Prepared for

Gulf Power Company
One Energy Place
Pensacola, Florida 32520

2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GULF POWER COMPANY, PLANT SMITH ASH POND

Prepared by

Geosyntec consultants

engineers | scientists | innovators

1120 North 12th Avenue
Pensacola, Florida 32501

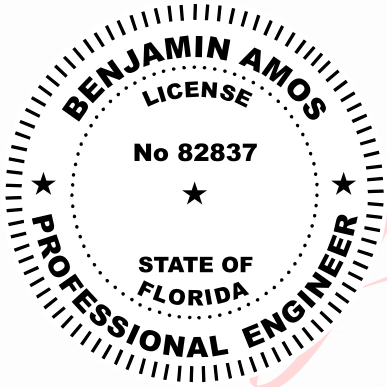
Project Number TXR0945

January 29, 2021

Geosyntec
consultants

CERTIFICATION STATEMENT

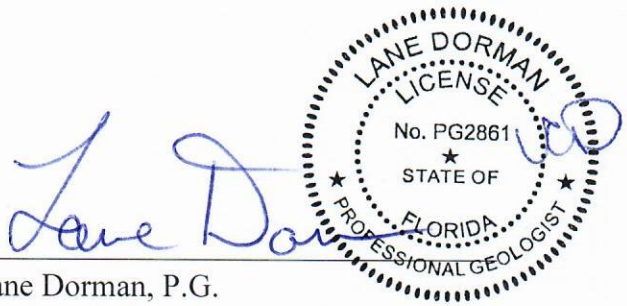
This *2020 Annual Groundwater Monitoring and Corrective Action Report, Gulf Power Company – Plant Smith – Ash Pond* has been prepared in accordance with the requirements of the United States Environmental Protection Agency coal combustion residuals rule (40 Code of Federal Regulations Part 257, Subpart D) under the supervision of a State of Florida licensed Professional Engineer and Professional Geologist with Geosyntec Consultants, Inc.



This document has been electronically signed and sealed by Benjamin Amos P.E. on 29 January 2021 using a SHA-1 authentication code. Printed copies of this document are not considered signed and sealed, and the SHA-1 authentication code must be verified on any electronic copies.
2021.01.29 09:13:06 -05'00'

Benjamin K. Amos, Ph.D., P.E.
Florida Professional Engineer No. 82837

Date



Lane Dorman, P.G.
Florida Professional Geologist No. PG2861

1/29/2021
Date

EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency ("USEPA") coal combustion residuals ("CCR") rule (40 Code of Federal Regulations Part 257, Subpart D) ("CCR Rule"), this *2020 Annual Groundwater Monitoring and Corrective Action Report* documents CCR groundwater monitoring activities and remedy selection evaluations completed in 2020 at Gulf Power Company ("Gulf Power") Plant Lansing Smith ("Plant Smith") Ash Pond. Plant Smith ceased coal-fired operations in March 2016 and Gulf Power has initiated pre-closure activities in preparation to close the Ash Pond in accordance with a State of Florida-approved closure plan.

Gulf Power previously installed a CCR groundwater monitoring well network to monitor groundwater within the uppermost aquifer in the vicinity of the Ash Pond. Monitoring wells in the CCR groundwater monitoring well network are listed below:

- background wells: MW-02, MW-03, and MW-12;
- downgradient wells: MW-06, MW-07, MW-08, MW-09, MW-10, MW-11, MW-13, and MW-14; and
- piezometers: MW-01, MW-04, and MW-05.

Statistical evaluation of CCR groundwater monitoring data collected through October 2017 identified statistically significant increases ("SSIs") of certain CCR Rule Appendix III groundwater monitoring constituents above background concentrations. In accordance with the CCR Rule, Gulf Power initiated an assessment monitoring program for the Ash Pond in March 2018 and continued assessment monitoring activities for the Ash Pond through 2020. Semi-annual assessment monitoring groundwater sample collection events for all CCR Rule Appendix III and Appendix IV parameters were conducted in May and September 2020.

In 2020, analytical data from the November 2019, May 2020, and September 2020 sampling events were evaluated in accordance with the *Statistical Analysis Plan*. Statistical analysis of data from the November 2019, May 2020, and September 2020 sampling events indicated SSIs of the following CCR Rule Appendix III constituents above background levels: boron, calcium, chloride, sulfate, total dissolved solids, and pH.

Statistical analysis indicated statistically significant levels ("SSLs") of the following CCR Rule Appendix IV constituents above applicable groundwater protection standards:

SSL Constituent	Semi-annual assessment monitoring event				
	November 2019		May 2020		September 2020
Radium 226 and 228 combined (total radium)	MW-06 MW-07 MW-08 MW-09	MW-10 MW-11 MW-13 MW-14	MW-06 MW-07 MW-08 MW-09	MW-10 MW-11 MW-13 MW-14	MW-06 MW-07
Arsenic	MW-11		MW-11		-
Lithium	MW-13		MW-13		-

In accordance with the CCR Rule, Gulf Power previously conducted an alternate source demonstration ("ASD") which documents that the total radium SSLs are from a source other than the Ash Pond.

Gulf Power initiated assessment of corrective measures ("ACM") in January 2019. The *Assessment of Corrective Measures Report* was completed in June 2019. In 2020, Gulf Power continued to evaluate groundwater corrective measures to support remedy selection for groundwater downgradient of the Ash Pond. Remedy evaluation activities included assessing temporal constituent concentration trends and continued assessment of monitored natural attenuation. A public meeting was held in December 2020 to discuss the ACM. Corrective measures evaluation and remedy selection is ongoing.

Gulf Power has initiated pre-closure activities in preparation to close the Ash Pond in accordance with a State of Florida-approved closure plan. Gulf Power continues to manage non-CCR wastewater in the Ash Pond and is currently dewatering, excavating, and dry stacking ash within the footprint of the Ash Pond in accordance with the closure plan. As ash removal is completed in the southern portion of the Ash Pond, Gulf Power is constructing three new industrial wastewater ponds in the area to ultimately manage the non-CCR wastewater and industrial wastewater. To facilitate Ash Pond closure (i.e., as part of pre-closure activities), the following monitoring wells and piezometers were abandoned in August 2020: MW-08, MW-09, MW-10, MW-11, MW-13, MW-14, PZ-11D, and PZ-13D.

In 2020, Gulf Power evaluated the nature and extent of lithium and arsenic in groundwater downgradient of the Ash Pond. Delineation activities were completed in 2020 and included sampling of the following delineation locations:

- MWI-12A, PZ-11D, PZ-14, and PZ-13D in May 2020; and
- MWI-12A and PZ-14 in September 2020.

Samples collected from the delineation wells/piezometers indicate that the horizontal and vertical extents of arsenic and lithium SSLs have been delineated. In 2021, the Ash Pond will remain in assessment monitoring.

Geosyntec consultants

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Overview

On behalf of Gulf Power Company ("Gulf Power"), Geosyntec Consultants, Inc. ("Geosyntec") has prepared this *2020 Annual Groundwater Monitoring and Corrective Action Report* for Gulf Power Plant Lansing Smith ("Site") Ash Pond. The purpose of this report is to present a summary of CCR groundwater monitoring activities and remedy selection evaluations conducted in 2020 in accordance with annual reporting requirements of the CCR Rule, section 257.90(e).

The Site is located at 4300 Highway 2300, Bay County, Florida, and is situated on approximately 1,560 acres. A Site location map is provided as **Figure 1**. Site topography is relatively flat. The Site is bordered by undeveloped land to the north and east, Alligator Bayou to the west, and North Bay to the south. The Ash Pond is located on the southern portion of the Site near North Bay.

1.2 Regional Geology & Hydrogeologic Setting

According to Pratt (1996), the principal aquifers beneath Bay County include the surficial aquifer system, the intermediate aquifer system, and the Floridan Aquifer System. The surficial aquifer system is the shallowest and is an unconfined system formed by recent terrace sands, the Citronelle Formation, and the upper portions of the Intracoastal Formation in hydraulic connection with these sediments. The general direction of groundwater flow is toward the south-southwest.

The intermediate aquifer system in Bay County is semi-confined and consists of the low permeability sediments of the Jackson Bluff and the Intracoastal Formations. Permeable portions of the Intracoastal Formation provide sufficient quantities of water for potable use. Overall, the intermediate aquifer system acts as a confining unit for the underlying Floridan Aquifer System.

