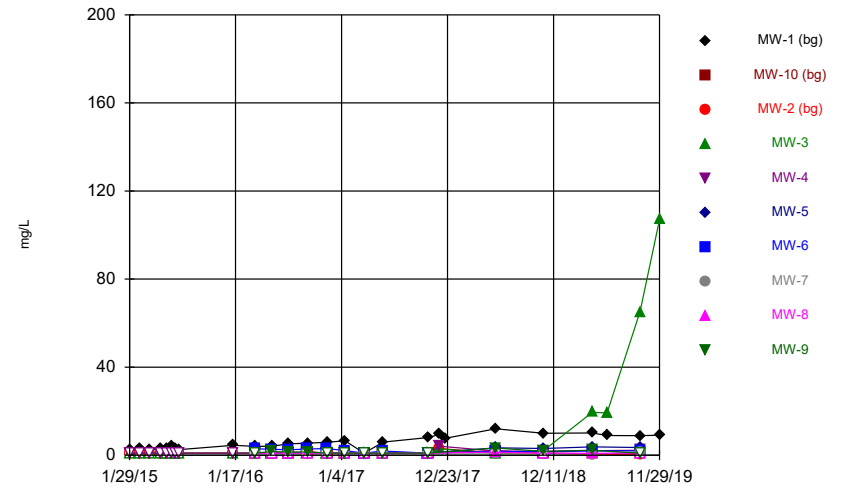
### Time Series



Constituent: pH Analysis Run 1/3/2020 2:24 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

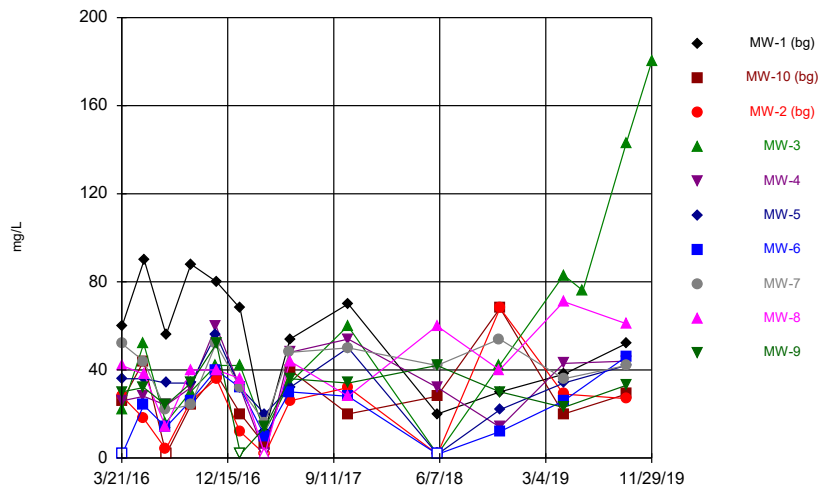
### Time Series



Constituent: Sulfate Analysis Run 1/3/2020 2:24 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

### Time Series



Constituent: Total Dissolved Solids Analysis Run 1/3/2020 2:24 PM View: Time Series  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Appendix C



**ALTERNATE SOURCE DEMONSTRATION**

**2019 First Semi-Annual Monitoring Event**

**MISSISSIPPI POWER COMPANY  
PLANT VICTOR DANIEL  
GYPSUM STORAGE AREA**

**November 15, 2019**

Prepared for

Mississippi Power Company  
Gulfport, Mississippi

By

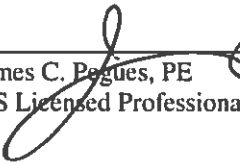
Southern Company Services  
Environmental Solutions




### CERTIFICATION STATEMENT

This Alternate Source Demonstration, Mississippi Power Company Plant Victor Daniel Gypsum Storage Area, has been prepared in compliance with applicable United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D; published in 80 FR 21302-21501, April 17, 2015) under the direction of a licensed professional engineer with Southern Company Services, Inc.

I hereby certify that the information presented in this Alternate Source Demonstration is accurate as required by 40 CFR § 257.94(e)(2).

  
James C. Pegues, PE  
MS Licensed Professional Engineer No. 18942



Date 11/15/19

Prepared by:

  
Lauren Parker  
Hydrogeologist

Date 11/15/19

  
Eric E. Wallis, PG  
Supervising Principal Hydrogeologist  
MS Licensed Geologist No. 0926



Date 11/15/19

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## FIGURE

Figure 1: Potentiometric Surface Contour Map – April 2019

## APPENDICES

Appendix A: Statistical Analysis

## **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; published in 80 FR 21302-21501, April 17, 2015) (CCR Rule or The Rule), this Alternate Source Demonstration, Mississippi Power Company Plant Victor Daniel (Plant Daniel) Gypsum Storage Area (GSA), has been prepared to document an alternate source for Statistically Significant Increases (SSIs) observed at the GSA during detection monitoring. This document is prepared to satisfy the requirements of §257.94(e)(2), which allows the owner or operator to demonstrate that a source other than the CCR Unit has caused an SSI or that the SSI was the result of errors in sampling, analysis, statistical evaluation, or caused by natural variation in groundwater quality.

## **2.0 BACKGROUND**

Plant Daniel GSA is presently in detection monitoring and the first semi-annual groundwater sampling of 2019 occurred in April. As detailed in the GSA's PE-certified statistical analysis plan, intrawell prediction limits (PL) are used to compare the most recent sample results to prediction limits constructed from historical data from within the same well to determine if any concentrations exceed background levels. The selected statistical method includes a 1-of-2 verification resample plan.

Following statistical analysis of analytical data from the April 2019 detection monitoring event and verification sampling conducted in June 2019, the SSIs at GSA include:

- Calcium: MW-3
- Chloride: MW-8
- Sulfate: MW-1 and MW-3
- Total Dissolved Solids (TDS): MW-3 and MW-8

As discussed in the following section, the SSIs identified at the GSA are attributed to natural variability in groundwater quality and are not from the CCR unit. Statistical analyses are included as Appendix A, Statistical Analysis.

## **3.0 ALTERNATE SOURCE DEMONSTRATION**

Pursuant to 40 CFR §257.94(e)(2), the following provides a demonstration that the SSIs reported during the 2019 first semi-annual detection monitoring event are not the result of a release from the GSA and that assessment monitoring is not required.

### 3.1 Chloride at MW-8

Review of statistical analysis for well MW-8 identified a chloride SSI resulting from a concentration slightly above the intrawell prediction limit (PL). This SSI is likely the result of natural variability not accommodated by the limited background data for the site. The following lines of evidence support this conclusion:

- Chloride concentrations are low and there is no discernable trend. Review of the prediction limit charts in Appendix A show that chloride concentrations in the well are low (11.3 milligrams per liter [mg/L]), and they only slightly exceed the prediction limit of 10.23 mg/L. Trend test results included in Appendix A indicate chloride trends in MW-8 are not statistically significant. A release from the unit would result in statistically significant increasing trends in chloride, which are not present in the data.
- Other Appendix III indicator parameters such as boron, calcium and sulfate would likely be detected at elevated concentrations if a release from the gypsum disposal area occurred. No other SSIs were observed in Appendix III parameters at MW-8.

Review of the statistical analysis for chloride shows that an SSI was the result of a slight increase in concentration following background monitoring. Based on review of site data and the information provided above, the SSI for chloride in well MW-8 is attributed to natural variability in site groundwater not accommodated by the background data set.

### 3.2 Sulfate at MW-1

Review of statistical analysis for well MW-1 identified a sulfate SSIs resulting from concentrations slightly above the intrawell prediction limit. MW-1 is located hydraulically upgradient of the GSA as shown on Figure 1. The sulfate SSI is likely the result of natural variability in groundwater migrating towards the GSA and not accommodated by the limited background data for the site. The following lines of evidence support this conclusion:

- Well MW-1 is a background well located hydraulically upgradient of the GSA with groundwater flow from the GSA occurring away from the well. For this well to be impacted by a release from the GSA groundwater flow would need to be reversed and flow toward the well. Review of groundwater elevations and groundwater elevation contour maps for the site indicates that has not occurred.

Based on the information provided above, the SSI for sulfate in upgradient background well MW-1 is not the result of a release from the GSA and is likely attributed to natural variability of groundwater

hydraulically upgradient of the GSA not accommodated by the background data set.

### **3.3 Calcium and Sulfate at MW-3**

SSIs for MW-3 were identified and verified for calcium and sulfate. As discussed below, the SSIs are not believed to be the result of a release from the GSA.

The increase in calcium and sulfate concentrations are limited to MW-3. A release from the GSA would likely result in lateral dispersion as the water migrates vertically through the unsaturated zone, and horizontally through the uppermost aquifer, resulting in a wide zone of impact that would be identifiable in multiple wells. This has not occurred. The fact that the increases are observed in a single well suggest a surficial or operational source in the immediate vicinity of the well.

Insufficient time has elapsed for a release from the GSA to reach well MW-3. Review of the groundwater elevation contour map (Figure 1) indicate that well MW-3 is located downgradient of only a small part of the northwest portion of the GSA. Review of the groundwater elevation contour map and inferred flow direction indicates that the nearest portion of the GSA upgradient of MW-3 is approximately 900 feet away. As reported in the *2018 Annual Groundwater Monitoring and Corrective Action Report*, the maximum groundwater flow velocity calculated at the site is approximately 73 feet/year. With a travel distance of 900 feet from the downgradient edge of the GSA to the well and a groundwater flow velocity of 73 feet/year, the travel time to MW-3 is approximately 12.3 years. Therefore, it will take approximately 12 years for a release from the nearest downgradient edge of the GSA to reach MW-3. Gypsum placement in the GSA began approximately 4 years ago in late 2015. There is insufficient time for the chloride and sulfate observed in MW-3 to have originated from the GSA. Therefore, based on groundwater flow velocity and time-of-travel, a release from the GSA cannot be a cause of the SSIs at well MW-3.

Discussions with MPC indicate that a pump failure associated with the clear water pond may have generated a small surface spill of water from the clear pool in the vicinity of well MW-3 in 2015. The pump failure was quickly corrected. Since other gypsum indicator parameters are not observed at this well, insufficient time has elapsed for calcium and sulfate from the GSA to reach MW-3, and information is available suggesting a surface spill near the well, we do not believe that these SSIs are the result of a release from the GSA.

### **3.4 TDS at MW-3 and MW-8**

Review of statistical analysis for MW-3 and MW-8 identified TDS SSIs resulting from concentrations slightly above the intrawell prediction limit. TDS is a gross measure of dissolved ions in a groundwater sample, including the specific Appendix III constituents identified as exhibiting SSIs. Therefore,

constituent increases identified above (i.e. for chloride, sulfate, and calcium) will reflect in the TDS concentration and result in a TDS SSI. The above lines of evidence for parameter-specific SSIs observed in wells MW-3 and MW-8 apply to the corresponding increase observed in TDS.

Based on the above, the SSIs observed in the first semi-annual 2019 monitoring event are the result of natural groundwater chemistry variation or are not the result of a release from the GSA. In accordance with §257.94(e)(2), this ASDs demonstrates that the SSIs are not the result of a release from the GSA.

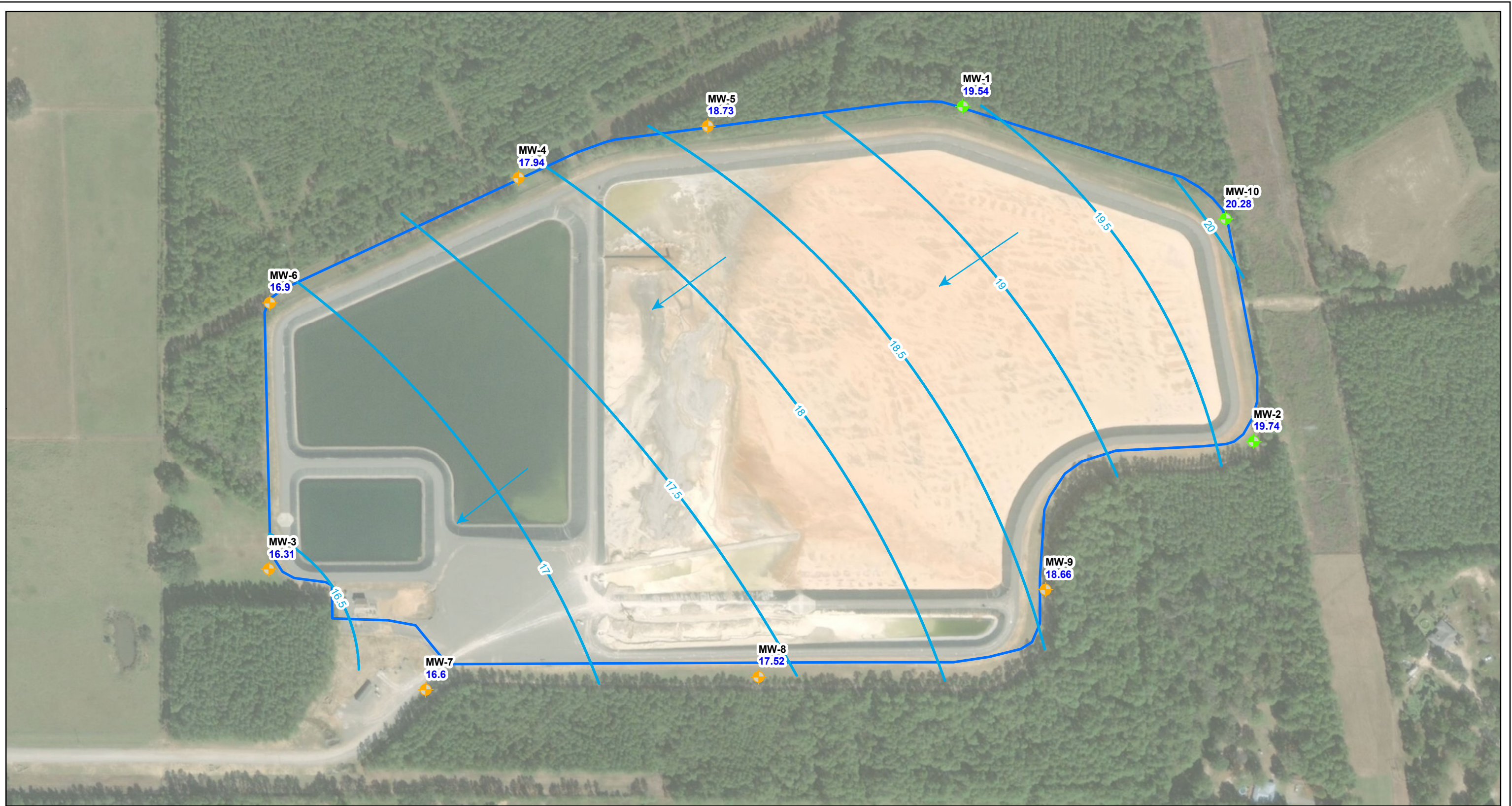
#### **4.0 CONCLUSION**

This ASD has been prepared in response to SSIs identified for calcium, chloride, sulfate and TDS in groundwater monitoring wells at the site. In accordance with §257.94(e)(2), this ASD demonstrates that the SSIs are not the result of a release from the GSA. Therefore, in accordance with §257.94(e)(2), the GSA will remain in detection monitoring.

**FIGURE 1**

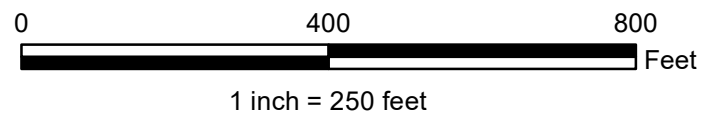
**Potentiometric Surface Contour Map – April 2019**





- LEGEND:
- Background Monitoring Well
  - Compliance Monitoring Well
  - Estimated Potentiometric Surface Contour
  - Approximate Groundwater Flow Direction

	Gypsum Storage Area
<b>MW-1</b> 19.54	Well Name Groundwater Elevation (ft NAVD88)



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

SCALE	1:3000	DRAWING TITLE <b>FIGURE 1</b> POTENTIOMETRIC SURFACE CONTOUR MAP - APRIL 2019 PLANT DANIEL GYPSUM STORAGE AREA
DATE	11/15/2019	
DRAWN BY	LEP	DRAWING NO
CHECKED BY	LMP	





## **APPENDIX A**

### **Statistical Analysis**

# Intrawell Prediction Limit - Significant Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 9/10/2019, 1:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	MW-3	1.31	n/a	4/19/2019	6.3	Yes	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-8	10.23	n/a	4/19/2019	11	Yes	8	0	No	0.001075	Param Intra 1 of 2
Fluoride (mg/L)	MW-3	0.1	n/a	4/19/2019	0.108	Yes	8	25	n/a	0.02144	NP Intra (normality) ...
Sulfate (mg/L)	MW-1	7.53	n/a	4/19/2019	10.1	Yes	17	5.882	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	1.4	n/a	4/19/2019	19.5	Yes	16	100	n/a	0.006456	NP Intra (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-3	71.98	n/a	4/19/2019	83	Yes	8	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-8	57.86	n/a	4/19/2019	71	Yes	8	12.5	x^2	0.001075	Param Intra 1 of 2

# Intrawell Prediction Limit - All Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 9/10/2019, 1:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	MW-1	0.05	n/a	4/19/2019	0.05ND	No	7	85.71	n/a	0.02765	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-2	0.05	n/a	4/19/2019	0.05ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-3	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-4	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-5	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-6	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-7	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-8	0.05	n/a	4/19/2019	0.05ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-9	0.05	n/a	4/19/2019	0.05ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Boron (mg/L)	MW-10	0.05	n/a	4/19/2019	0.05ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Calcium (mg/L)	MW-1	8.293	n/a	4/19/2019	3.26	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-2	1.162	n/a	4/19/2019	0.942	No	8	0	No	0.001075	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>MW-3</b>	<b>1.31</b>	<b>n/a</b>	<b>4/19/2019</b>	<b>6.3</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	MW-4	2.113	n/a	4/19/2019	1.88	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-5	2.606	n/a	4/19/2019	1.7	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-6	1.763	n/a	4/19/2019	0.998	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-7	2.082	n/a	4/19/2019	1.34	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-8	3.389	n/a	4/19/2019	2.99	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-9	1.047	n/a	4/19/2019	1	No	8	0	No	0.001075	Param Intra 1 of 2
Calcium (mg/L)	MW-10	4.778	n/a	4/19/2019	1.03	No	8	0	sqrt(x)	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-1	12.54	n/a	4/19/2019	2.65	No	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-2	9.842	n/a	4/19/2019	8.38	No	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-3	11	n/a	4/19/2019	9.34	No	8	0	n/a	0.02144	NP Intra (normality) ...
Chloride (mg/L)	MW-4	14.63	n/a	4/19/2019	7.82	No	8	0	n/a	0.02144	NP Intra (normality) ...
Chloride (mg/L)	MW-5	11.34	n/a	4/19/2019	6.57	No	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-6	9.581	n/a	4/19/2019	5.99	No	8	12.5	x^2	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-7	17.75	n/a	4/19/2019	10.6	No	8	0	No	0.001075	Param Intra 1 of 2
<b>Chloride (mg/L)</b>	<b>MW-8</b>	<b>10.23</b>	<b>n/a</b>	<b>4/19/2019</b>	<b>11</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Chloride (mg/L)	MW-9	8.998	n/a	4/19/2019	7.55	No	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-10	7.793	n/a	4/19/2019	4.41	No	8	12.5	No	0.001075	Param Intra 1 of 2
Fluoride (mg/L)	MW-1	0.1	n/a	4/19/2019	0.1ND	No	8	50	n/a	0.02144	NP Intra (normality) ...
Fluoride (mg/L)	MW-2	0.1	n/a	4/19/2019	0.0267	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>MW-3</b>	<b>0.1</b>	<b>n/a</b>	<b>4/19/2019</b>	<b>0.108</b>	<b>Yes</b>	<b>8</b>	<b>25</b>	<b>n/a</b>	<b>0.02144</b>	<b>NP Intra (normality) ...</b>
Fluoride (mg/L)	MW-4	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-5	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-6	0.1	n/a	4/19/2019	0.1ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-7	0.1	n/a	4/19/2019	0.1ND	No	8	62.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-8	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-9	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	MW-10	0.1	n/a	4/19/2019	0.1ND	No	8	100	n/a	0.02144	NP Intra (NDs) 1 of 2
pH (pH)	MW-1	5.912	4.402	4/19/2019	4.89	No	17	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-2	5.755	4.417	4/19/2019	4.85	No	17	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-3	4.856	4.185	4/19/2019	4.38	No	17	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-4	5.17	4.593	4/19/2019	4.91	No	17	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-5	4.928	4.527	4/19/2019	4.86	No	8	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-6	4.858	4.4	4/19/2019	4.72	No	8	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-7	5.329	3.681	4/19/2019	4.51	No	8	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-8	5.234	4.049	4/19/2019	4.63	No	7	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-9	5.063	4.722	4/19/2019	4.94	No	8	0	No	0.000...	Param Intra 1 of 2
pH (pH)	MW-10	5.744	4.416	4/19/2019	5.13	No	8	0	No	0.000...	Param Intra 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-1</b>	<b>7.53</b>	<b>n/a</b>	<b>4/19/2019</b>	<b>10.1</b>	<b>Yes</b>	<b>17</b>	<b>5.882</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Sulfate (mg/L)	MW-2	5	n/a	4/19/2019	0.468	No	17	94.12	n/a	0.005914	NP Intra (NDs) 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-3</b>	<b>1.4</b>	<b>n/a</b>	<b>4/19/2019</b>	<b>19.5</b>	<b>Yes</b>	<b>16</b>	<b>100</b>	<b>n/a</b>	<b>0.006456</b>	<b>NP Intra (NDs) 1 of 2</b>
Sulfate (mg/L)	MW-4	5	n/a	4/19/2019	2.1	No	16	100	n/a	0.006456	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-5	5	n/a	4/19/2019	3.82	No	7	100	n/a	0.02765	NP Intra (NDs) 1 of 2

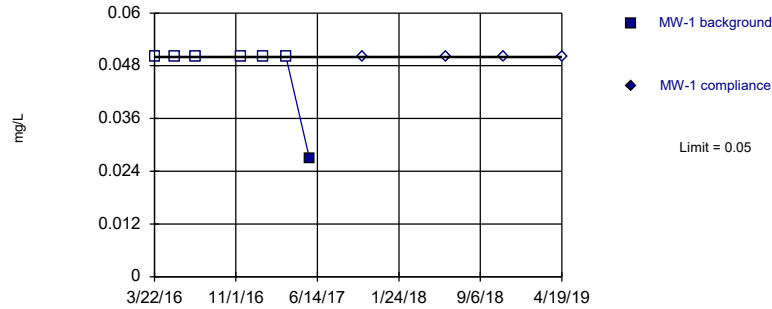
# Intrawell Prediction Limit - All Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 9/10/2019, 1:34 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate (mg/L)	MW-6	6.127	n/a	4/19/2019	1.96	No	7	14.29	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-7	5	n/a	4/19/2019	0.449	No	7	100	n/a	0.02765	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-8	5	n/a	4/19/2019	0.906	No	7	100	n/a	0.02765	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-9	5	n/a	4/19/2019	2.3	No	7	57.14	n/a	0.02765	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	MW-10	5	n/a	4/19/2019	0.702	No	7	85.71	n/a	0.02765	NP Intra (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-1	136.8	n/a	4/19/2019	38	No	8	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-2	54.63	n/a	4/19/2019	29	No	8	12.5	No	0.001075	Param Intra 1 of 2
<b>Total Dissolved Solids (mg/L)</b>	<b>MW-3</b>	<b>71.98</b>	<b>n/a</b>	<b>4/19/2019</b>	<b>83</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Total Dissolved Solids (mg/L)	MW-4	81.27	n/a	4/19/2019	43	No	8	12.5	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-5	63.98	n/a	4/19/2019	34	No	8	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-6	59.31	n/a	4/19/2019	26	No	8	12.5	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-7	78.68	n/a	4/19/2019	36	No	8	0	No	0.001075	Param Intra 1 of 2
<b>Total Dissolved Solids (mg/L)</b>	<b>MW-8</b>	<b>57.86</b>	<b>n/a</b>	<b>4/19/2019</b>	<b>71</b>	<b>Yes</b>	<b>8</b>	<b>12.5</b>	<b>x^2</b>	<b>0.001075</b>	<b>Param Intra 1 of 2</b>
Total Dissolved Solids (mg/L)	MW-9	71.67	n/a	4/19/2019	23	No	8	12.5	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-10	69.92	n/a	4/19/2019	20	No	8	12.5	No	0.001075	Param Intra 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

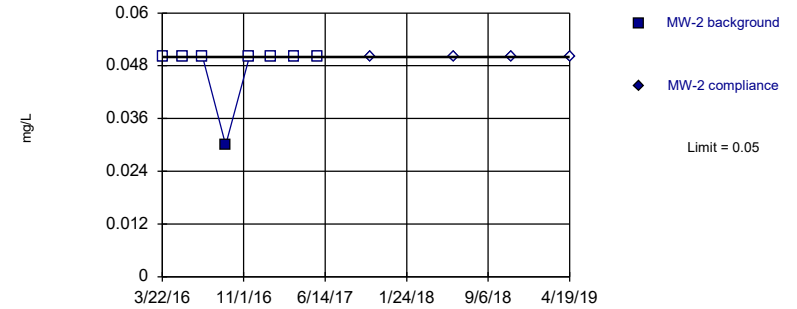


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:10 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

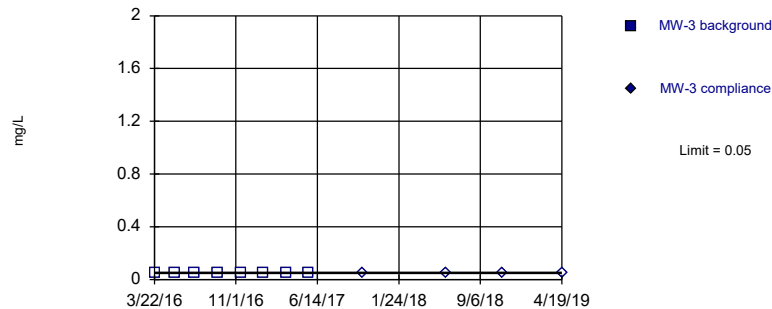


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:10 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

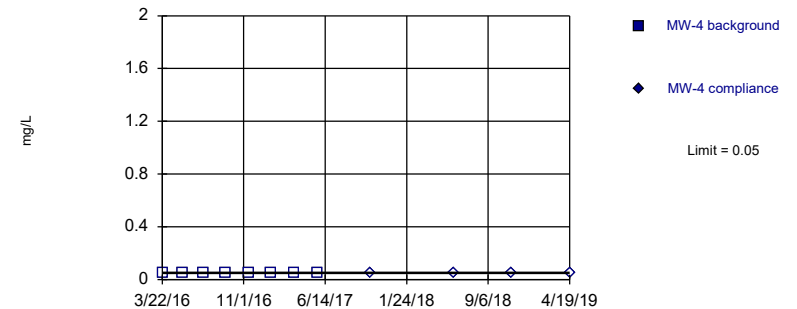


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:10 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

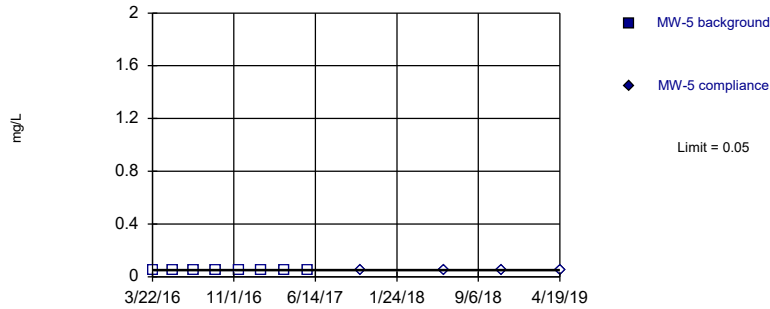


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:10 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

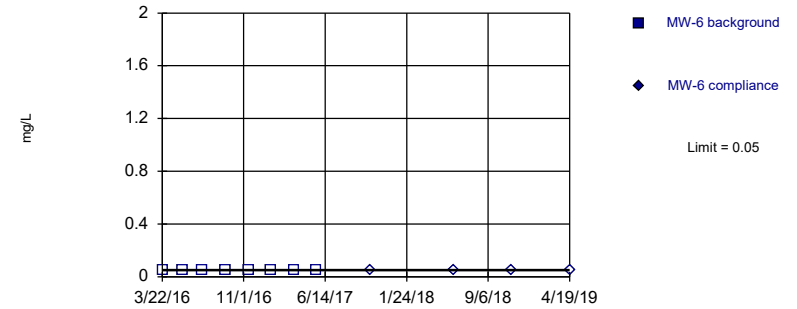


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:10 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

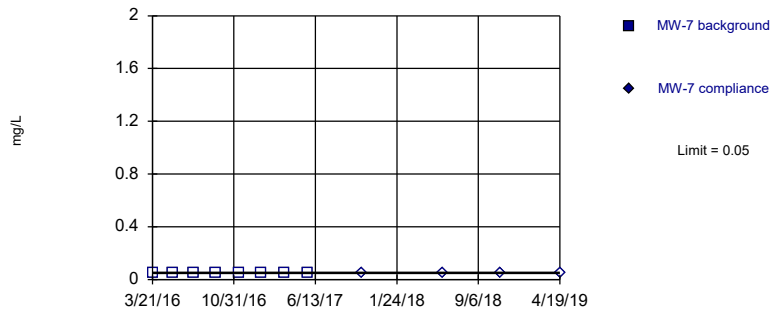


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:10 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

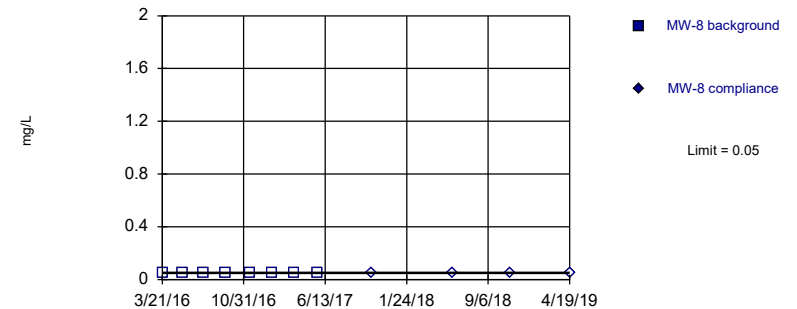


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:10 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

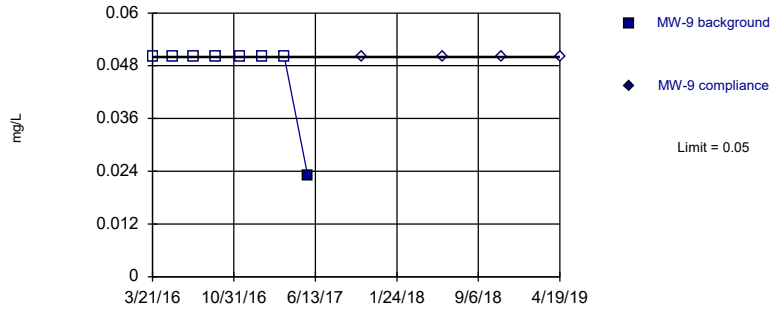


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

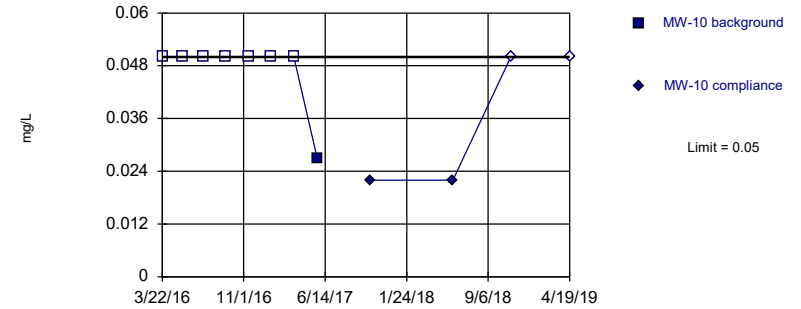


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

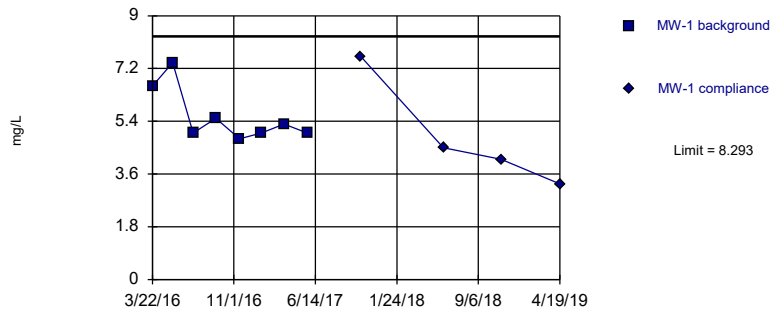


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Boron Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

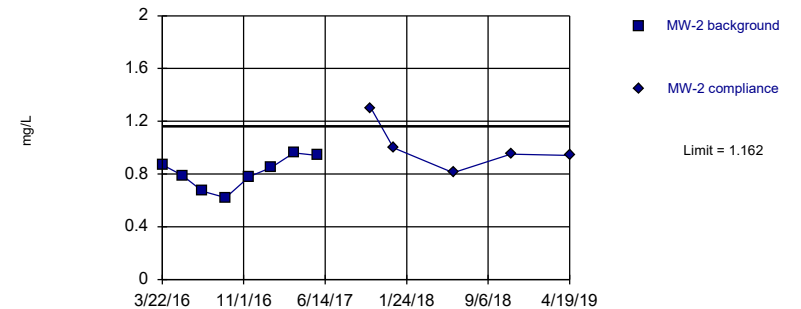


Background Data Summary: Mean=5.575, Std. Dev.=0.9301, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7876, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