This surficial aquifer system at the Site is considered the uppermost aquifer for groundwater monitoring purposes. CCR monitoring wells are screened in the uppermost, water-bearing zone in the undifferentiated quaternary alluvium of the surficial aquifer system. Site-specific lithology in the uppermost aquifer consists primarily of sand, silt, and clay mixtures. Groundwater in the surficial aquifer system at the Site is encountered in a laterally-extensive water-bearing unit of predominantly fine sand from approximately 5 to -20 feet ("ft") elevation relative to the North American Vertical Datum of 1988

("NAVD88"). CCR monitoring wells and piezometers are screened in the uppermost aquifer at elevations shown in **Table 1**.

1.3 Ash Pond CCR Unit and Groundwater Monitoring System Descriptions

The Ash Pond occupies approximately 165 acres. Plant Smith ceased coal-fired operations in March 2016. The Ash Pond has ceased receipt of CCR but continues to receive non-CCR wastewater. Gulf Power has initiated pre-closure activities in preparation to close the Ash Pond in accordance with a State of Florida-approved closure plan.

Pursuant to the CCR Rule, Gulf Power installed a CCR groundwater monitoring system around the Ash Pond to monitor groundwater within the uppermost aquifer at the Site (Southern Company ("SC"), 2018). Background monitoring wells were installed upgradient of the Site to establish Site-wide background water quality. The downgradient monitoring well network was installed at the waste boundary. The Ash Pond groundwater monitoring network is comprised of the following wells:

- background wells: MW-02, MW-03, and MW-12;
- downgradient wells: MW-06, MW-07, MW-08, MW-09, MW-10, MW-11, MW-13, and MW-14; and
- piezometers: MW-01, MW-04, and MW-05.

As previously reported (Geosyntec, 2020a), in December 2018 Gulf Power installed vertical and horizontal delineation wells/piezometers to evaluate the nature and extent of identified statistically significant levels (SSLs) of CCR Rule Appendix IV constituents. In 2020, Gulf Power sampled the following vertical and horizontal delineation wells/piezometers around the Ash Pond for CCR Rule Appendix IV constituents: MWI-12A, PZ-11D, PZ-14, and PZ-13D.

Monitoring wells and piezometer details, including installation date, coordinates, elevations, screen interval, and designation, are summarized in **Table 1**. The CCR groundwater monitoring network and delineation wells/piezometers for the Ash Pond are depicted on **Figure 2.**

2.0 GROUNDWATER MONITORING ACTIVITIES

The following section describes CCR groundwater monitoring-related activities performed during 2020. Groundwater samples were collected from monitoring wells in the CCR groundwater monitoring network and delineation wells/piezometers (locations for the May 2020 event are shown in **Figure 2**; locations for the September 2020 event are shown in **Figure 3**). Monitoring wells and piezometers installed in 2015 (SC, 2018) and 2018 (Geosyntec, 2020a) were sampled and/or gauged on a semiannual basis in 2020. A summary of groundwater sampling events completed in 2020 is provided in **Table 2**. Analytical data associated with these events are summarized in **Table 3**; laboratory analytical reports are included in **Appendix A.**

2.1 Monitoring Well Installation and Maintenance

No additional monitoring wells or piezometers were installed in 2020. Monitoring well and piezometer conditions were adequate for their intended purpose in 2020.

2.2 Monitoring Well Abandonment

Gulf Power has initiated pre-closure activities in preparation to close the Ash Pond in accordance with a State of Florida-approved closure plan. Gulf Power continues to manage non-CCR wastewater in the Ash Pond and is currently dewatering, excavating, and dry stacking ash within the footprint of the Ash Pond in accordance with the closure plan. As ash removal is completed in the southern portion of the Ash Pond, Gulf Power is constructing three new industrial wastewater ponds in the area to manage non-CCR wastewater and industrial wastewater. To facilitate Ash Pond closure (i.e., as part of pre-closure activities), the following monitoring wells and piezometers were abandoned in August 2020 (locations shown in **Figure 3)**: MW-08, MW-09, MW-10, MW-11, MW-13, MW-14, PZ-11D, and PZ-13D. Well abandonment logs are included in **Appendix A** and were placed in Plant Smith's operating record in December 2020.

2.3 Semi-Annual Assessment Monitoring Events

Semi-annual assessment monitoring events were conducted in May and September 2020. During the 2020 semi-annual assessment monitoring events, groundwater samples were collected from each monitoring and delineation well/piezometer and analyzed for CCR Rule Appendix III and Appendix IV constituents. In May 2020, groundwater samples were collected from the locations shown on **Figure 2**. In September 2020, groundwater samples were collected from the locations shown on **Figure 3**. As discussed in Section

2.2, monitoring wells MW-08, MW-09, MW-10, MW-11, MW-13, MW-14, and piezometer wells PZ-11D and PZ-13D were abandoned in August 2020 and hence not sampled in September 2020.

3.0 SAMPLE METHODOLOGY & RESULTS

The following section describes the methods used to conduct CCR groundwater monitoring at the Ash Pond. In addition, results from potentiometric gauging and delineation sampling are summarized. Results for CCR Rule Appendix III and Appendix IV constituents are discussed in Section 4.

3.1 Groundwater Elevation Measurement

Prior to each CCR sampling event, groundwater depths were recorded from the CCR groundwater monitoring wells and delineation wells/piezometers. These groundwater depths were then converted to elevations and are summarized in **Table 4**. A Site-wide potentiometric surface elevation contour map developed using groundwater elevation data from the first semi-annual assessment monitoring event is presented on **Figure 4**. **Figure 5** shows the groundwater elevations during the second semi-annual assessment monitoring event. As illustrated on **Figure 4**, locally, groundwater generally flows south across the Site and, in the vicinity of the Ash Pond, radially away from the Ash Pond. The groundwater flow patterns observed during the 2020 assessment monitoring events were generally consistent with observations from 2019 (Geosyntec, 2020a).

3.2 Groundwater Sampling

Groundwater samples were collected in general accordance with Florida Department of Environmental Protection ("FDEP") Standard Operation Procedure FS2200 (FDEP, 2017) and the CCR Rule. SmarTroll™ or AquaTroll™ (In-Situ field instruments) were used to monitor and record field water quality parameters (pH, conductivity, and dissolved oxygen) during well purging to evaluate stabilization prior to sampling. Turbidity was measured using a portable Hach™ turbidimeter. Following sample collection, samples were placed in ice-packed coolers and submitted to Eurofins TestAmerica Laboratories, Inc. ("TAL"), in Pensacola, Florida following chain-of-custody protocol. Field sampling data sheets are provided in **Appendix A**.

3.3 Delineation Sampling

To confirm continued delineation of the nature and extent of lithium and arsenic (i.e., constituents with SSLs), groundwater samples were collected from relevant delineation wells and piezometers during semi-annual assessment monitoring events. During the first semi-annual assessment monitoring event in May 2020:

- To delineate the horizontal and vertical extent of lithium at MW-13, Gulf Power sampled piezometers PZ-14 and PZ-13D, respectively.

- To delineate the vertical and horizontal extent of arsenic at MW-11, Gulf Power sampled piezometer (PZ-11D) and well (MWI-12A), respectively.

During the second semi-annual assessment monitoring event in September 2020,

- To delineate the horizontal extent of lithium at MW-13, Gulf Power sampled piezometer PZ-14.

- To delineate the horizontal extent of arsenic at MW-11, Gulf Power sampled well MWI-12A.

Piezometer wells PZ-11D and PZ-13D were not sampled during the second semi-annual monitoring event because these wells were abandoned in August 2020.

Groundwater sample results (**Table 3**) from these locations indicate complete horizontal and vertical delineation of both arsenic and lithium in May 2020 and complete horizontal delineation of arsenic and lithium in September 2020.

3.4 Laboratory Analyses

Laboratory analyses for groundwater samples collected during the semi-annual assessment monitoring events included both CCR Rule Appendix III and Appendix IV constituents. Applicable analytical methods are provided in laboratory reports in **Appendix A**.

Laboratory analyses were performed by TAL. TAL is accredited by the National Environmental Laboratory Accreditation Program ("NELAP") and maintains a NELAP certification for all parameters analyzed for this project. In addition, TAL is certified to perform analyses by the State of Florida. Groundwater data and chain-of-custody records for the monitoring events are presented in **Appendix A**.