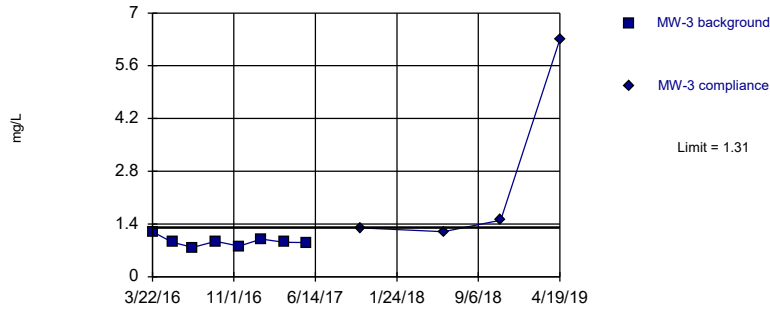
Background Data Summary: Mean=0.81, Std. Dev.=0.1205, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9474, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR



Exceeds Limit

Prediction Limit  
Intrawell Parametric

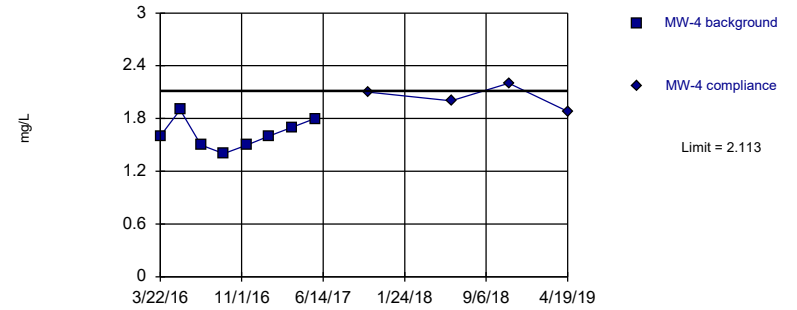


Background Data Summary: Mean=0.935, Std. Dev.=0.1283, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8863, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

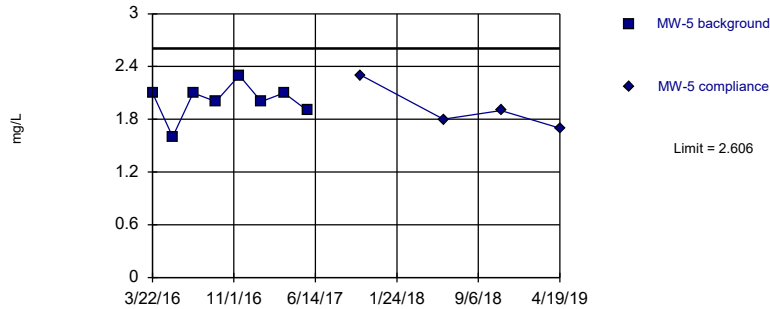


Background Data Summary: Mean=1.625, Std. Dev.=0.1669, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9587, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

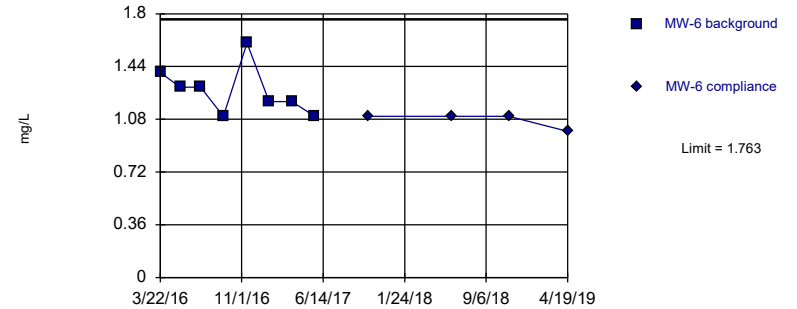


Background Data Summary: Mean=2.013, Std. Dev.=0.2031, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9006, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

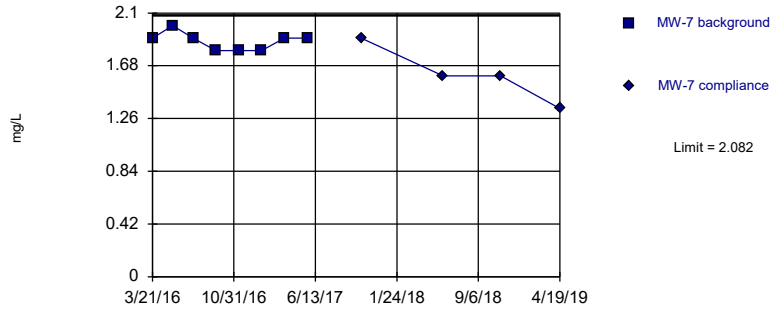
Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=1.275, Std. Dev.=0.1669, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.907, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

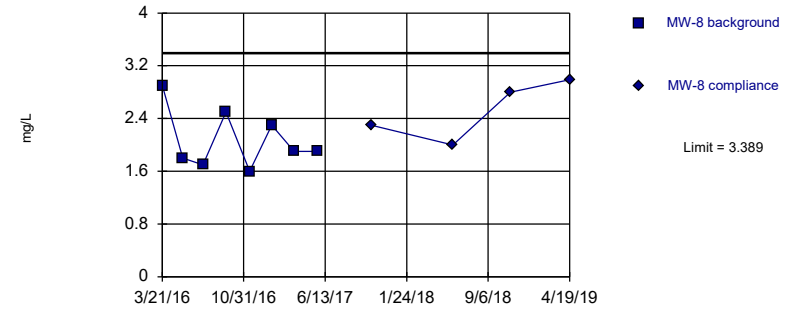
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=1.875, Std. Dev.=0.07071, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8268, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

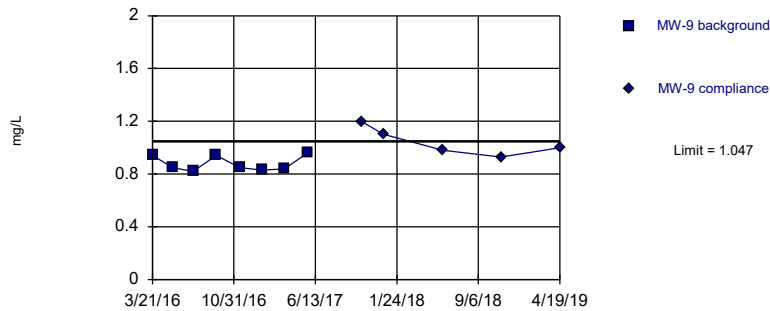
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=2.075, Std. Dev.=0.4496, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8977, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

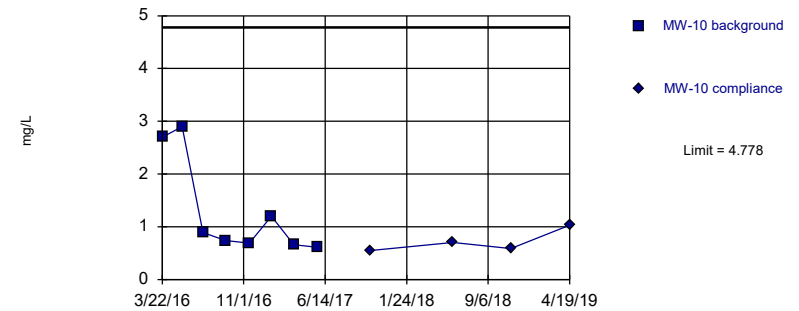
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=0.8788, Std. Dev.=0.05743, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8125, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

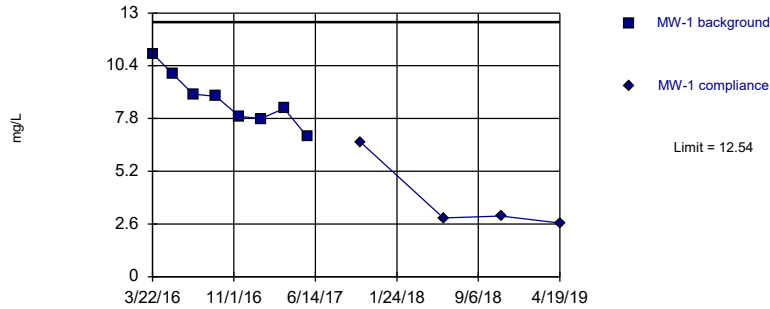
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.084, Std. Dev.=0.3771, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7632, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

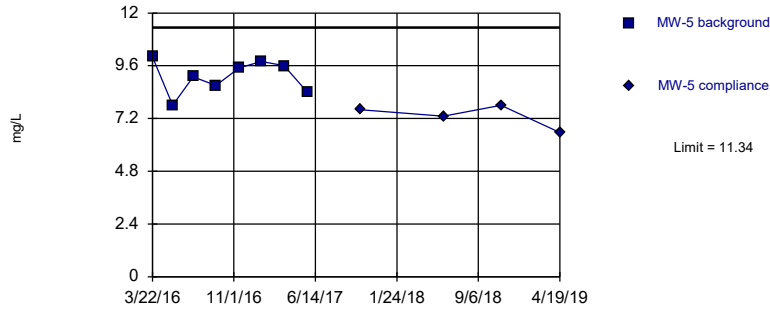
Constituent: Calcium Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit Prediction Limit  
Intrawell Parametric



Within Limit

Prediction Limit  
Intrawell Parametric

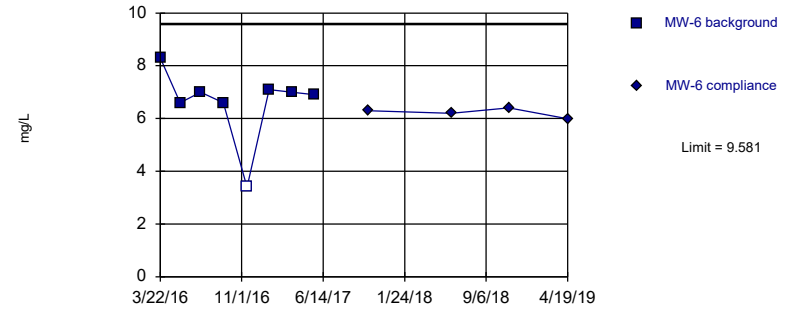


Background Data Summary: Mean=9.113, Std. Dev.=0.7605, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9428, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

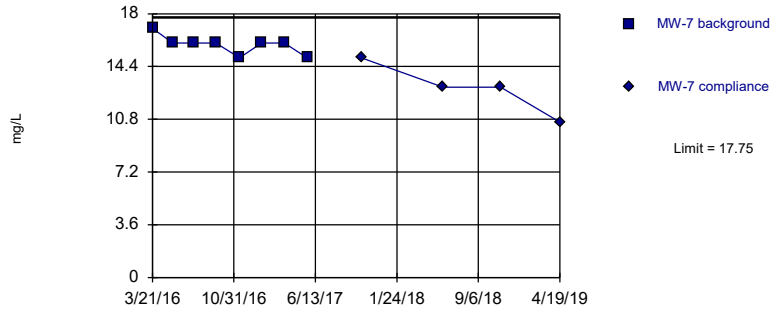


Background Data Summary (based on square transformation): Mean=45.45, Std. Dev.=15.85, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8159, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

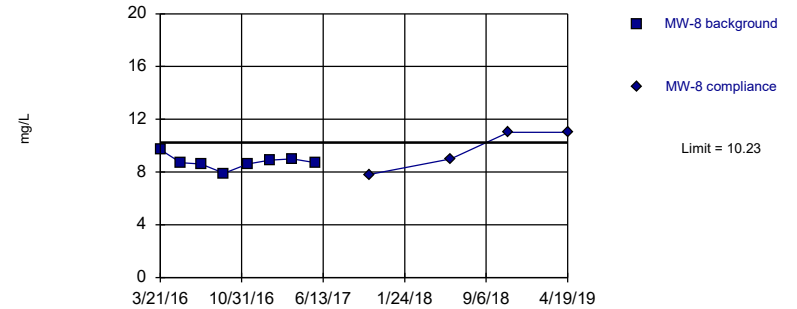


Background Data Summary: Mean=15.88, Std. Dev.=0.6409, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8108, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric

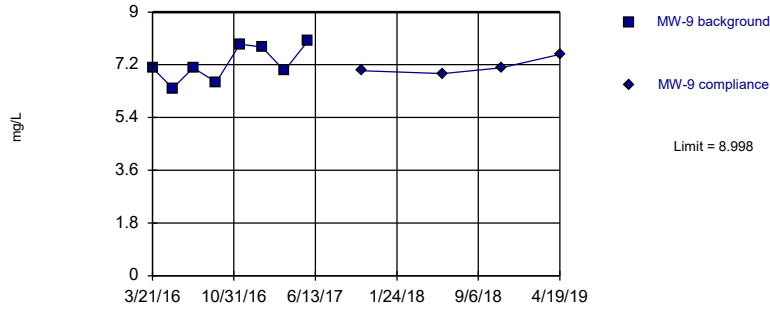


Background Data Summary: Mean=8.763, Std. Dev.=0.5012, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9145, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

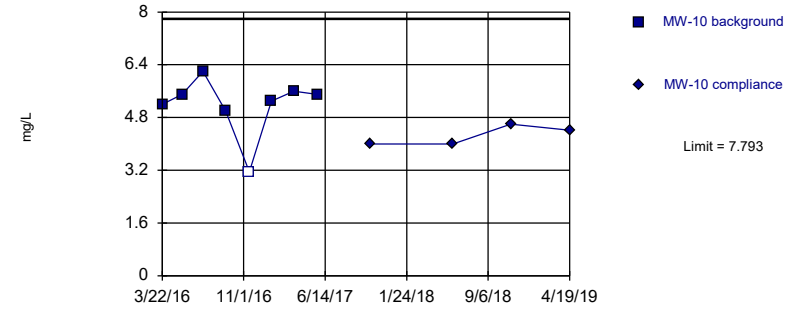


Background Data Summary: Mean=7.238, Std. Dev.=0.6022, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.909, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



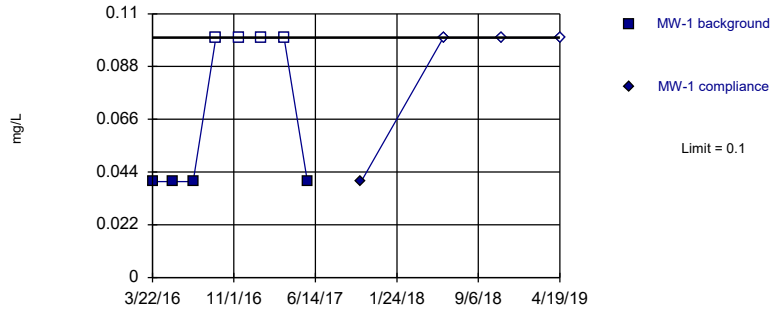
Background Data Summary: Mean=5.181, Std. Dev.=0.8936, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7884, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



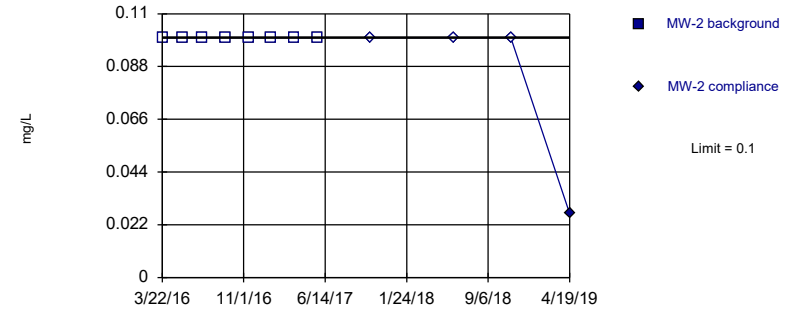
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 50% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

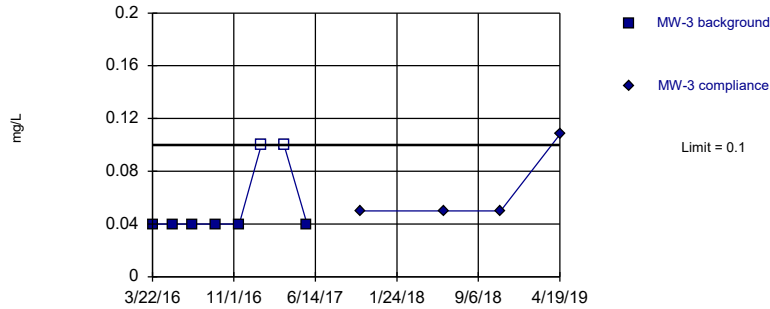


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric

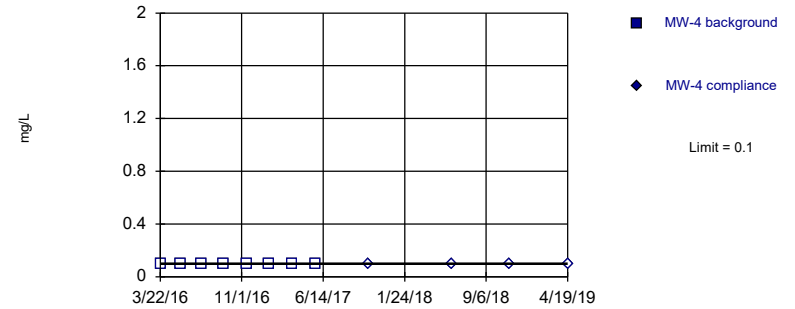


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 25% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