3.5 Quality Assurance & Quality Control Summary

During each sampling event, quality assurance/quality control ("QA/QC") samples including equipment blanks, field blanks, and duplicate samples were collected. Data from these QA/QC samples were evaluated during data validation.

Groundwater quality data in this report were independently validated in accordance with United States Environmental Protection Agency ("USEPA") guidance (USEPA, 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences ("RPDs"), post digestions spikes, laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags are applied to the data using USEPA procedures as guidance (USEPA, 2017). Data validation reports for the November 2019, May 2020, and September 2020 semi-annual assessment monitoring events are included in **Appendix A**.

4.0 STATISTICAL ANALYSIS

The following section describes the statistical methods and analyses performed in 2020.

4.1 Statistical Methods

Statistical analysis of CCR Rule Appendix III and Appendix IV constituents was performed on CCR groundwater monitoring data collected during the November 2019, May 2020, and September 2020 semi-annual assessment monitoring events in accordance with the *Statistical Analysis Plan* ("SAP") (Groundwater Stats Consulting ("GSC"), 2017). The SAP describes Site-specific statistical methods that are used to evaluate CCR groundwater data.

Statistical analysis of Ash Pond CCR groundwater data was performed using the Sanitas™ v.9.6.05 groundwater statistical software. Sanitas™ is a decision support software package that incorporates statistical tests required of Subtitle C and D facilities by USEPA regulations and incorporates methods recommended in the *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance* (USEPA, 2009).

4.1.1 Appendix III Constituent Statistical Methods

Statistical analysis of CCR Rule Appendix III constituents was performed to evaluate if concentrations were consistent with observed background values. Statistical tests used to evaluate the groundwater monitoring data consisted of interwell prediction limits combined with a 1-of-2 resample strategy for the following CCR Rule Appendix III constituents: boron, calcium, chloride, fluoride, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background prediction limit for an individual constituent, and the most recent sample from each downgradient well is compared to the background prediction limit for each parameter. Intrawell prediction limits combined with a 1-of-2 resample strategy were used to evaluate pH at each well. Intrawell prediction limits are constructed using historical data within a given well and compare the most recent sample to background levels within the same well. The 1-of-2 resample strategy allows for collection of a verification sample when SSIs are identified. If the most recent sample exceeded its respective background prediction limit and a verification sample is not collected, an SSI is identified.

4.1.2 Appendix IV Constituent Statistical Methods

In accordance with the CCR Rule, Groundwater Protection Standards (GWPSs) for Appendix IV constituents were established and are presented in **Table 5**.

To evaluate SSLs of CCR Rule Appendix IV constituents, confidence intervals were constructed for each Appendix IV constituent in each downgradient well and compared to the GWPSs (**Table 5**). An SSL was identified only when the entire confidence interval is above the applicable GWPS. Other statistical tests, including time-series plots and trend analyses, were performed in accordance with the SAP. Additional details are presented in the statistical analysis packages provided in the Sanitas™ outputs for the November 2019, May 2020, and September 2020 semi-annual assessment monitoring events provided in **Appendix B**, **Appendix C**, and **Appendix D**, respectively.

4.2 Statistical Analysis Results

Analytical data from the November 2019, May 2020, and September 2020 semi-annual assessment monitoring events were analyzed in accordance with the SAP. Appendix III statistical analysis was performed to evaluate if constituent concentrations in groundwater were consistent with background levels. CCR Rule Appendix IV constituents were evaluated to assess if groundwater concentrations statistically exceeded the established GWPSs.

4.2.1 Appendix III Constituent Statistical Results

Concentrations of select CCR Rule Appendix III constituents from samples collected during the November 2019, May 2020 and September 2020 semi-annual assessment monitoring events were above background levels. SSIs were identified for the following constituents: boron, calcium, chloride, sulfate, total dissolved solids, and pH. As such, assessment monitoring will continue in 2021.

4.2.2 Appendix IV Constituents Statistical Results

Based on the statistical analysis of CCR Rule Appendix IV constituents, the following SSLs were identified:

SSL Constituent	Semi-annual assessment monitoring event				
	November 2019		May 2020		September 2020
Radium 226 and 228 combined (total radium)	MW-06 MW-07 MW-08 MW-09	MW-10 MW-11 MW-13 MW-14	MW-06 MW-07 MW-08 MW-09	MW-10 MW-11 MW-13 MW-14	MW-06 MW-07
Arsenic	MW-11		MW-11		-
Lithium	MW-13		MW-13		-

5.0 ALTERNATE SOURCE DEMONSTRATION

In accordance with the CCR Rule, Gulf Power prepared an alternate source demonstration ("ASD") for total radium (Geosyntec, 2019a). The key conclusions of the ASD, which were based on historical findings accepted by FDEP (FDEP, 1997a & b), are briefly summarized below:

- the parent radionuclides that decay into total radium (i.e., uranium and thorium) are naturally-occurring constituents in native sediments at Plant Smith;
- the interaction between saline groundwater and native sediments enriched in uranium and thorium (parent radionuclides to total radium) mobilizes total radium into groundwater; and
- the results of extraction tests conducted on ash from the Ash Pond demonstrate that the Ash Pond was not the source of the SSLs for total radium reported in groundwater.

6.0 CONCLUSIONS AND FUTURE ACTIONS

In accordance with the CCR Rule, Gulf Power continued implementation of assessment monitoring in 2020. Statistical analysis identified SSLs of total radium, lithium, and arsenic downgradient of the Ash Pond. An ASD was prepared for the total radium SSLs which documents that another source caused the total radium SSLs. Monitoring data collected in 2020 confirm vertical and horizontal delineation of lithium and arsenic SSLs downgradient of the Ash Pond.

An ACM was initiated in January 2019 and completed in June 2019 (Geosyntec, 2019b). Corrective measures evaluation and remedy selection is ongoing, as documented in the December 2020 *Remedy Selection Semi-Annual Progress Report* (Geosyntec, 2020b). Remedy evaluation activities included assessing temporal constituent concentration trends and continued assessment of monitored natural attenuation. A public meeting was held in December 2020 to discuss the ACM.

Gulf Power has initiated pre-closure activities in preparation to close the Ash Pond in accordance with a State of Florida-approved closure plan. Gulf Power continues to manage non-CCR wastewater in the Ash Pond and is currently dewatering, excavating, and dry stacking ash within the footprint of the Ash Pond in accordance with the closure plan. As ash removal is completed in the southern portion of the Ash Pond, Gulf Power is constructing three new industrial wastewater ponds in the area to manage non-CCR wastewater and industrial wastewater. To facilitate Ash Pond closure (i.e., as part of pre-closure activities), the following monitoring wells and piezometers were abandoned in August 2020: MW-08, MW-09, MW-10, MW-11, MW-13, MW-14, PZ-11D, and PZ-13D.

Assessment monitoring will continue in 2021. Corrective measures evaluation and remedy selection is ongoing.

7.0 REFERENCES

Florida Department of Environmental Protection (FDEP), 6 June 1997a. *Radionuclides at Gulf Power Lansing Smith Plant.*

Florida Department of Environmental Protection (FDEP), 9 June 1997b. Comments concerning "Factors Affecting the Distribution of Radiological Activity in Groundwater in the Vicinity of Plant Lansing Smith, Bay County, Florida."

Florida Department of Environment Protection (FDEP), 2017. *Department of Environmental Protection Standard Operating Procedures for Field Activities.* DEP-SOP-001/01. Florida Department of Environmental Protection. January. https://floridadep.gov/dear/quality-assurance/content/dep-sops

Geosyntec Consultants, 2019a. Alternate Source Demonstration, Gulf Power Company, Ash Pond, January.

Geosyntec Consultants, 2019b. Assessment of Corrective Measures Report, Gulf Power Company, Plant Smith, Ash Pond, June.

Geosyntec Consultants, 2020a. 2019 Annual Groundwater Monitoring Report, Gulf Power Company, Plant Smith, Ash Pond, January

Geosyntec Consultants, 2020b. Remedy Selection Semi-Annual Progress Report, Gulf Power Company, Plant Smith, Ash Pond, December.

Groundwater Stats Consulting (GSC), 2017. Gulf Power Company, Plant Smith, Ash Pond, Statistical Analysis Plan. October.

Pratt, Thomas R., Christopher J. Richards, Katherine A. Milla, Jeffry R. Wagner, Jay L. Johnson, and Ross J. Curry, 1996. *Hydrogeology of the Northwest Florida Water Management District*. Water Resources Special Report 96-4. October.

Southern Company (SC), 2018. 2017 Annual Groundwater Monitoring and Corrective Action Report. Gulf Power Company – Plant Smith Ash Pond. January 31, 2018.

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, 2011. *Region* IV *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.

TABLES

TABLE 1: GROUNDWATER MONITORING LOCATION DETAILS
Gulf Power Company - Plant Smith Ash Pond, Bay County, Florida

Monitoring Location	Installation Date	Northing	Easting	Ground Elevation	Top of Casing Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Designation
CCR Groundwater Monitoring Network								
MW-01	11/11/2015	464368.78	1589789.76	11.09	10.75	1.15	-8.85	Piezometer
MW-02	11/10/2015	464419.66	1592286.78	10.26	13.29	-2.71	-12.71	Background
MW-03	11/10/2015	464322.49	1594277.21	10.98	14.06	-8.94	-18.94	Background
MW-04	11/7/2015	464027.17	1591388.60	12.00	15.05	2.25	-7.75	Piezometer
MW-05	11/4/2015	463987.97	1592784.03	11.18	14.13	-1.97	-11.97	Piezometer
MW-06	11/17/2015	463858.80	1591389.13	24.18	23.82	-5.38	-15.38	Downgradient
MW-07	11/3/2015	463856.65	1592774.97	21.72	21.42	-7.88	-17.88	Downgradient
MW-08[3]	11/17/2015	461649.15	1590479.94	21.33	24.31	-8.39	-18.39	Downgradient
MW-09[3]	11/17/2015	460663.62	1590695.95	12.49	15.37	-6.73	-16.73	Downgradient
MW-10[3]	11/20/2015	461234.34	1592098.52	10.94	13.93	-8.67	-18.67	Downgradient
MW-11[3]	11/21/2015	462157.18	1593298.86	13.42	16.51	-6.49	-16.49	Downgradient
MW-12	11/11/2015	462362.00	1589322.96	8.21	11.14	-10.56	-20.56	Background
MW-13[3]	11/11/2015	462676.94	1590589.33	23.53	26.54	-6.36	-16.36	Downgradient
MW-14[3]	11/10/2015	460892.89	1590173.47	22.11	24.95	-5.69	-15.69	Downgradient
Groundwater Monitoring Locations for Delineation								
MWI-12A	Unknown	461669.34	1593482.68	Unknown	9.82	4.32	-5.68	Delineation Well
PZ-11D[3]	12/5/2018	462128.91	1593287.38	10.55	13.51	-34.45	-44.45	Delineation Piezometer
PZ-14	12/4/2018	462584.13	1590334.98	10.08	9.87	-4.92	-14.92	Delineation Piezometer
PZ-13D[3]	12/6/2018	462700.23	1590586.00	23.54	26.44	-20.46	-30.46	Delineation Piezometer

Notes:

1. Northing and easting are in feet relative to the State Plane Florida North Datum of 1983.
2. Elevations are in feet relative to the North American Vertical Datum of 1988.
3. These monitoring wells and piezometers were abandoned in August 2020 to facilitate CCR unit closure.

TABLE 2: SUMMARY OF 2020 GROUNDWATER SAMPLING EVENTS
Gulf Power Company - Plant Smith Ash Pond, Bay County, Florida

Monitoring Location	2020 Semi-Annual Assessment Monitoring Event 1	2020 Semi-Annual Assessment Monitoring Event 2
MW-02	5/5/2020	9/29/2020
MW-03	5/5/2020	9/29/2020
MW-06	5/5/2020	9/30/2020
MW-07	5/6/2020	9/30/2020
MW-08	5/6/2020	Abandoned[2]
MW-09	5/7/2020	Abandoned[2]
MW-10	5/6/2020	Abandoned[2]
MW-11	5/6/2020	Abandoned[2]
MW-12	5/6/2020	9/29/2020
MW-13	5/7/2020	Abandoned[2]
MW-14	5/7/2020	Abandoned[2]
MWI-12A	5/7/2020	9/30/2020
PZ-11D	5/7/2020	Abandoned[2]
PZ-14	5/8/2020	9/30/2020
PZ-13D	5/8/2020	Abandoned[2]

Notes:

1. Assessment monitoring event includes groundwater samples analyzed for CCR Rule Appendix III and Appendix IV constituents.
2. Monitoring location was not sampled during 2020 Semi-Annual Assessment Monitoring Event 2 because it was abandoned in Augusst 2020 to facilitate CCR unit closure.

TABLE 3: SUMMARY OF 2020 GROUNDWATER LABORATORY ANALYTICAL DATA
Gulf Power Company - Plant Smith Ash Pond, Bay County, Florida