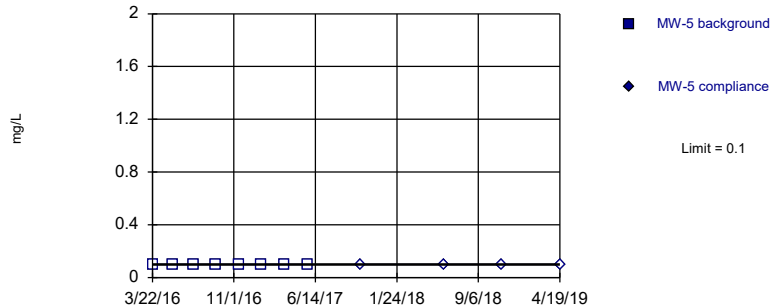


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

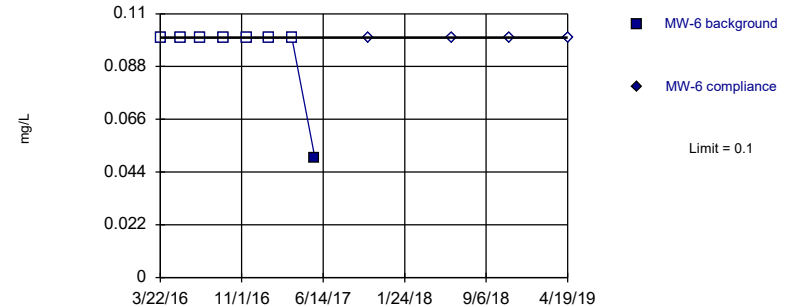


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

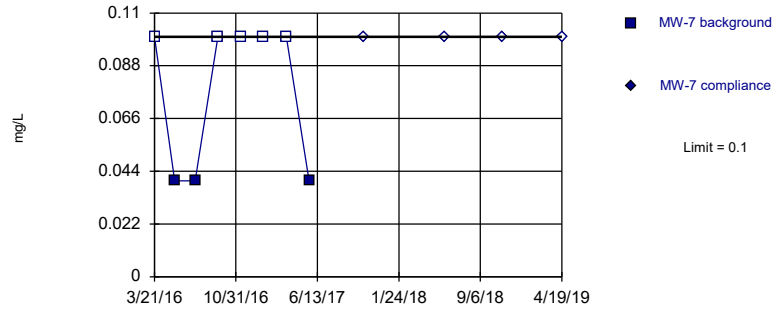


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

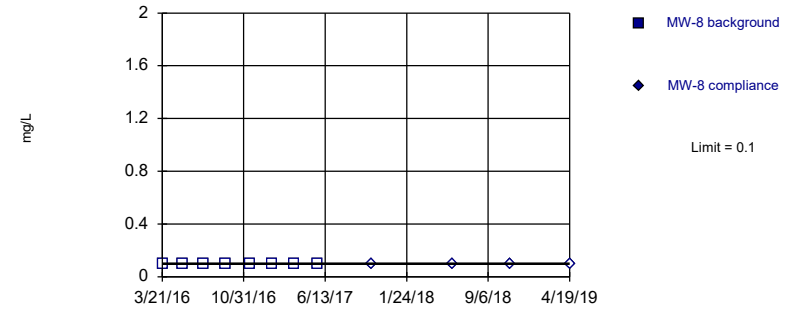


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

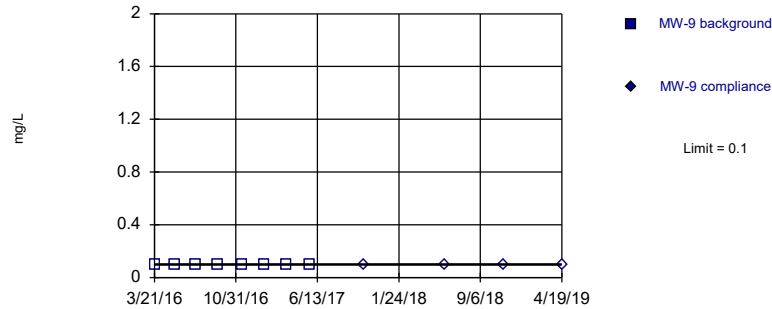


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:11 PM View: Intrawell PLs  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

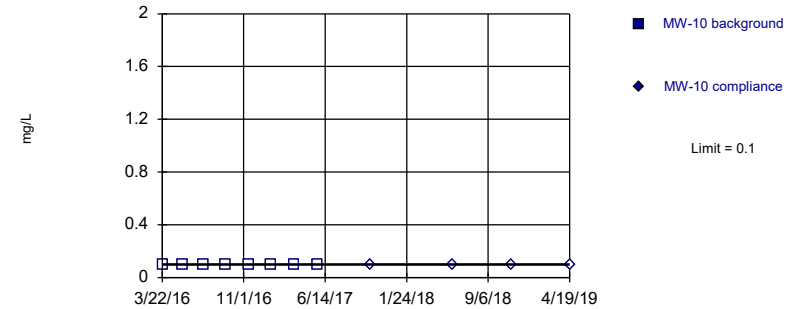


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

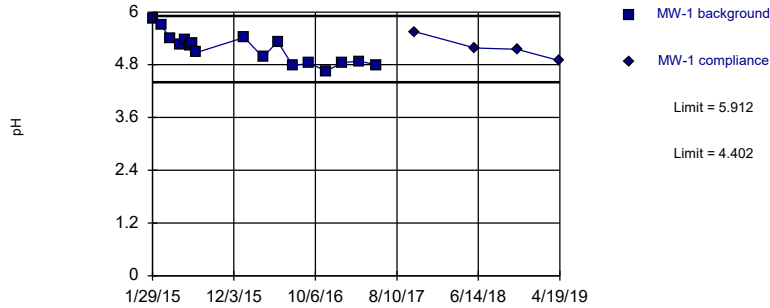


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

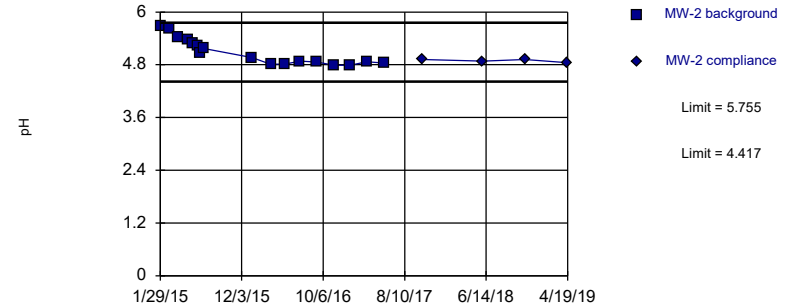


Background Data Summary: Mean=5.157, Std. Dev.=0.3379, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9456, critical = 0.851. Kappa = 2.235 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

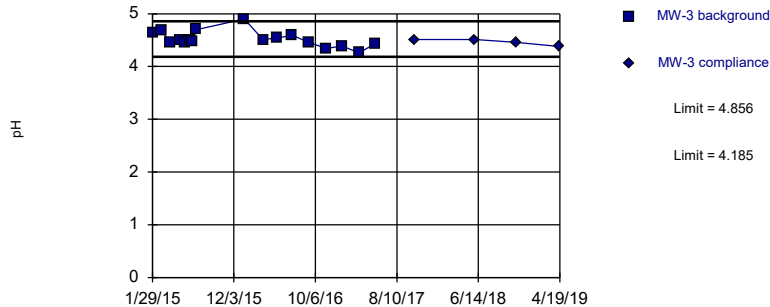


Background Data Summary: Mean=5.086, Std. Dev.=0.2992, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8673, critical = 0.851. Kappa = 2.235 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

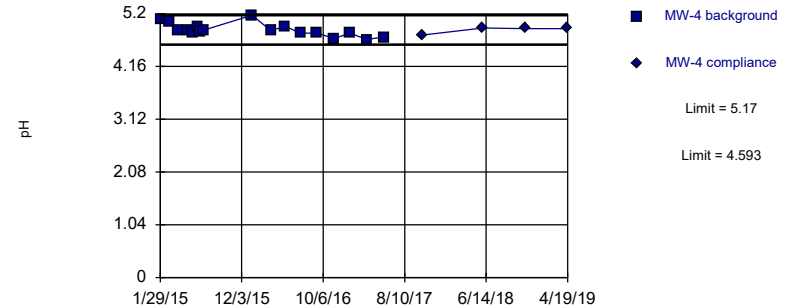


Background Data Summary: Mean=4.521, Std. Dev.=0.1501, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9477, critical = 0.851. Kappa = 2.235 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric



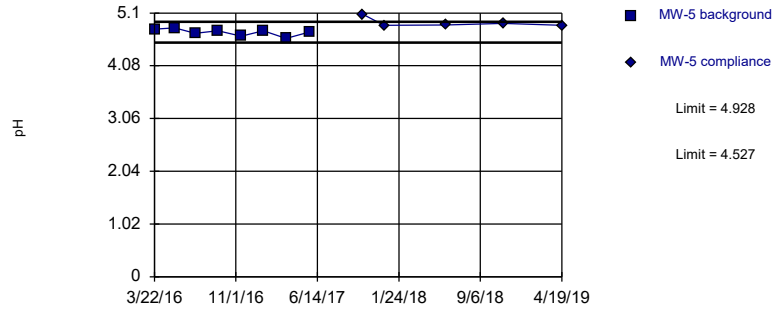
Background Data Summary: Mean=4.882, Std. Dev.=0.129, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.851. Kappa = 2.235 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR



Within Limits

Prediction Limit  
Intrawell Parametric

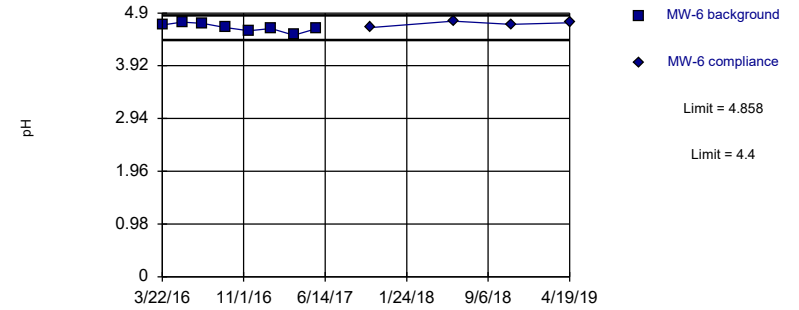


Background Data Summary: Mean=4.728, Std. Dev.=0.06861, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9373, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

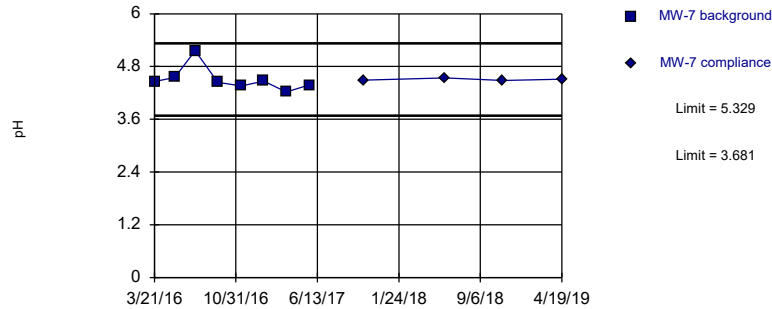


Background Data Summary: Mean=4.629, Std. Dev.=0.07827, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9596, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

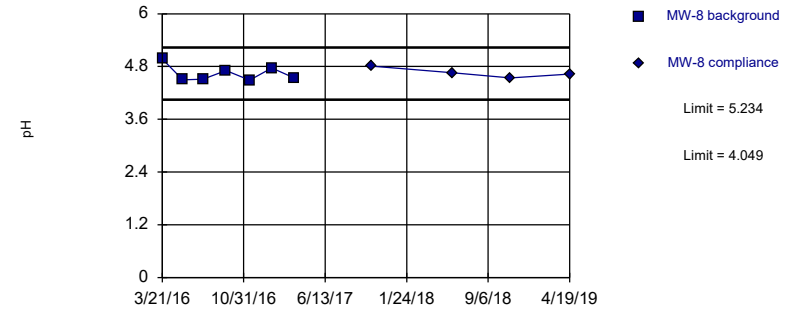


Background Data Summary: Mean=4.505, Std. Dev.=0.2819, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7496, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

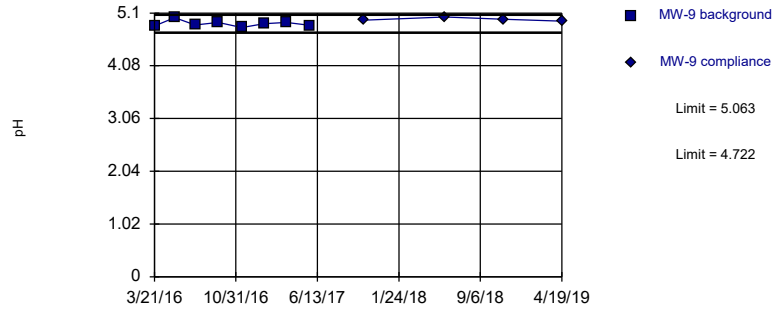


Background Data Summary: Mean=4.641, Std. Dev.=0.1824, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8379, critical = 0.73. Kappa = 3.249 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

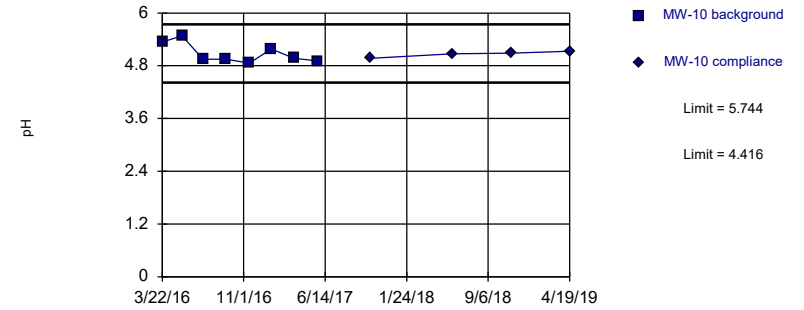


Background Data Summary: Mean=4.893, Std. Dev.=0.05849, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9234, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Parametric

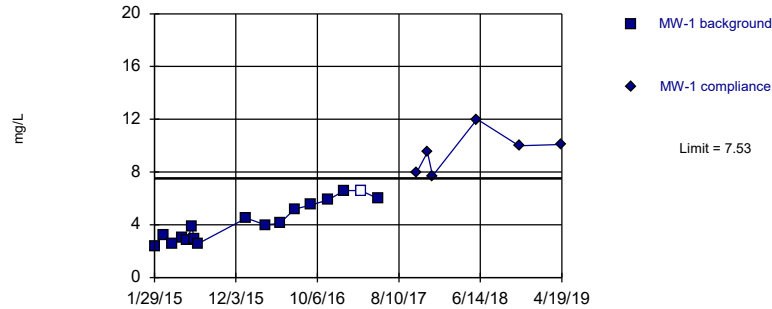


Background Data Summary: Mean=5.08, Std. Dev.=0.227, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.846, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric

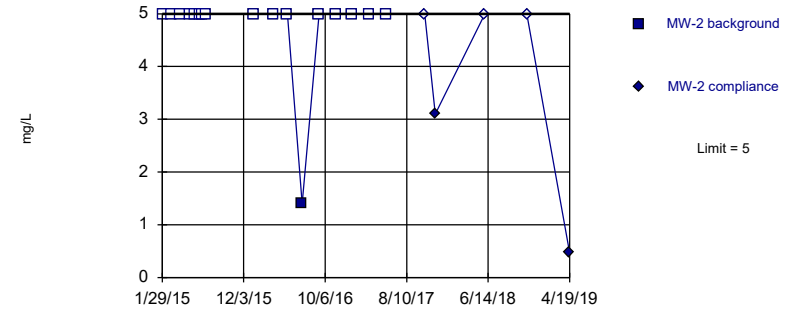


Background Data Summary: Mean=4.224, Std. Dev.=1.479, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9013, critical = 0.851. Kappa = 2.235 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limits