Monitoring Location	Well Designation	Sample Date	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Total Radium (pCi/L)	Fluoride (mg/L)	Lead (mg/L)	Lithium (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	pH (SU)	Selenium (mg/L)	Sulfate (mg/L)	TDS (mg/L)	Thallium (mg/L)
Semi-Annual Assessment Monitoring Event 1																							
MW-02	Background	5/5/2020	0.00030 U	0.000078 U	0.013	0.000057 I V	0.041	0.000056 U	13	13	0.0016	0.00011 U	0.805	0.090 I V	0.000058 U	0.0019	0.000070 U	0.00090 U	5.91	0.00016 U	4.4 I	54	0.000024 U
MW-03	Background	5/5/2020	0.00030 U	0.000078 U	0.024	0.00011 I V	0.0073 I	0.000056 U	2.3	15	0.00064	0.00011 U	1.42	0.050 I V	0.000058 U	0.013	0.000070 U	0.00090 U	5.04	0.00016 U	1.4 U	34	0.000024 U
MW-12	Background	5/5/2020	0.00030 U	0.000078 U	0.012	0.000043 I V	0.11	0.000056 U	31	200	0.00050	0.00011 U	1.87	0.15 V	0.000058 U	0.014	0.000070 U	0.00090 U	6.09	0.00016 U	1.4 U	430	0.000024 U
MW-06	Downgradient	5/6/2020	0.00030 U	0.0034	0.068	0.00049 I	7.7	0.000056 U	180	2500	0.0020 U	0.00011 U	21.8	0.032 U	0.000058 U	0.0085	0.000070 U	0.00090 U	5.61	0.0016 U	320	5000	0.000024 U
MW-07	Downgradient	5/6/2020	0.00030 U	0.00078 U	0.12	0.00020 I V	3.6	0.000056 U	290	2600	0.0020 U	0.00029 I	33.8	0.032 U	0.000058 U	0.0019	0.000070 U	0.012	6.41	0.0016 U	550	6100	0.000024 U
MW-08	Downgradient	5/7/2020	0.030 U	0.0034	0.070	0.0015	15	0.000056 U	550	3600	0.0020 U	0.0011 U	36.7	0.032 U	0.000058 U	0.011	0.000070 U	0.00090 U	4.66	0.0016 U	760	8100	0.000024 U
MW-09	Downgradient	5/6/2020	0.00030 U	0.0016 U	0.093	0.000053 I V	11	0.000056 U	260	2200	0.0040 U	0.00018 I	10.9	0.040 I	0.000058 U	0.0034	0.000070 U	0.0060	6.75	0.0033 U	440	5000	0.000024 U
MW-10	Downgradient	5/6/2020	0.00030 U	0.00078 U	0.11	0.00063	10	0.000056 U	450	2500	0.0020 U	0.00011 U	19.5	0.040 I	0.000058 U	0.0071	0.000070 U	0.00090 U	5.09	0.0016 U	640	5400	0.000024 U
MW-11	Downgradient	5/6/2020	0.00030 U	0.011	0.15	0.000052 I V	3.8	0.000056 U	160	2700	0.0020 U	0.00032 I	26.9	0.032 U	0.000058 U	0.00038 U	0.000070 U	0.032	6.78	0.0016 U	270	5200	0.000024 U
MW-13	Downgradient	5/7/2020	0.00030 U	0.00078 U	0.083	0.00034 U	14	0.000056 U	560	4300	0.0020 U	0.00011 U	10.9	0.040 I	0.000058 U	0.15	0.000070 U	0.0085	7.14	0.00016 U	530	9100	0.000024 U
MW-14	Downgradient	5/7/2020	0.00030 U	0.0019 I	0.062	0.000034 U	0.36 U	0.000056 U	290	1900	0.0020 U	0.00011 U	5.23	0.090 I	0.000058 U	0.0037	0.000070 U	0.094	7.02	0.00016 U	490	4400	0.000024 U
MWI-12A	Delineation	5/7/2020	0.00030 U	0.00060 V	0.12	0.00017 I	4.0	0.000056 U	79	320	0.00070	0.00011 U	21.9	0.060 I	0.000062 I	0.0059	0.000070 U	0.019	5.53	0.00016 U	170	840	0.000024 U
PZ-11D	Delineation	5/7/2020	0.00030 U	0.00094 V	0.11	0.000034 U	1.2	0.000056 U	220	1700	0.00064	0.00011 U	6.27	0.21	0.000058 U	0.035	0.000070 U	0.00090 U	6.88	0.00017 I V	150	3500	0.000024 U
PZ-14	Delineation	5/8/2020	0.00030 U	0.013	0.16	0.000034 U	13	0.000056 U	700	3200	0.0020 U	0.00015 I	20.7	0.51	0.000058 U	0.00038 U	0.000070 U	0.0021 I	6.66	0.00020 I V	1200	8000	0.000024 U
PZ-13D	Delineation	5/8/2020	0.0030 U	0.0030	0.061	0.0023	11	0.000056 U	720	4600	0.0020 U	0.0011 U	38.4	0.032 U	0.000058 U	0.019	0.000070 U	0.00090 U	4.49	0.0016 U	950	8700	0.000024 U
Semi-Annual Assessment Monitoring Event 2																							
MW-02	Background	9/29/2020	0.0015 U	0.00039 U	0.014	0.00017 U	0.040 I	0.00028 U	9.6	14	0.0010 U	0.00056 U	1.73	0.060 I	0.00029 U	0.0019 U	0.000070 U	0.0045 U	5.73	0.00082 U	4.8 I	40	0.00012 U
MW-03	Background	9/29/2020	0.0015 U	0.00039 U	0.023	0.00017 U	0.018 U	0.00028 U	2.6	16	0.0010 U	0.00056 U	1.32	0.032 U	0.00029 U	0.011	0.000070 U	0.0045 U	4.91	0.00082 U	1.4 U	36	0.00012 U
MW-12	Background	9/29/2020	0.0015 U	0.00039 U	0.014	0.00017 U	0.086	0.00028 U	41	200	0.0010 U	0.00056 U	2.63	0.15	0.00029 U	0.017	0.000070 U	0.0045 U	6.08	0.00082 U	3.3 I	580	0.00012 U
MW-06	Downgradient	9/30/2020	0.0015 U	0.00096 I	0.064	0.00089 I	8.2	0.00028 U	220	2400	0.0010 U	0.00056 U	26.4	0.032 U	0.00029 U	0.01	0.000070 U	0.0045 U	5.57	0.00082 U	430	5600	0.00012 U
MW-07	Downgradient	9/30/2020	0.0015 U	0.0015	0.093	0.00017 U	3.1	0.00028 U	270	1900	0.0034	0.00056 U	29.1	0.032 U	0.00029 U	0.0019 U	0.000070 U	0.0061 I	6.43	0.00082 U	630	4300	0.00012 U
MWI-12A	Delineation	9/30/2020	0.0015 U	0.0021	0.062	0.00017 U	4.4	0.00028 U	75	190	0.0010 U	0.00056 U	10.5	0.070 I	0.00044 I	0.013	0.000070 U	0.029	6.21	0.00082 U	150	700	0.00012 U
PZ-14	Delineation	9/30/2020	0.0015 U	0.011	0.15	0.00017 U	13	0.00028 U	690	2600	0.0011 I	0.00056 U	24.1	0.63	0.00029 U	0.0019 U	0.000070 U	0.0045 U	6.82	0.00082 U	1500	7200	0.00012 U

Notes:
1. mg/L indicates milligrams per liter, pCi/L indicates picocuries per liter, SU indicates standard units.
2. TDS indicates Total Dissolved Solids.
3. "U" indicates analyte was analyzed but not detected.
4. "V" indicates that the analyte was detected at or above the method detection limit in both the sample and associated method blank and the value of 10 times the blank was equal to or greater than the associated sample value (i.e., the reported concentration may be biased high).
5. "I" indicates that the reported value is between laboratory method detection limit and laboratory practical quantitation limit.
6. Data validation was performed on laboratory analytical results from both semi-annual assessment monitoring events as described in the data validation reports included in Appendix A. Data validation flags are not included in Table 3.
7. Total Radium is defined as the combined concentrations of Radium 226 and Radium 228.

TABLE 4: SUMMARY OF 2020 GROUNDWATER ELEVATIONS
Gulf Power Company - Plant Smith Ash Pond, Bay County, Florida

Monitoring Location	Northing	Easting	Top of Casing Elevation	Date	Depth to Water	Groundwater Elevation
MW-01	464368.78	1589789.76	10.75	5/5/2020	5.32	5.43
MW-02	464419.66	1592286.78	13.29	5/5/2020	5.20	8.09
MW-03	464322.49	1594277.21	14.06	5/5/2020	6.03	8.03
MW-04	464027.17	1591388.60	15.05	5/5/2020	7.14	7.91
MW-05	463987.97	1592784.03	14.13	5/5/2020	6.15	7.98
MW-06	463858.80	1591389.13	23.82	5/5/2020	13.95	9.87
MW-07	463856.65	1592774.97	21.42	5/5/2020	13.40	8.02
MW-08	461649.15	1590479.94	24.31	5/5/2020	19.28	5.03
MW-09	460663.62	1590695.95	15.37	5/5/2020	12.33	3.04
MW-10	461234.34	1592098.52	13.93	5/5/2020	10.27	3.66
MW-11	462157.18	1593298.86	16.51	5/5/2020	9.35	7.16
MW-12	462362.00	1589322.96	11.14	5/5/2020	9.96	1.18
MW-13	462676.94	1590589.33	26.54	5/5/2020	16.67	9.87
MW-14	460892.89	1590173.47	24.95	5/5/2020	22.34	2.61
MWI-12A	461669.34	1593482.68	9.82	5/5/2020	7.12	2.70
PZ-11D	462128.91	1593287.38	13.51	5/5/2020	8.29	5.22
PZ-14	462584.13	1590334.98	9.87	5/5/2020	2.45	7.42
PZ-13D	462700.23	1590586.00	26.44	5/5/2020	18.32	8.12

Notes:

1. Northing and easting are in feet relative to the State Plane Florida North Datum of 1983.
2. Elevations are in feet relative to the North American Vertical Datum of 1988.
3. Depth to water measurements are in feet below top of casing.

TABLE 4: SUMMARY OF 2020 GROUNDWATER ELEVATIONS
Gulf Power Company - Plant Smith Ash Pond, Bay County, Florida

Monitoring Location	Northing	Easting	Top of Casing Elevation	Date	Depth to Water	Groundwater Elevation
MW-01	464368.78	1589789.76	10.75	9/29/2020	5.20	5.55
MW-02	464419.66	1592286.78	13.29	9/29/2020	3.98	9.31
MW-03	464322.49	1594277.21	14.06	9/29/2020	5.48	8.58
MW-04	464027.17	1591388.60	15.05	9/29/2020	6.62	8.43
MW-05	463987.97	1592784.03	14.13	9/29/2020	5.41	8.72
MW-06	463858.80	1591389.13	23.82	9/29/2020	13.35	10.47
MW-07	463856.65	1592774.97	21.42	9/29/2020	11.53	9.89
MW-12	462362.00	1589322.96	11.14	9/29/2020	8.95	2.19
MWI-12A	461669.34	1593482.68	9.82	9/29/2020	6.75	3.07
PZ-14	462584.13	1590334.98	9.87	9/29/2020	1.94	7.93

Notes:

1. Northing and easting are in feet relative to the State Plane Florida North Datum of 1983.
2. Elevations are in feet relative to the North American Vertical Datum of 1988.
3. Depth to water measurements are in feet below top of casing.

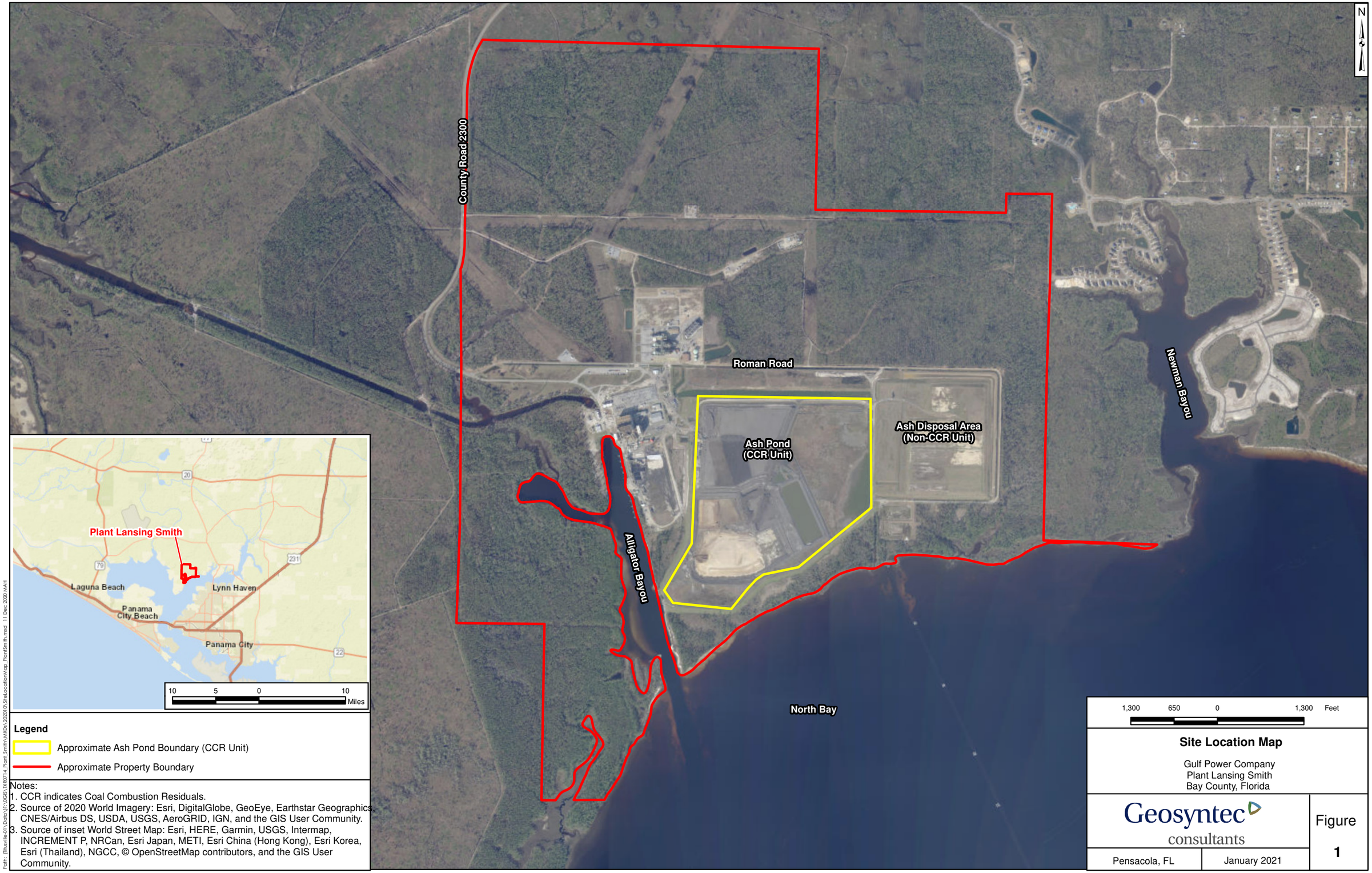
TABLE 5: SUMMARY OF BACKGROUND LIMITS AND GROUNDWATER PROTECTION STANDARDS
Gulf Power Company - Plant Smith Ash Pond, Bay County, Florida

Analyte	Units[1]	USEPA CCR Rule Specified Limit	November 2019		May 2020		September 2020	
			Background[3]	Site-Specific GWPS[4]	Background[3]	Site-Specific GWPS[4]	Background[3]	Site-Specific GWPS[4]
Antimony	mg/L	0.006	0.0025	0.006	0.0005	0.006	0.0025	0.006
Arsenic	mg/L	0.01	0.0013	0.01	0.00085	0.01	0.0013	0.01
Barium	mg/L	2	0.028	2	0.028	2	0.029	2
Beryllium	mg/L	0.004	0.0025	0.004	0.0025	0.004	0.0025	0.004
Cadmium	mg/L	0.005	0.0025	0.005	0.0005	0.005	0.0025	0.005
Chromium	mg/L	0.1	0.012	0.1	0.012	0.1	0.012	0.1
Cobalt[2]	mg/L	0.006	0.0025	0.006	0.0005	0.006	0.0025	0.006
Fluoride	mg/L	4	0.28	4	0.28	4	0.23	4
Lead[2]	mg/L	0.015	0.0013	0.015	0.00039	0.015	0.0013	0.015
Lithium[2]	mg/L	0.04	0.025	0.04	0.025	0.04	0.018	0.04
Mercury	mg/L	0.002	0.0002	0.002	0.0002	0.002	0.0002	0.002
Molybdenum[2]	mg/L	0.1	0.015	0.1	0.003	0.1	0.015	0.1
Selenium	mg/L	0.05	0.0013	0.05	0.00069	0.05	0.0013	0.05
Thallium	mg/L	0.002	0.0005	0.002	0.0001	0.002	0.0005	0.002
Total Radium - 226+228	pCi/L	5	3.777	5	3.7	5	3.72	5

Notes:

1. USEPA indicates United States Environmental Protection Agency; CCR indicates Coal Combustion Residuals; GWPS indicates Groundwater Protection Standard; mg/L indicates milligrams per liter; pCi/L indicates picocuries per liter.
2. USEPA CCR Rule Specified Limit established in the USEPA CCR Rule Amendment dated July 30, 2018.
3. Background indicates the statistically derived upper tolerance limit.
4. GWPS selected as the higher of the USEPA CCR Rule Specified Limit and background.
5. Total Radium is defined as the combined concentrations of Radium 226 and Radium 228.

FIGURES



Legend

- Approximate Ash Pond Boundary (CCR Unit)
- Approximate Property Boundary

Notes:
1. CCR indicates Coal Combustion Residuals.
2. Source of 2020 World Imagery: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.
3. Source of inset World Street Map: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community.