Prediction Limit  
Intrawell Non-parametric

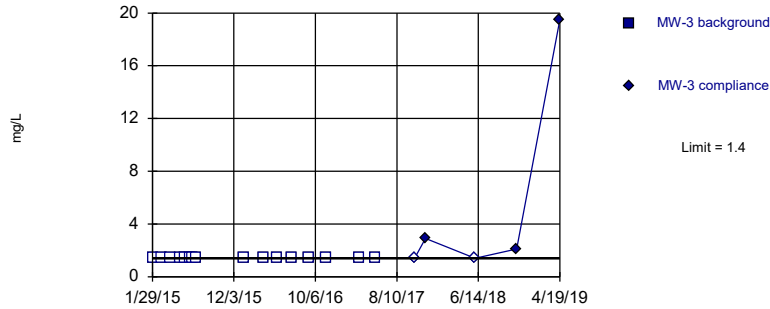


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLS  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric

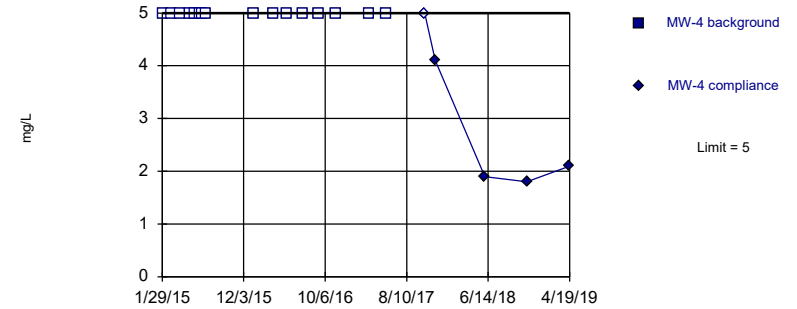


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 16) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

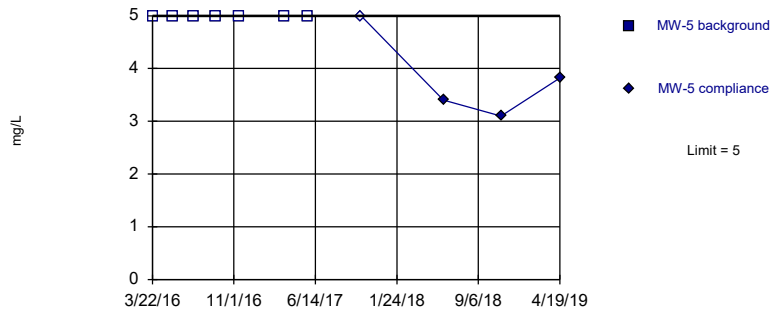


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 16) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

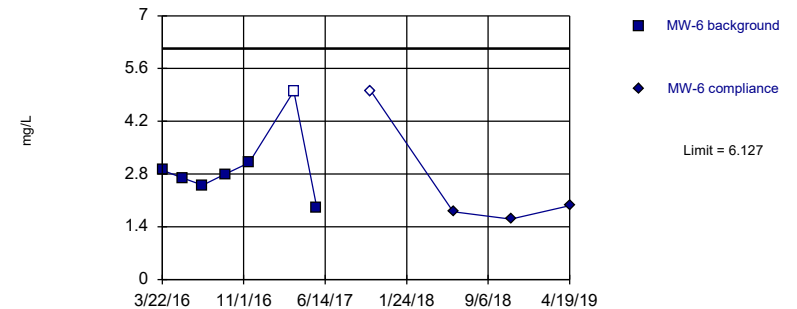


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

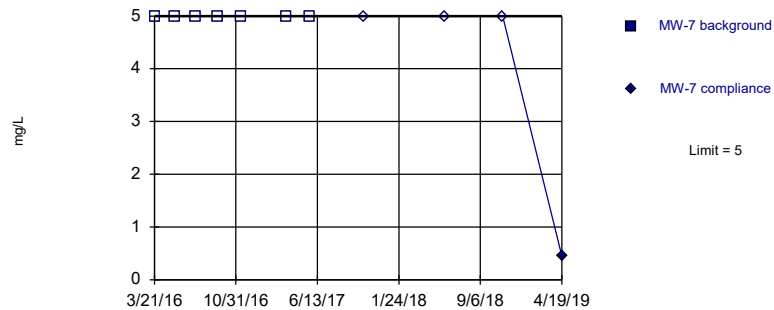


Background Data Summary: Mean=2.986, Std. Dev.=0.9668, n=7, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8181, critical = 0.73. Kappa = 3.249 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

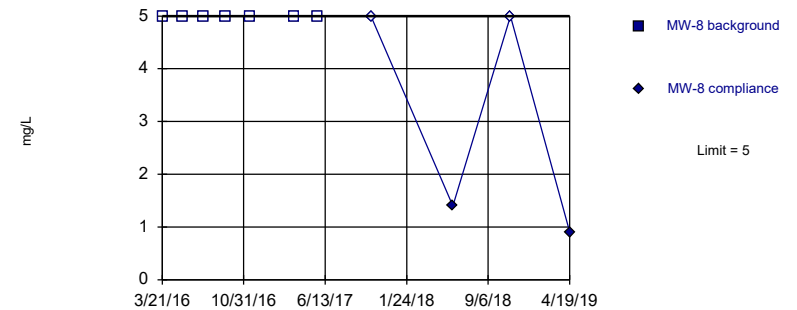


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

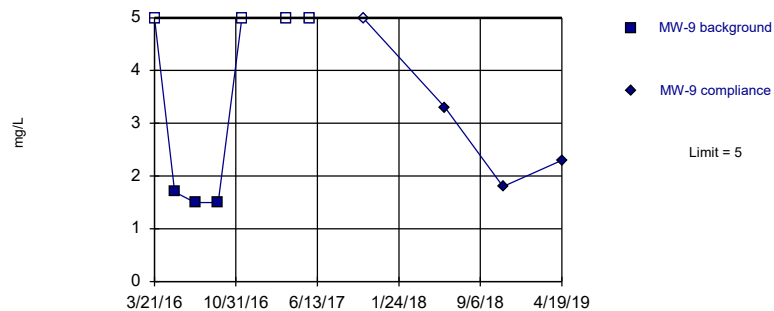


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

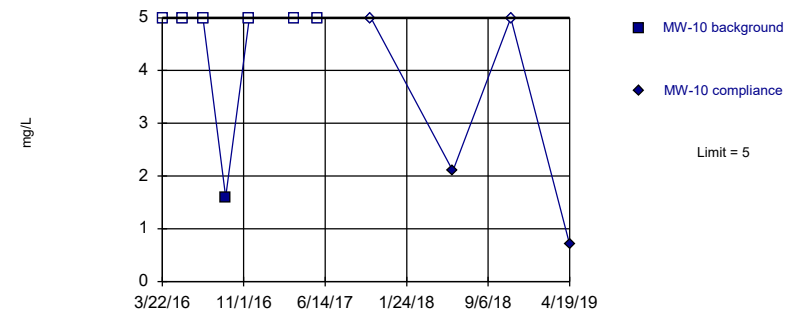


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
 Intrawell Non-parametric

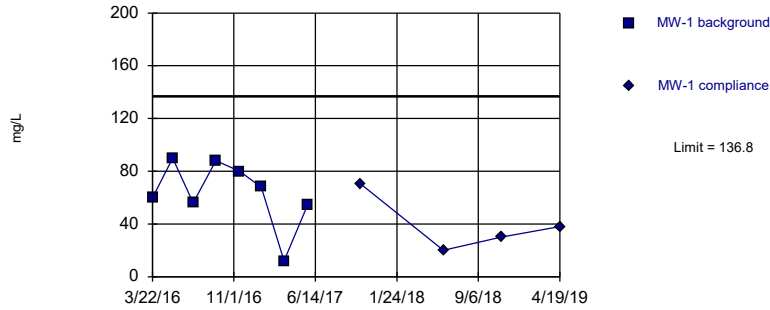


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Constituent: Sulfate Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

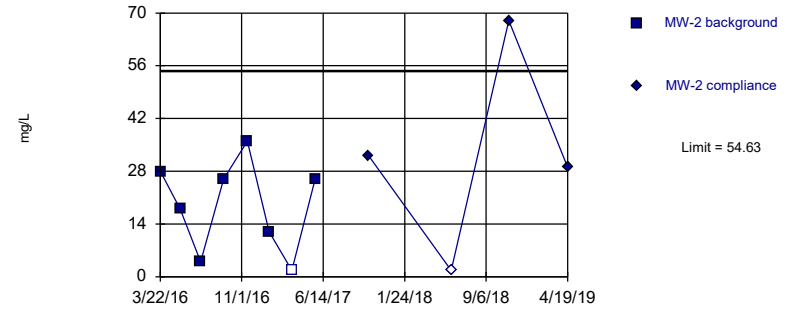


Background Data Summary: Mean=63.5, Std. Dev.=25.09, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8893, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



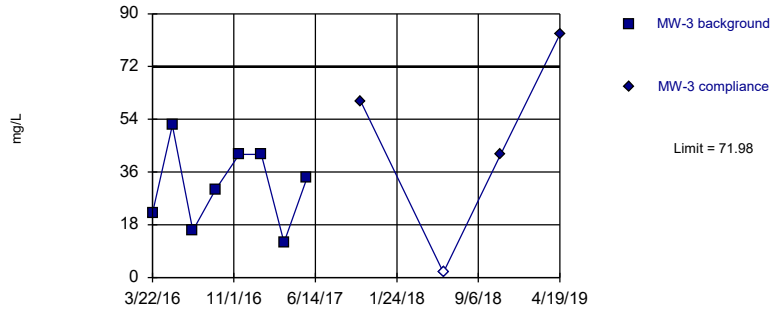
Background Data Summary: Mean=18.96, Std. Dev.=12.2, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9364, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit  
Intrawell Parametric



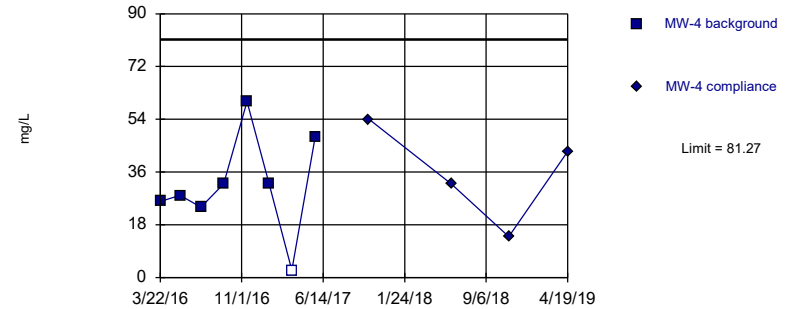
Background Data Summary: Mean=31.25, Std. Dev.=13.94, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.961, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

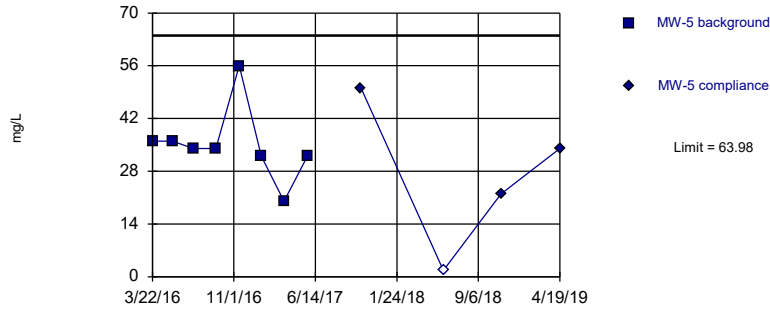


Background Data Summary: Mean=31.56, Std. Dev.=17.01, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9416, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

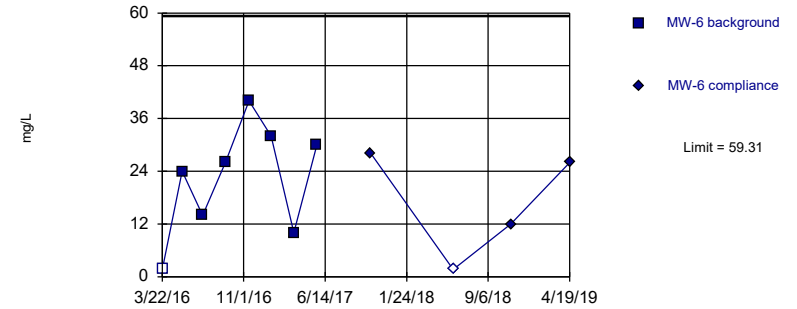


Background Data Summary: Mean=35, Std. Dev.=9.914, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8199, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

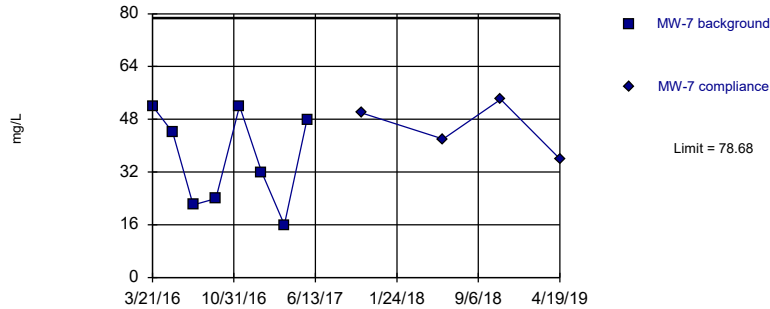


Background Data Summary: Mean=22.21, Std. Dev.=12.69, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9681, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

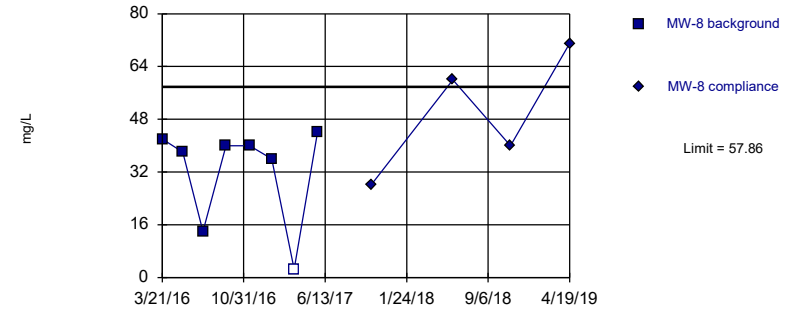


Background Data Summary: Mean=36.25, Std. Dev.=14.52, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric

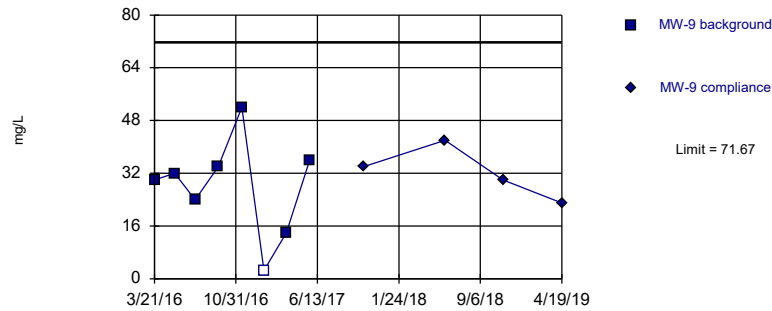


Background Data Summary (based on square transformation): Mean=1230, Std. Dev.=724.5, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8105, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:12 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric

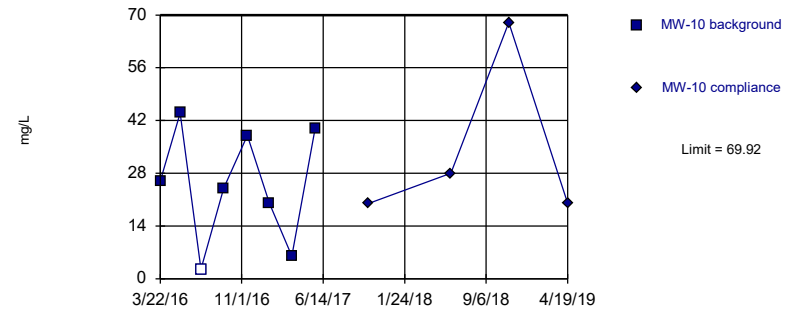


Background Data Summary: Mean=28.06, Std. Dev.=14.92, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9648, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:13 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=25.06, Std. Dev.=15.35, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9281, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:13 PM View: Intrawell PLs  
Plant Daniel Client: Southern Company Data: Gypsum CCR

## Intrawell Prediction Limit - Significant Resample Results

Plant Daniel    Client: Southern Company    Data: Gypsum CCR    Printed 9/10/2019, 2:57 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	MW-3	1.31	n/a	6/7/2019	6.91	Yes	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-8	10.23	n/a	6/7/2019	11.3	Yes	8	0	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	7.53	n/a	6/7/2019	8.98	Yes	17	5.882	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	1.4	n/a	6/7/2019	19.2	Yes	16	100	n/a	0.006456	NP Intra (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-3	71.98	n/a	6/7/2019	76	Yes	8	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-8	57.86	n/a	4/19/2019	71	Yes	8	12.5	x^2	0.001075	Param Intra 1 of 2