Site Location Map

Gulf Power Company
Plant Lansing Smith
Bay County, Florida

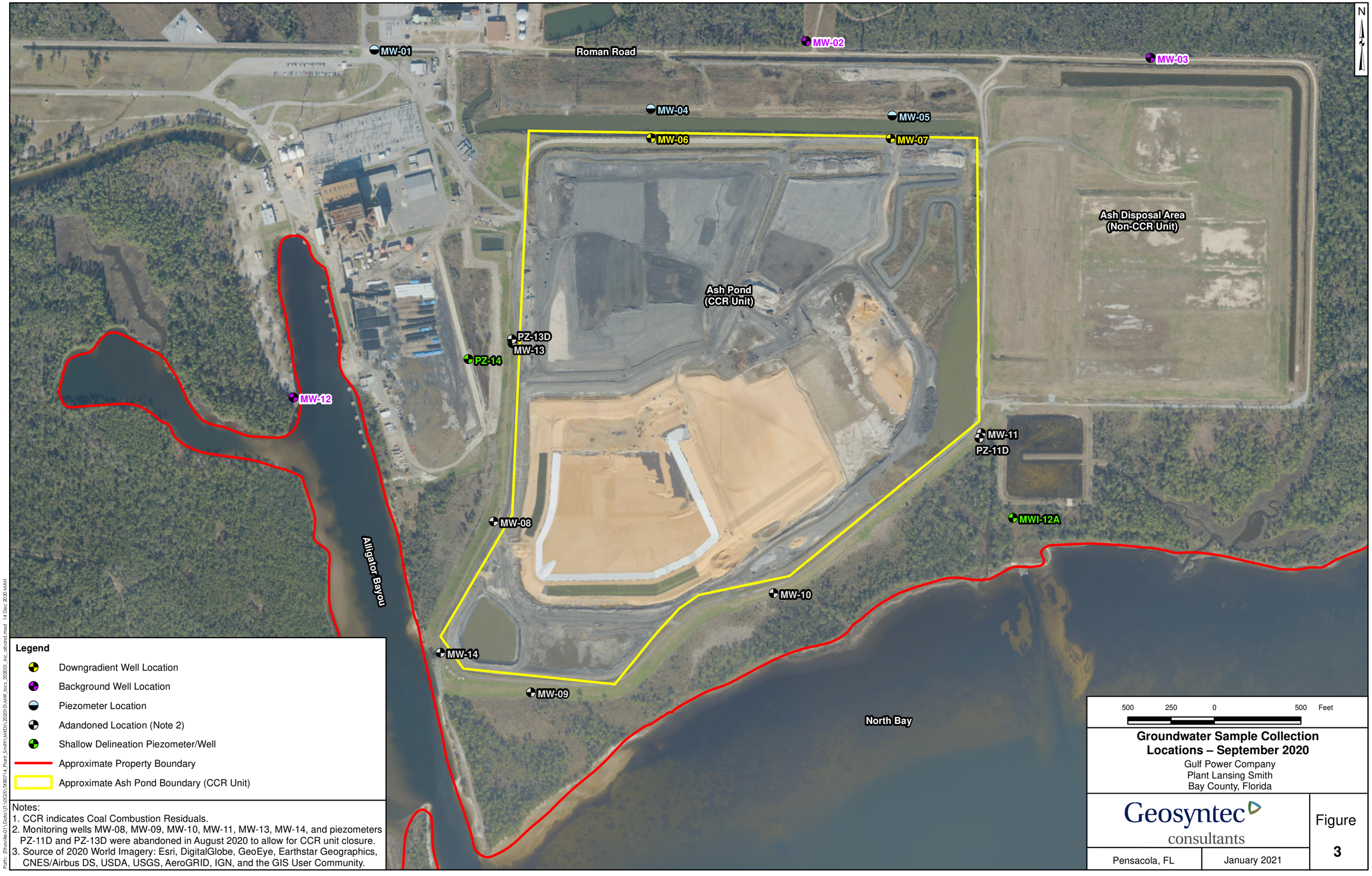
Geosyntec consultants

Pensacola, FL | January 2021

Figure 1

Path: I:\tallville-01\Data\JT\GIS\JW0714_Plant_Smith\MXDs\2020\DLSiteLocationMap_PlantSmith.mxd 11 Dec 2020 MAH

Path: I:\tlavalle-01\Data\JT\GIS\TR8714_Plant_Smith\MXDs\2020\DLWW_loc2_20200[1].mxd 14 Dec 2020 MAH


N
MW-01
Roman Road
MW-02
MW-03
MW-04
MW-05
MW-06
MW-07
Ash Disposal Area
(Non-CCR Unit)
Ash Pond
(CCR Unit)
PZ-13D
MW-13
PZ-14
MW-12
MW-11
PZ-11D
MW-08
MWI-12A
Alligator Bayou
MW-10
MW-14
MW-09
North Bay
Legend
Downgradient Well Location
Background Well Location
Piezometer Location
Adandoned Location (Note 2)
Shallow Delineation Piezometer/Well
Approximate Property Boundary
Approximate Ash Pond Boundary (CCR Unit)
Notes:
1. CCR indicates Coal Combustion Residuals.
2. Monitoring wells MW-08, MW-09, MW-10, MW-11, MW-13, MW-14, and piezometers PZ-11D and PZ-13D were abandoned in August 2020 to allow for CCR unit closure.
3. Source of 2020 World Imagery: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.
500 250 0 500 Feet
Groundwater Sample Collection Locations – September 2020
Gulf Power Company
Plant Lansing Smith
Bay County, Florida
Geosyntec consultants
Pensacola, FL
January 2021
Figure 3
Path: \\fileville-01\Data\1\1\GIS\196714_Plant_Smith\MXDs\20201D_MW_locs_202001_inc_dbcond.mxd 14 Dec 2020 MAH

MW-01 [5.43]
Roman Road
MW-02 [8.09*]
MW-03 [8.03*]
MW-04 [7.91*]
MW-05 [7.98*]
MW-06 [9.87]
MW-07 [8.02]
Ash Disposal Area (Non-CCR Unit)
Ash Pond (CCR Unit)
PZ-13D [8.12*]
MW-13 [9.87]
PZ-14 [7.42]
MW-12 [1.18*]
PZ-11D [5.22*]
MW-11 [7.16]
MW-08 [5.03]
MWI-12A [2.70]
MW-10 [3.66]
MW-14 [2.61]
MW-09 [3.04]
Alligator Bayou
North Bay
N

Legend

- Downgradient Well Location
- Background Well Location
- Piezometer Location
- Shallow Delineation Piezometer/Well
- Deep Delineation Piezometer
- Inferred Groundwater Elevation Contour (ft NAVD88)
- Approximate Property Boundary
- Approximate Ash Pond Boundary (CCR Unit)
- [7.42] Groundwater Elevation (ft NAVD88)

Notes:
1. * indicates groundwater elevation not used for contouring.
2. CCR indicates Coal Combustion Residuals.
3. Water level measurements collected on 5 May 2020.
4. ft NAVD88 indicates feet North American Vertical Datum of 1988.
5. Source of 2020 World Imagery: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

500 250 0 500 Feet

Potentiometric Surface Contour Map
5 May 2020
Plant Lansing Smith

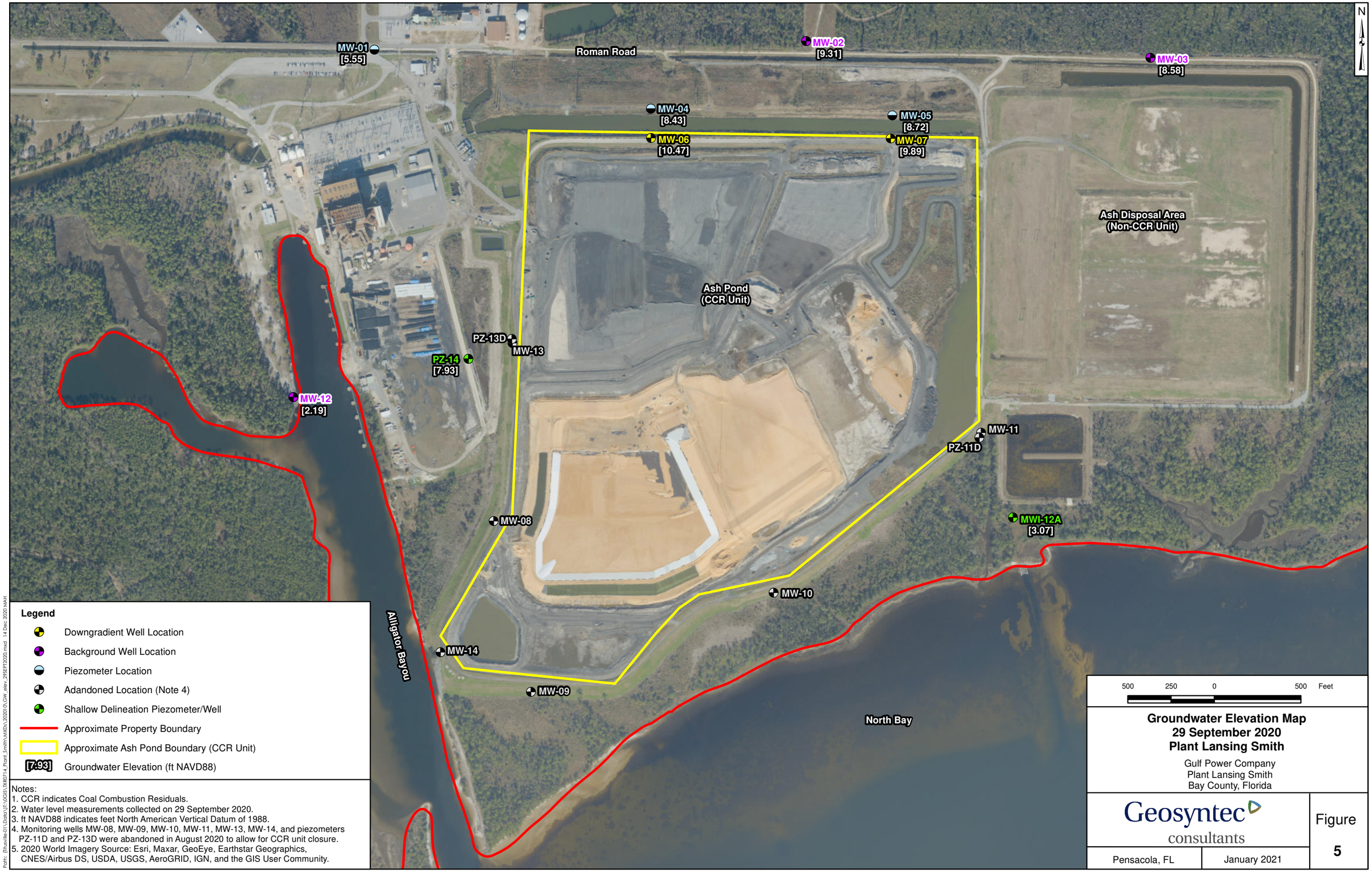
Gulf Power Company
Plant Lansing Smith
Bay County, Florida