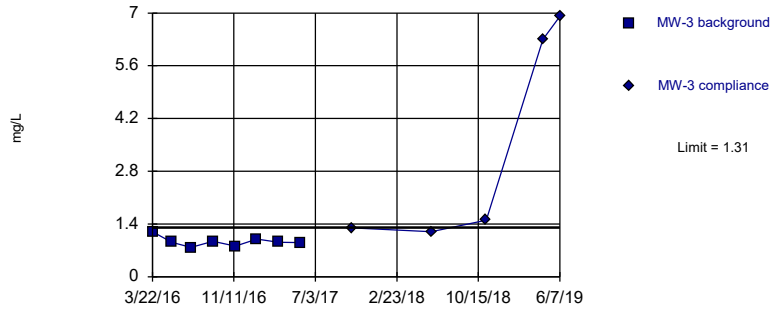
## Intrawell Prediction Limit - All Resample Results

Plant Daniel    Client: Southern Company    Data: Gypsum CCR    Printed 9/10/2019, 2:57 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	MW-3	1.31	n/a	6/7/2019	6.91	Yes	8	0	No	0.001075	Param Intra 1 of 2
Chloride (mg/L)	MW-8	10.23	n/a	6/7/2019	11.3	Yes	8	0	No	0.001075	Param Intra 1 of 2
Fluoride (mg/L)	MW-3	0.1	n/a	6/7/2019	0.0937	No	8	25	n/a	0.02144	NP Intra (normality) ...
Sulfate (mg/L)	MW-1	7.53	n/a	6/7/2019	8.98	Yes	17	5.882	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	1.4	n/a	6/7/2019	19.2	Yes	16	100	n/a	0.006456	NP Intra (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-3	71.98	n/a	6/7/2019	76	Yes	8	0	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-8	57.86	n/a	4/19/2019	71	Yes	8	12.5	x^2	0.001075	Param Intra 1 of 2

Exceeds Limit

Prediction Limit  
Intrawell Parametric

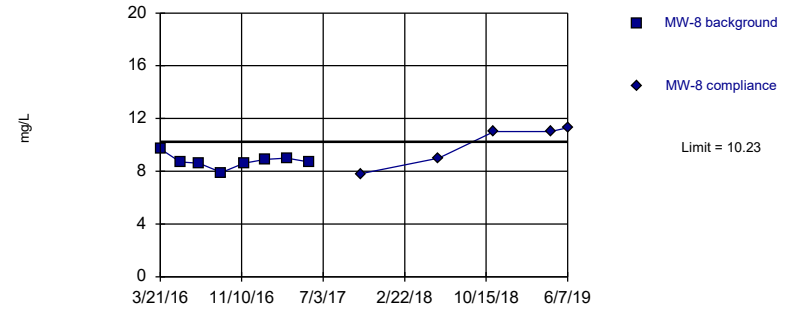


Background Data Summary: Mean=0.935, Std. Dev.=0.1283, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8863, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/10/2019 2:54 PM View: PL's - Resamples  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric

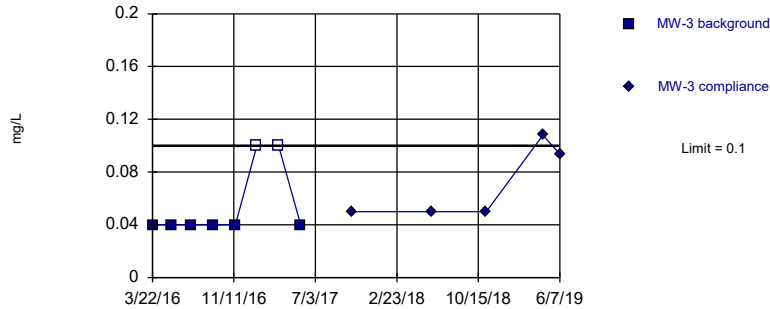


Background Data Summary: Mean=8.763, Std. Dev.=0.5012, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9145, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/10/2019 2:54 PM View: PL's - Resamples  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Within Limit

Prediction Limit  
Intrawell Non-parametric

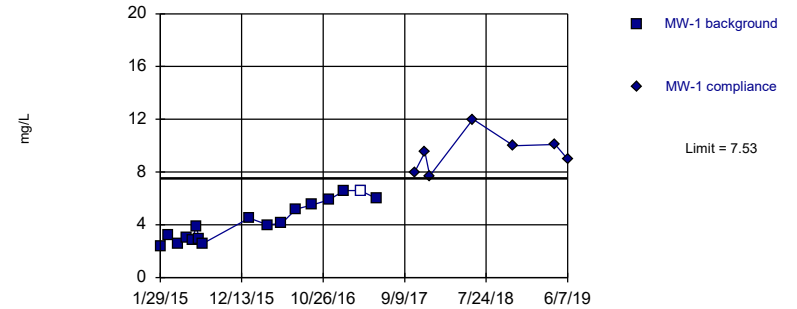


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 25% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 9/10/2019 2:54 PM View: PL's - Resamples  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

Prediction Limit  
Intrawell Parametric

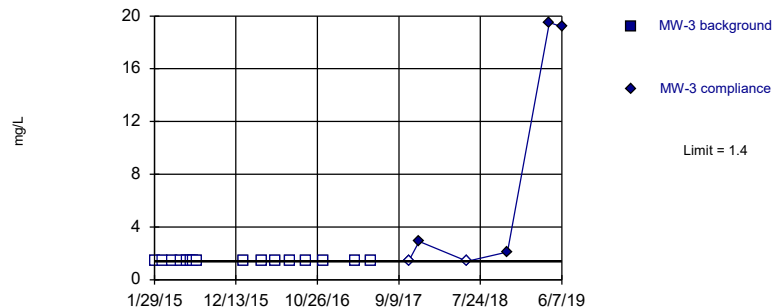


Background Data Summary: Mean=4.224, Std. Dev.=1.479, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9013, critical = 0.851. Kappa = 2.235 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 9/10/2019 2:54 PM View: PL's - Resamples  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Exceeds Limit

### Prediction Limit Intrawell Non-parametric



# Trend Tests - Significant Results

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 9/10/2019, 1:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Chloride (mg/L)	MW-1 (bg)	-2.714	-60	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-1 (bg)	1.911	226	105	Yes	24	4.167	n/a	n/a	0.01	NP

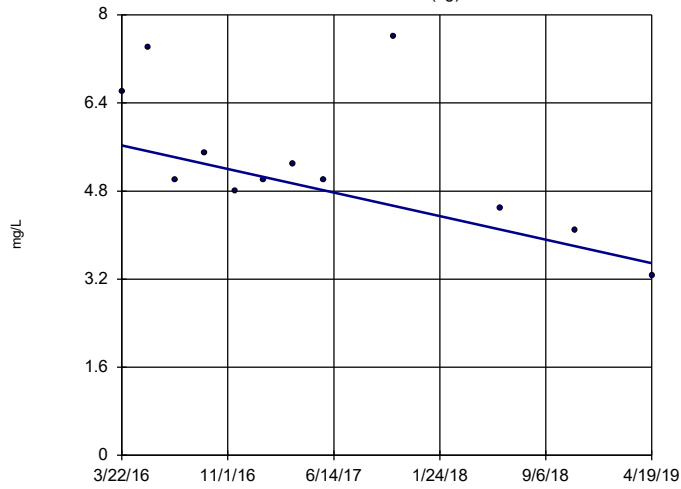
## Trend Tests - All Results

Plant Daniel    Client: Southern Company    Data: Gypsum CCR    Printed 9/10/2019, 1:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	MW-1 (bg)	-0.6947	-33	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	0.08028	30	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3	0.279	42	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-10 (bg)	-0.2202	-32	-38	No	12	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MW-1 (bg)</b>	<b>-2.714</b>	<b>-60</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MW-2 (bg)	0.4698	26	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-8	0.5464	30	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-10 (bg)	-0.3912	-18	-38	No	12	8.333	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	0	19	38	No	12	58.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-2 (bg)	0	-11	-38	No	12	91.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-3	0.005172	37	43	No	13	15.38	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-10 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MW-1 (bg)</b>	<b>1.911</b>	<b>226</b>	<b>105</b>	<b>Yes</b>	<b>24</b>	<b>4.167</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MW-2 (bg)	0	-38	-92	No	22	86.36	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3	0	72	92	No	22	81.82	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-10 (bg)	0	-13	-34	No	11	72.73	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-1 (bg)	-16.89	-28	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	2.056	8	38	No	12	16.67	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3	12.24	23	43	No	13	7.692	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-8	6.019	15	38	No	12	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-10 (bg)	0.4557	3	38	No	12	8.333	n/a	n/a	0.01	NP

### Sen's Slope Estimator

MW-1 (bg)

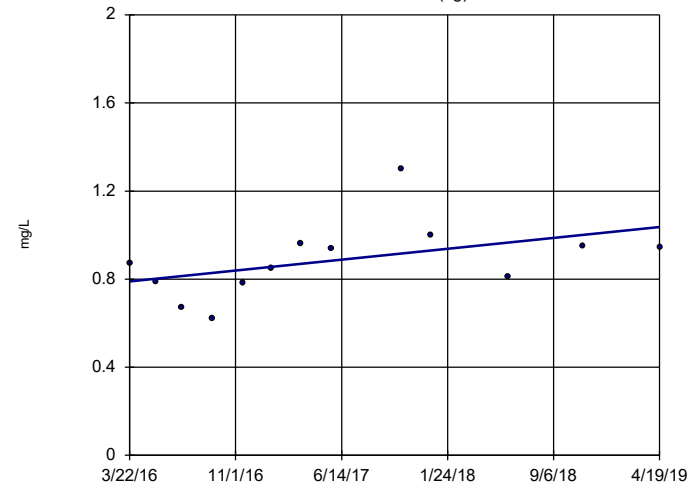


n = 12  
 Slope = -0.6947 units per year.  
 Mann-Kendall statistic = -33  
 critical = -38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator

MW-2 (bg)

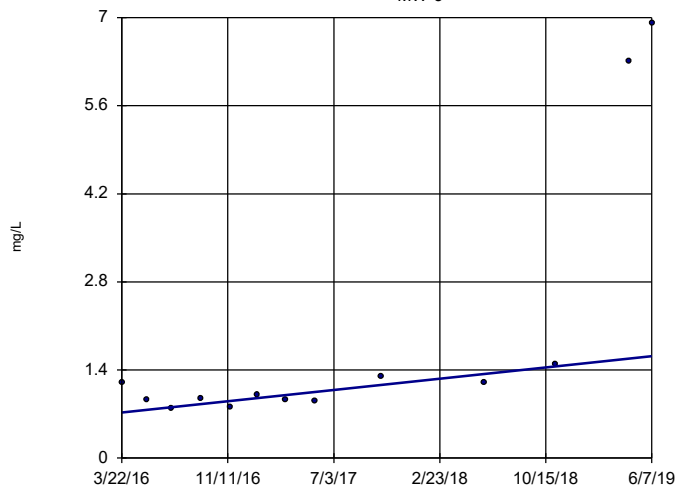


n = 13  
 Slope = 0.08028 units per year.  
 Mann-Kendall statistic = 30  
 critical = 43  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator

MW-3

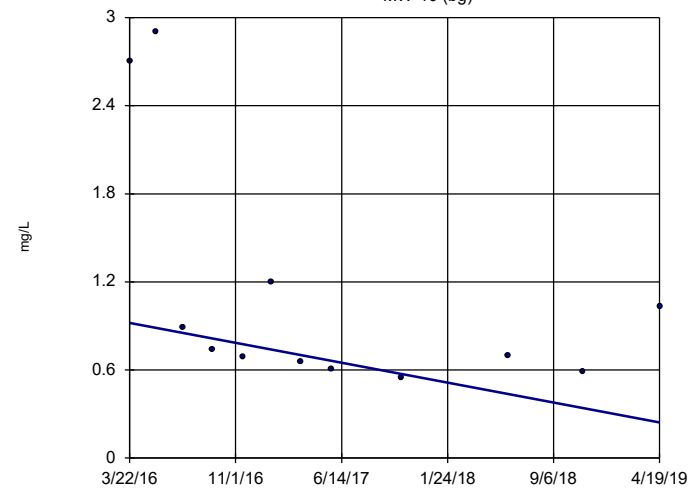


n = 13  
 Slope = 0.279 units per year.  
 Mann-Kendall statistic = 42  
 critical = 43  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator

MW-10 (bg)

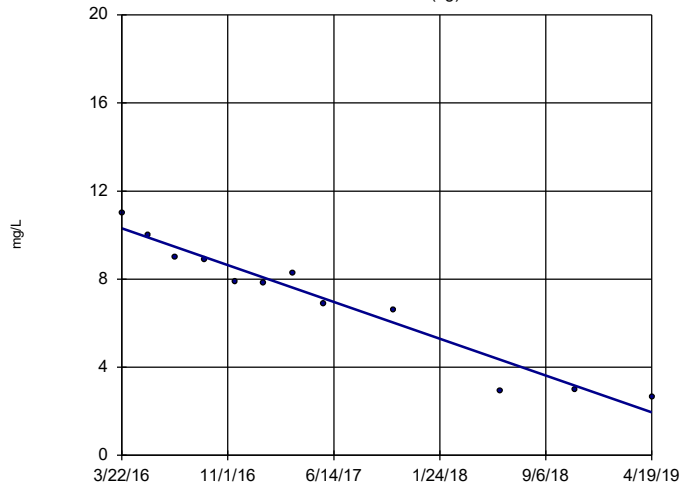


n = 12  
 Slope = -0.2202 units per year.  
 Mann-Kendall statistic = -32  
 critical = -38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator

MW-1 (bg)

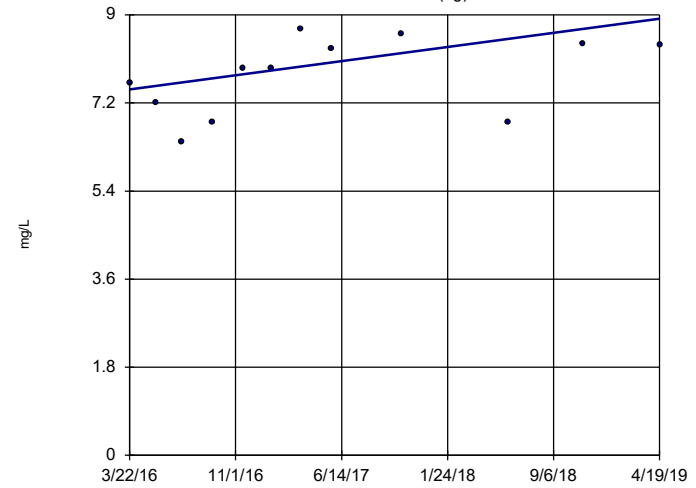


n = 12  
 Slope = -2.714  
 units per year.  
 Mann-Kendall  
 statistic = -60  
 critical = -38  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator

MW-2 (bg)

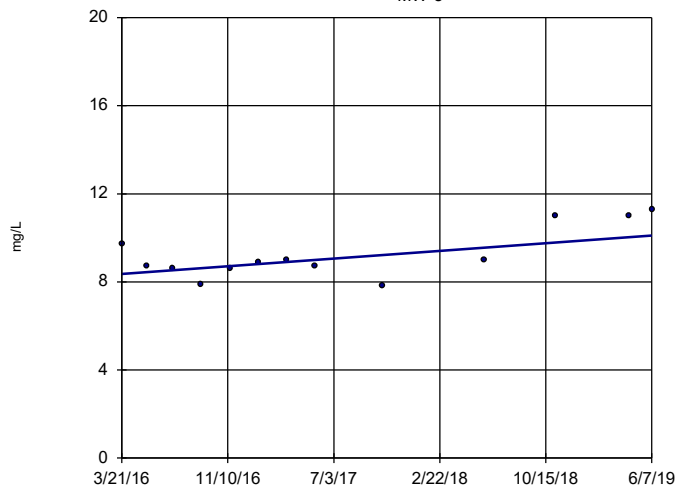


n = 12  
 Slope = 0.4698  
 units per year.  
 Mann-Kendall  
 statistic = 26  
 critical = 38  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator

MW-8



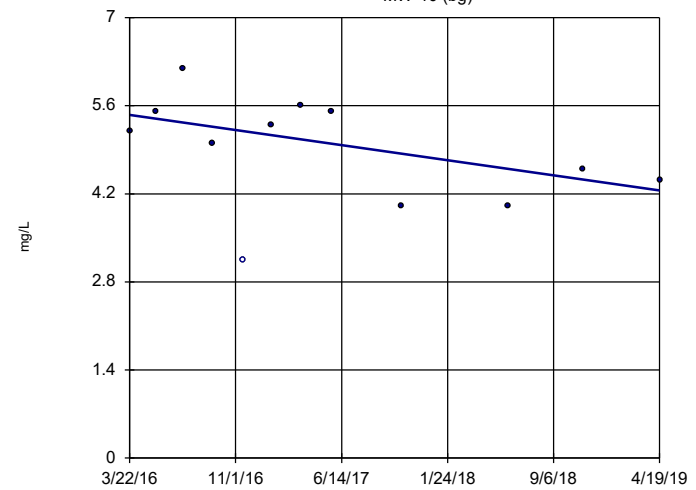
n = 13  
 Slope = 0.5464  
 units per year.  
 Mann-Kendall  
 statistic = 30  
 critical = 43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

### Sen's Slope Estimator

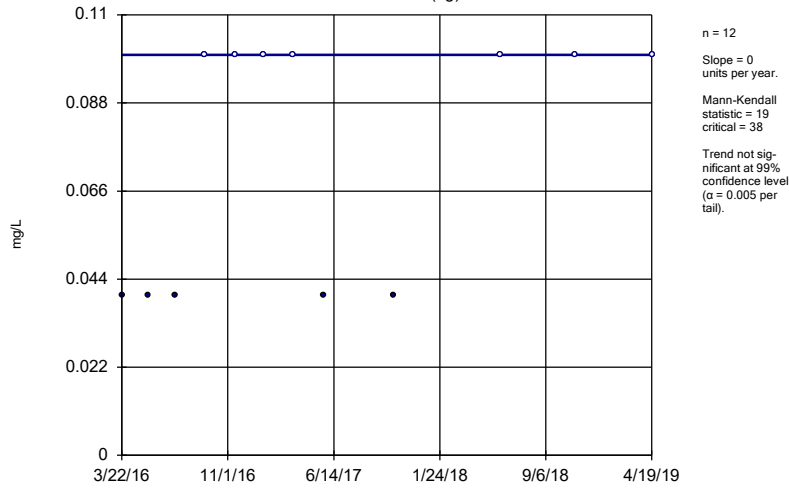
MW-10 (bg)



n = 12  
 Slope = -0.3912  
 units per year.  
 Mann-Kendall  
 statistic = -18  
 critical = -38  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

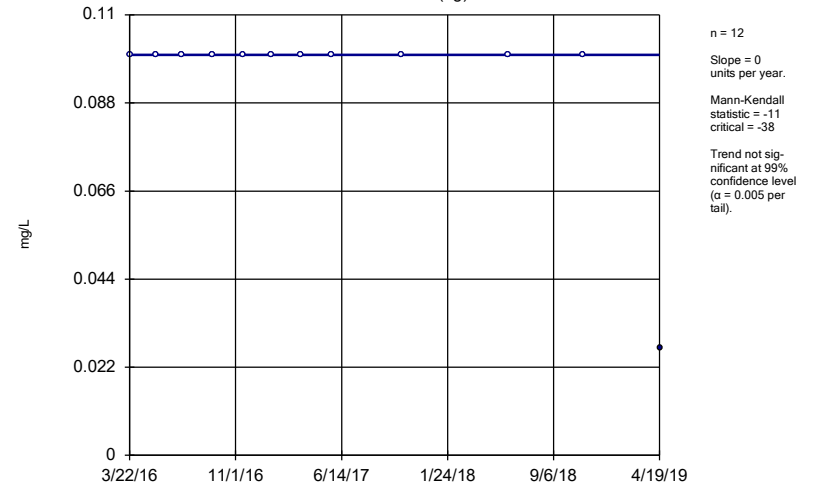
Constituent: Chloride Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator MW-1 (bg)



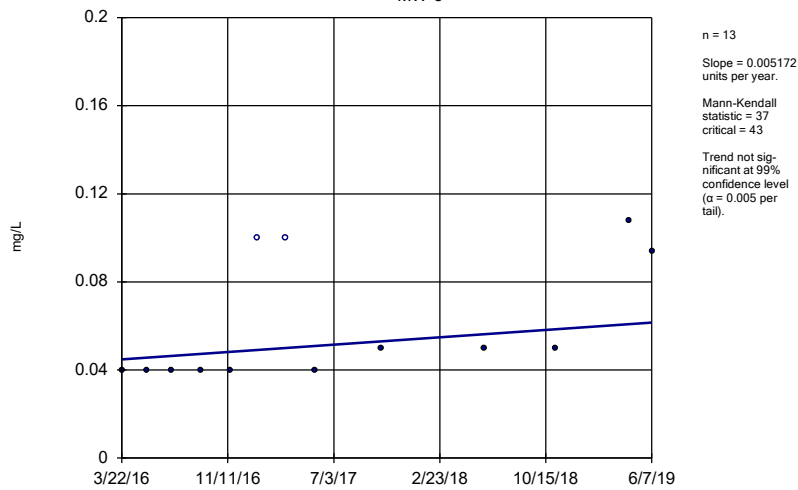
Constituent: Fluoride Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator MW-2 (bg)



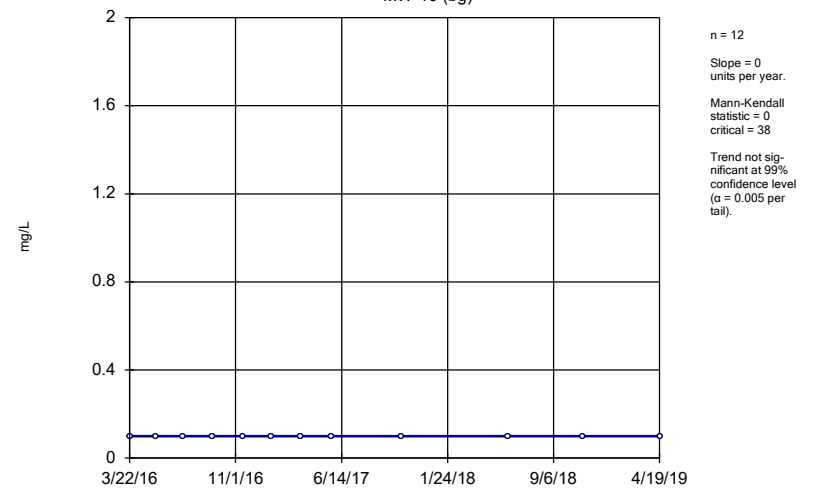
Constituent: Fluoride Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator MW-3



Constituent: Fluoride Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator MW-10 (bg)

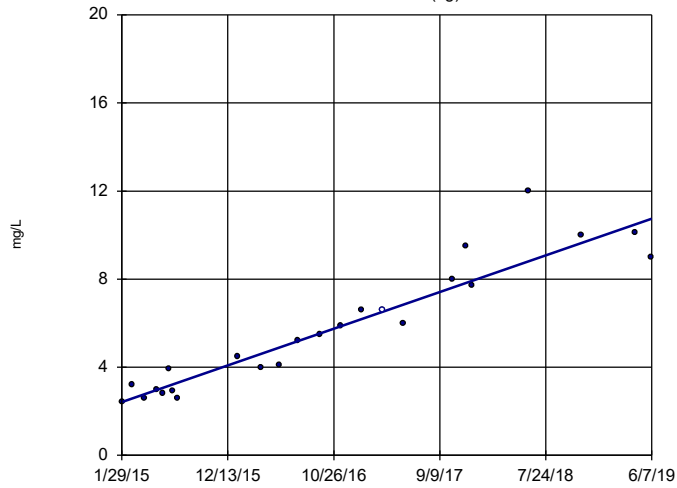


Constituent: Fluoride Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
Plant Daniel Client: Southern Company Data: Gypsum CCR



### Sen's Slope Estimator

MW-1 (bg)

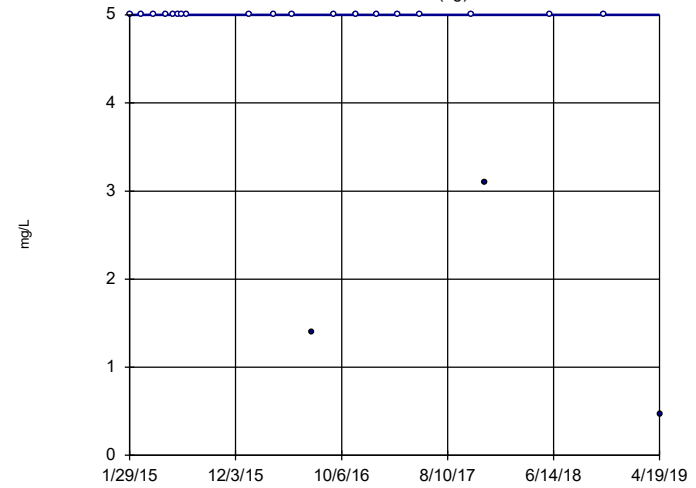


n = 24  
 Slope = 1.911  
 units per year.  
 Mann-Kendall  
 statistic = 226  
 critical = 105  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 9/10/2019 1:36 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

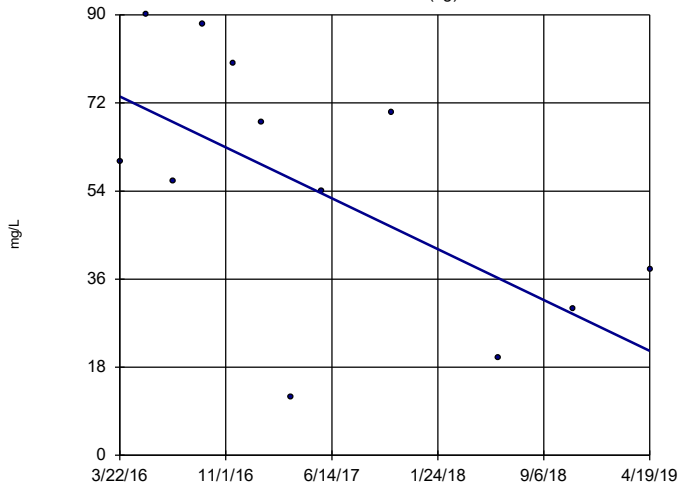
### Sen's Slope Estimator

MW-2 (bg)



### Sen's Slope Estimator

MW-1 (bg)



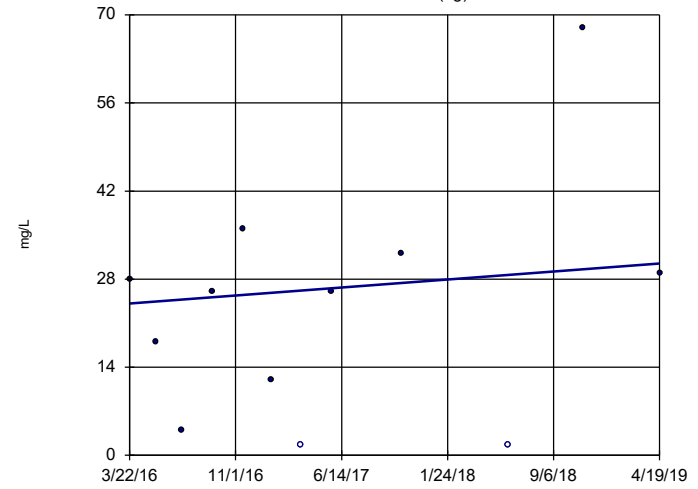
n = 12  
 Slope = -16.89 units per year.  
 Mann-Kendall statistic = -28  
 critical = -38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:37 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

### Sen's Slope Estimator

MW-2 (bg)



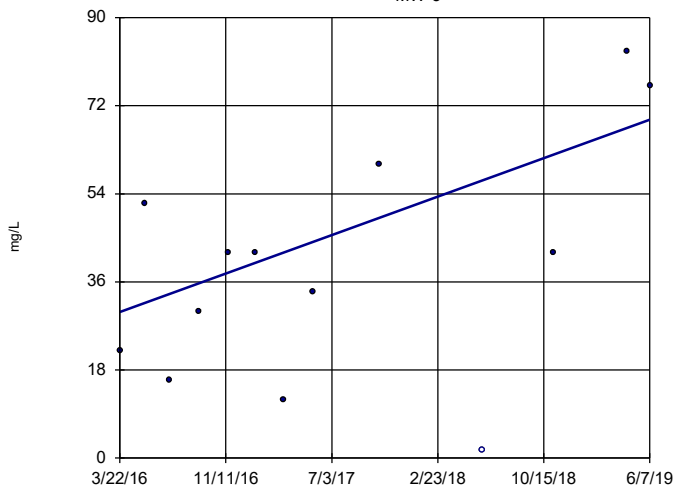
n = 12  
 Slope = 2.056 units per year.  
 Mann-Kendall statistic = 8  
 critical = 38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:37 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

### Sen's Slope Estimator

MW-3



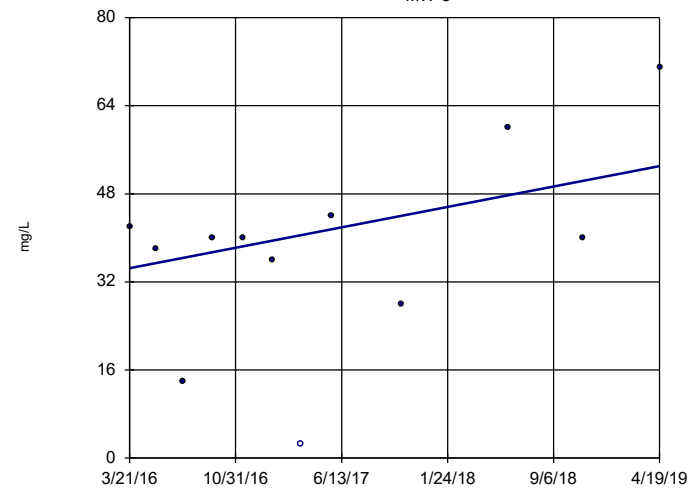
n = 13  
 Slope = 12.24 units per year.  
 Mann-Kendall statistic = 23  
 critical = 43  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:37 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Hollow symbols indicate censored values.

### Sen's Slope Estimator

MW-8

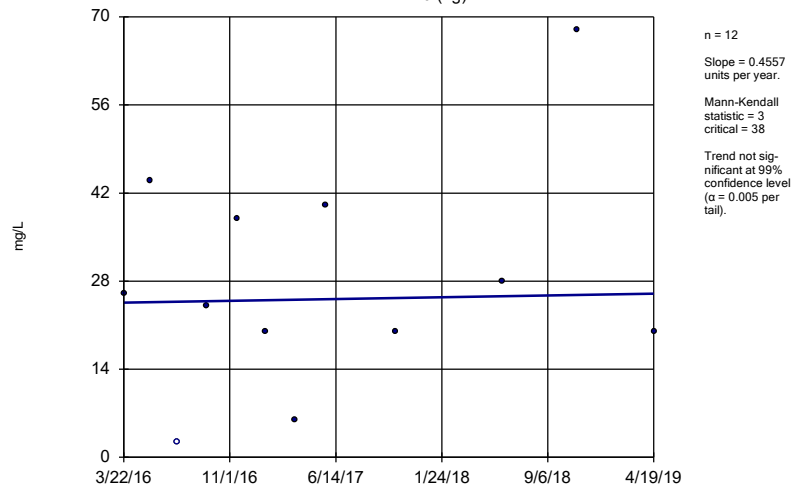


n = 12  
 Slope = 6.019 units per year.  
 Mann-Kendall statistic = 15  
 critical = 38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:37 PM View: Trend Tests  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Sen's Slope Estimator

MW-10 (bg)



Constituent: Total Dissolved Solids Analysis Run 9/10/2019 1:37 PM View: Trend Tests  
Plant Daniel Client: Southern Company Data: Gypsum CCR

# Outlier Analysis

Plant Daniel Client: Southern Company Data: Gypsum CCR Printed 7/16/2019, 10:50 AM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Sulfate (mg/L)	MW-1 (bg)	No	n/a	n/a	NP	NaN	24	5.753	2.829	normal	ShapiroWilk
Sulfate (mg/L)	MW-2 (bg)	n/a	n/a	n/a	NP	NaN	22	4.544	1.245	unknown	ShapiroWilk
Sulfate (mg/L)	MW-3	n/a	n/a	n/a	NP	NaN	22	3.132	5.261	unknown	ShapiroWilk
Sulfate (mg/L)	MW-10 (bg)	No	n/a	n/a	NP	NaN	11	4.037	1.68	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-1 (bg)	No	n/a	n/a	NP	NaN	12	55.5	25.84	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-2 (bg)	No	n/a	n/a	NP	NaN	12	23.53	18.5	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-3	No	n/a	n/a	NP	NaN	13	39.44	24.12	normal	ShapiroWilk
Total Dissolved Solids (mg/L)	MW-10 (bg)	No	n/a	n/a	NP	NaN	12	28.04	17.7	normal	ShapiroWilk

### Tukey's Outlier Screening

MW-1 (bg)

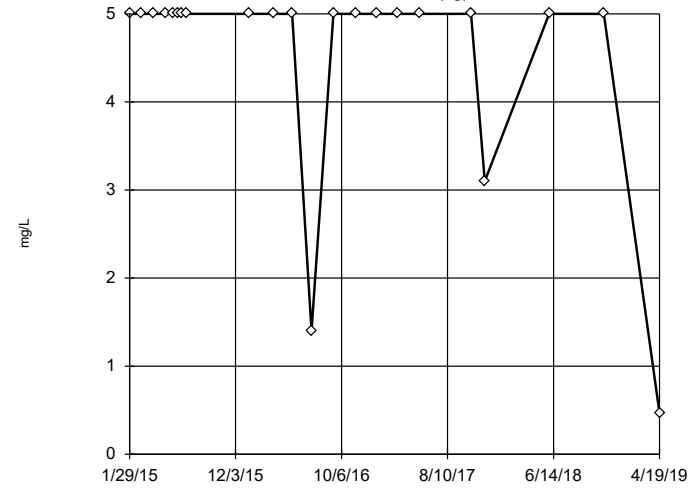


n = 24  
 No outliers found.  
 Tukey's method selected by user.  
 High cutoff = 22.1, low cutoff = -11.15, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 7/16/2019 10:50 AM View: Tukeys Outlier Testing  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

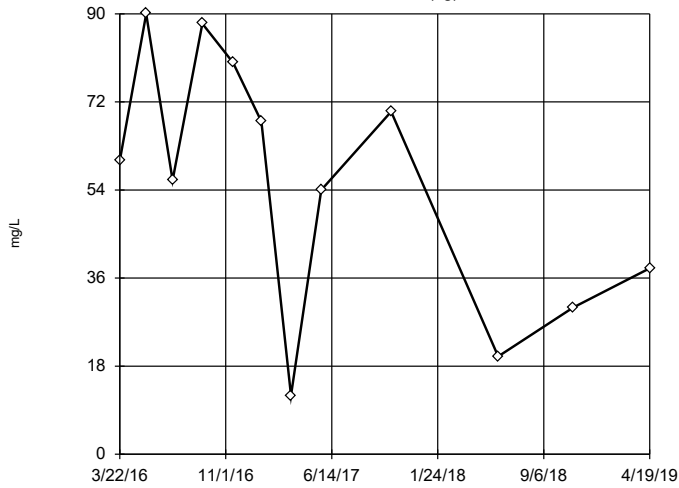
### Tukey's Outlier Screening

MW-2 (bg)



### Tukey's Outlier Screening

MW-1 (bg)

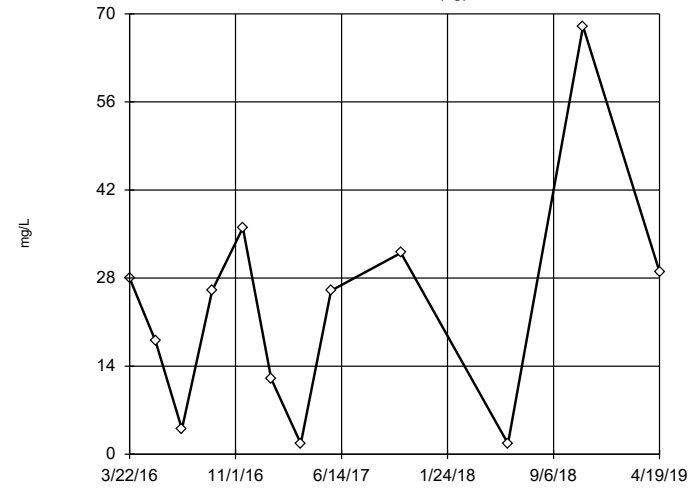


n = 12  
 No outliers found.  
 Tukey's method selected by user.  
 High cutoff = 198, low cutoff = -89, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 7/16/2019 10:50 AM View: Tukeys Outlier Testing  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Tukey's Outlier Screening

MW-2 (bg)

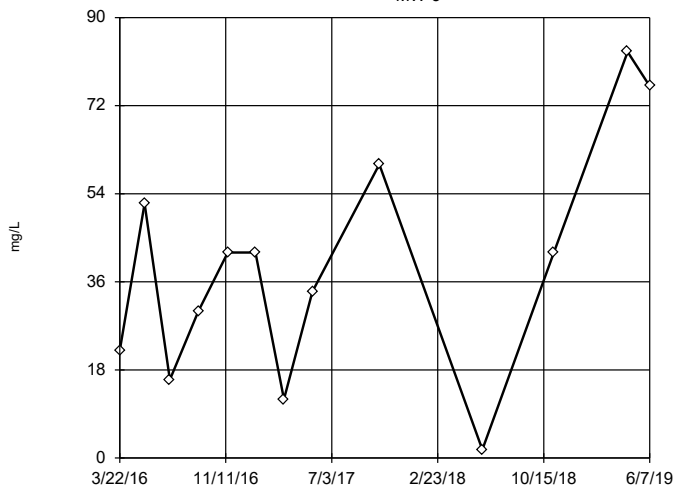


n = 12  
 No outliers found.  
 Tukey's method selected by user.  
 High cutoff = 98, low cutoff = -59.5, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 7/16/2019 10:50 AM View: Tukeys Outlier Testing  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Tukey's Outlier Screening

MW-3

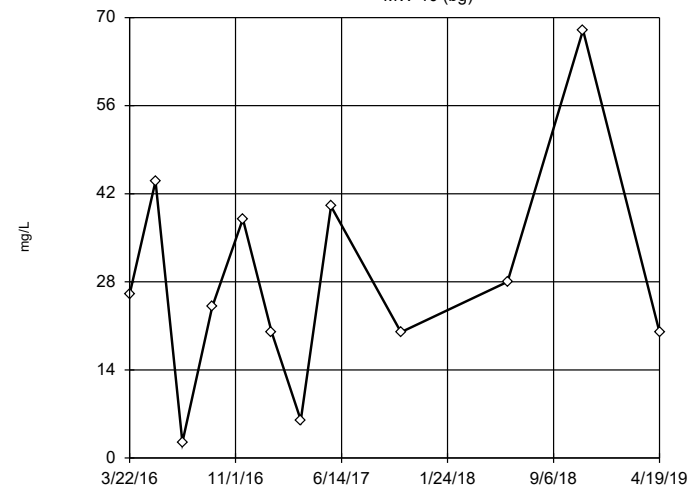


n = 13  
 No outliers found.  
 Tukey's method selected by user.  
 High cutoff = 167, low cutoff = -92, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 7/16/2019 10:50 AM View: Tukeys Outlier Testing  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

### Tukey's Outlier Screening

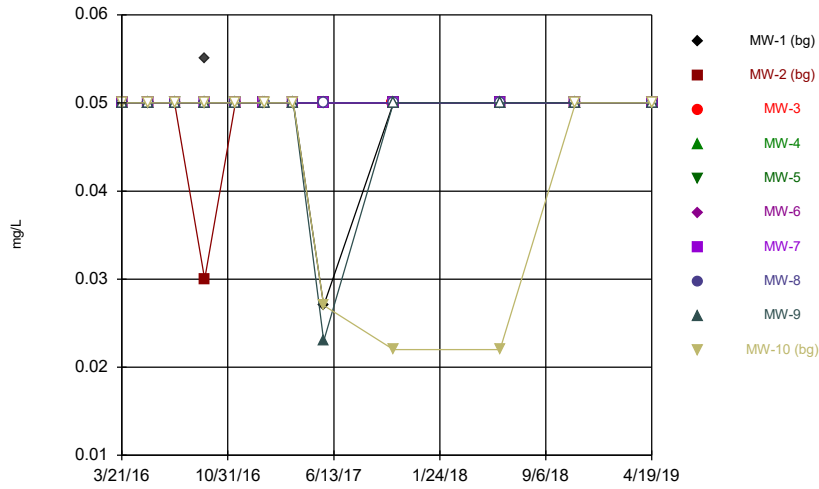
MW-10 (bg)



n = 12  
 No outliers found.  
 Tukey's method selected by user.  
 High cutoff = 96, low cutoff = -37, based on IQR multiplier of 3.

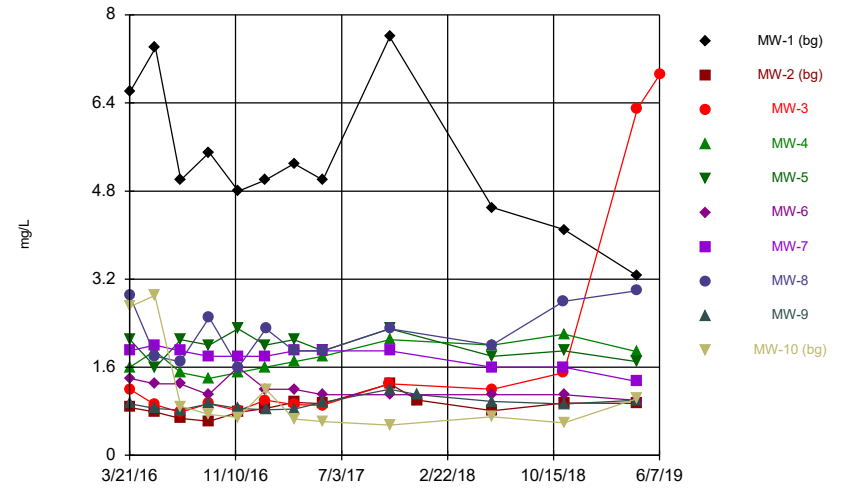
Constituent: Total Dissolved Solids Analysis Run 7/16/2019 10:50 AM View: Tukeys Outlier Testing  
 Plant Daniel Client: Southern Company Data: Gypsum CCR

Time Series



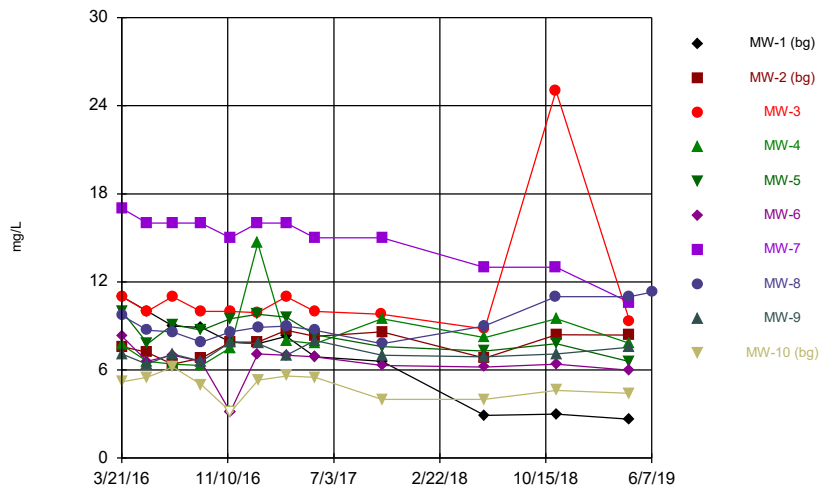
Constituent: Boron Analysis Run 9/10/2019 2:59 PM View: Time Series - App III  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Time Series



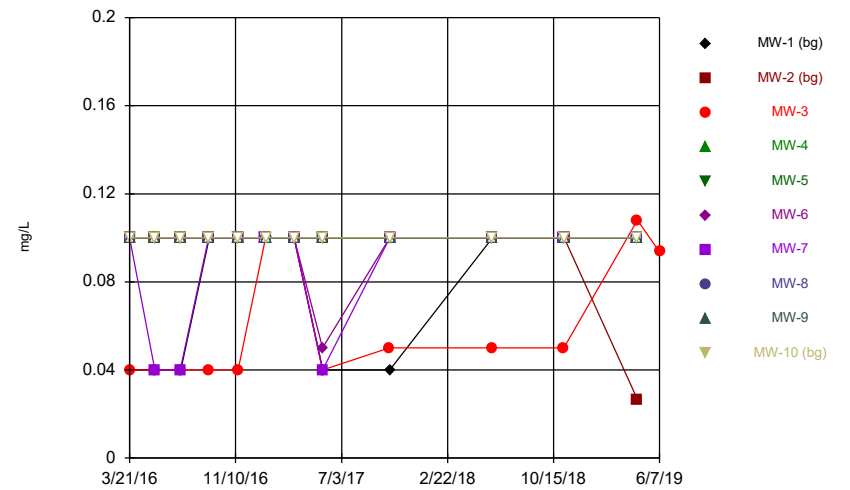
Constituent: Calcium Analysis Run 9/10/2019 2:59 PM View: Time Series - App III  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Time Series



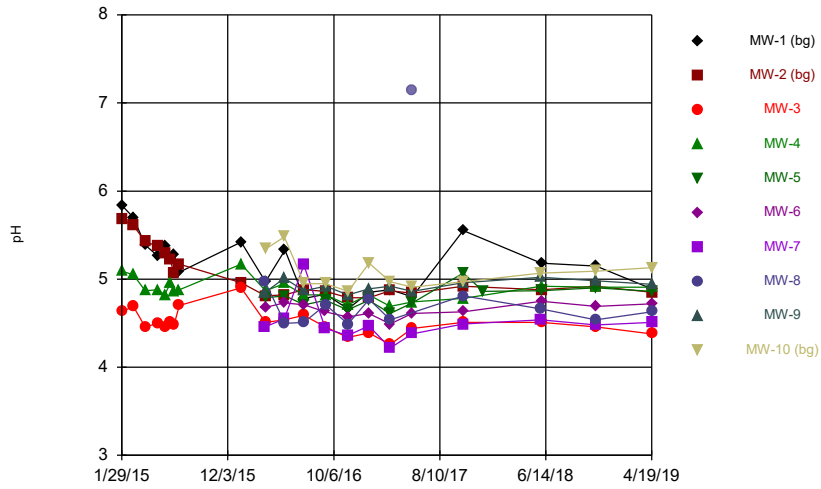
Constituent: Chloride Analysis Run 9/10/2019 2:59 PM View: Time Series - App III  
Plant Daniel Client: Southern Company Data: Gypsum CCR

Time Series



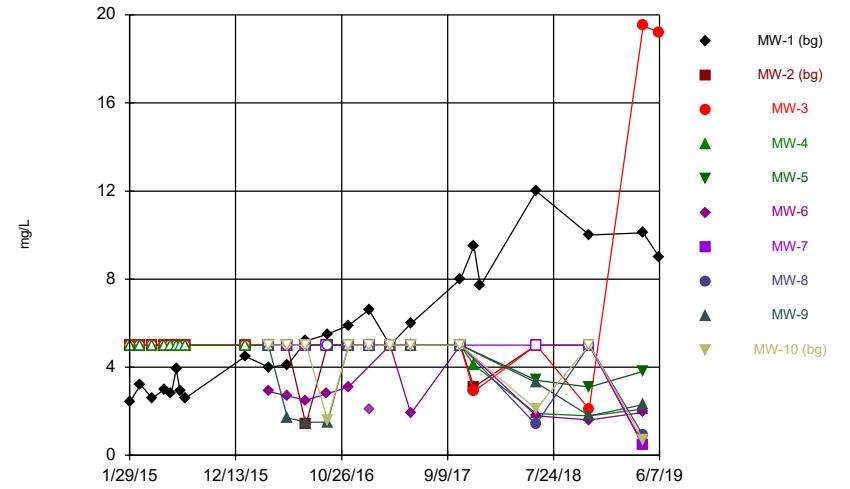
Constituent: Fluoride Analysis Run 9/10/2019 3:00 PM View: Time Series - App III  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Time Series



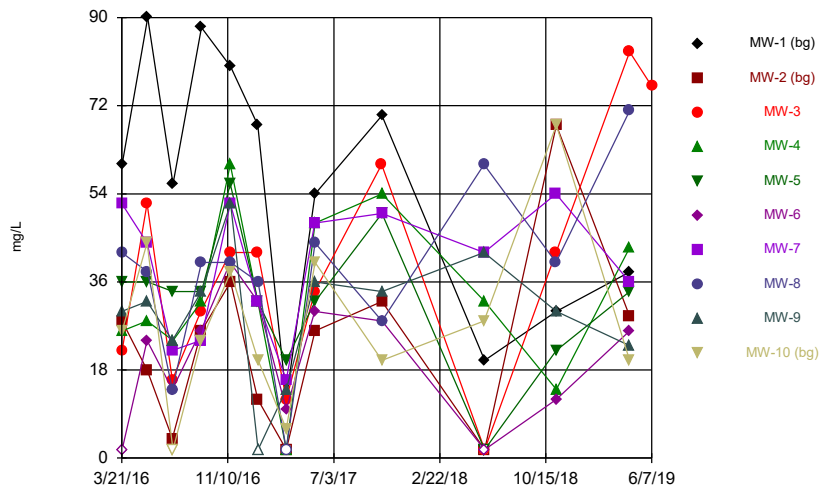
Constituent: pH Analysis Run 9/10/2019 3:00 PM View: Time Series - App III  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Time Series



Constituent: Sulfate Analysis Run 9/10/2019 3:00 PM View: Time Series - App III  
Plant Daniel Client: Southern Company Data: Gypsum CCR

### Time Series



Constituent: Total Dissolved Solids Analysis Run 9/10/2019 3:00 PM View: Time Series - App III  
Plant Daniel Client: Southern Company Data: Gypsum CCR