Geosyntec consultants

Pensacola, FL | January 2021

Figure 4

Path: I:\florville-01\Data\VT\GIS\LW60714_Plant_Smith\MXDs\2020\Pz_elev_05MAY2020_20201D.mxd 14 Dec 2020 MAH


MW-01
[5.55]
Roman Road
MW-02
[9.31]
MW-03
[8.58]
MW-04
[8.43]
MW-05
[8.72]
MW-06
[10.47]
MW-07
[9.89]
Ash Disposal Area
(Non-CCR Unit)
Ash Pond
(CCR Unit)
PZ-13D
MW-13
PZ-14
[7.93]
MW-12
[2.19]
MW-11
PZ-11D
MW-08
MWI-12A
[3.07]
MW-10
Alligator Bayou
MW-14
MW-09
North Bay
N
Legend
Downgradient Well Location
Background Well Location
Piezometer Location
Adandoned Location (Note 4)
Shallow Delineation Piezometer/Well
Approximate Property Boundary
Approximate Ash Pond Boundary (CCR Unit)
[7.93] Groundwater Elevation (ft NAVD88)
Notes:
1. CCR indicates Coal Combustion Residuals.
2. Water level measurements collected on 29 September 2020.
3. ft NAVD88 indicates feet North American Vertical Datum of 1988.
4. Monitoring wells MW-08, MW-09, MW-10, MW-11, MW-13, MW-14, and piezometers PZ-11D and PZ-13D were abandoned in August 2020 to allow for CCR unit closure.
5. 2020 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.
500 250 0 500 Feet
Groundwater Elevation Map
29 September 2020
Plant Lansing Smith
Gulf Power Company
Plant Lansing Smith
Bay County, Florida
Geosyntec consultants
Pensacola, FL
January 2021
Figure
5
Path: \\fileville-01\Data\V1\GIS\LR90714_Plant_Smith\MXDs\2020\GW_elev_29SEP2020.mxd 14 Dec 2020 MAH

APPENDIX A

Laboratory Analytical, Field Sampling Reports, Well Abandonment Logs, and Data Validation Reports

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	September 8, 2020
To:	Lane Dorman
From:	Jennifer Pinion
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-179848-1, Revision 1**

SITE: CCR Smith Plant

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of eight aqueous samples, one field blank, one equipment blank and one field duplicate, collected November 18-19, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020
- Total Dissolved Solids (TDS) by Standard Method 2540C
- Chloride by Standard Method 4500 CL-E
- Fluoride by Standard Method 4500 F C
  Sulfate by Standard Method 4500 SO4 E

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);

- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001);

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-179848-1	MW-06
400-179848-2	MW-07
400-179848-3	MW-08
400-179848-4	MW-09
400-179848-5	MW-10
400-179848-6	MW-11

Laboratory IDs	Client IDs
400-179848-7	MW-13
400-179848-8	MW-14
400-179848-9	DUP-02
400-179848-10	FB-01
400-179848-11	EB-01

The chain of custody (COC) indicates the samples were between 0-6ºC. No preservation issues were noted by the laboratory.

Incorrect error corrections were observed on the COC, instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.

The laboratory report was revised on 7/9/2020 to include the missing method blank result for batch 467033. The laboratory report was identified as 400-179848-1, revision 1.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Equipment Blank
⊗ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The metals data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 467033 and 473080). Metals were not detected in the method blanks above the method detection limits (MDLs), with the following exceptions.

Boron was detected at a concentration greater than the practical quantitation limit (PQL) in the MB in batch 467033. The concentrations of boron in the associated samples were greater than the PQL and greater than ten times the method blank result; therefore, no qualifications were applied to the concentrations of boron in the associated samples.

Boron was detected at an estimated concentration greater than the MDL and less than the PQL in the method blank in batch 473080. Therefore, the estimated concentrations of boron in the associated samples were U qualified as not detected at the PQLs.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
FB-01	Boron	0.0062	I	0.010	U	3
EB-01	Boron	0.0082	I	0.010	U	3

mg/L- milligram per liter
I-laboratory flag indicating the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample

FB-01. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria.

One batch MS/MSD pair was also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Metals were not detected in the equipment blank with the following exceptions.

Boron was detected at an estimated concentration greater than the MDL and less than the PQL in the equipment blank. Since the boron concentrations of boron in EB-01 was U qualified due to method blank contamination and based on professional and technical judgement, no additional qualifications were applied to the data.

Calcium (0.084 mg/L) was detected at a concentration greater than the PQL in the equipment blank. Since calcium was J+ qualified as estimated with a high bias due to field blank contamination and the concentrations of calcium in the associated samples were greater than ten times the equipment blank concentration, no qualifications were applied to the calcium data.

1.7 Field Blank

One field blank was collected with the sample set, FB-01. Metals were not detected in the field blank with the following exceptions.

Boron was detected at an estimated concentration greater than the MDL and less than the PQL in the equipment blank. Since the boron concentrations of boron in EB-01 was U qualified due to method blank contamination and based on professional and technical judgement, no additional qualifications were applied to the data.

Calcium (0.066 mg/L) was detected at a concentration greater than the PQL in the field blank. Therefore, the calcium concentration in the associated sample greater than the field blank concentration and less than ten times the field blank concentration was J+ qualified as estimated with high bias.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
EB-01	Calcium	0.084	NA	0.084	J+	3

mg/L-milligrams per liter
NA-not applicable

1.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-02. Acceptable precision (RPD ≤ 30%) was demonstrated between the field duplicate and the original sample, MW-09.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 WET CHEMISTRY

The samples were analyzed for chloride by Standard Method 4500 Cl-E, fluoride by Standard Method 4500 F C, sulfate by Standard Method 4500 SO4 E and TDS by Standard Method 2540C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Equipment Blank
✓ Field Blank
⊗ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The wet chemistry data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this dataset is 100%.

2.2 Holding Times

The holding time for the fluoride, chloride and sulfate analysis of a water sample is 28 days from sample collection to analysis. The holding time for TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for each analysis and batch (TDS batches 466894 and 466936, chloride batches 467500 and 468407, sulfate batch 468367, fluoride batches 468526 and 468570). The wet chemistry parameters were not detected in the method blanks above the MDLs.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Sample specific MS/MSD pairs were reported for chloride, fluoride and sulfate, using samples MW-09, MW-06 and MW-07, respectively. The recoveries and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of chloride in the MS/MSD pair, using sample MW-09 were low and outside the laboratory specified acceptance criteria. Therefore, the concentration of chloride in sample MW-09 was J- qualified as estimated with a low bias.

The recoveries of sulfate in the MS/MSD pair, using sample MW-07 were low and outside the laboratory specified acceptance criteria. Therefore, the concentration of sulfate in sample MW-07 was J- qualified as estimated with a low bias.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
MW-09	Chloride	2200	NA	2200	J-	4
MW-07	Sulfate	650	NA	650	J-	4

mg/L- milligram per liter
NA-not applicable

Batch MS/MSD pairs were reported for to chloride, fluoride and sulfate. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data. MS/MSD pairs were not reported for TDS.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria. MRLs were also reported for chloride and sulfate.

2.6 Laboratory Duplicate

Batch laboratory duplicates were reported for TDS. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.7 Equipment Blank

One equipment blank was collected with the sample set, EB-01. The wet chemistry parameters were not detected in the equipment blank.

2.8 Field Blank

One field blank was collected with the sample set, FB-01. The wet chemistry parameters were not detected in the field blank, with the following exceptions.

Sulfate was detected in FB-01 at an estimated concentration greater than the MDL and less than the PQL. No qualifications were applied to the sulfate concentrations in the associated samples greater than the PQL. In addition, based on professional and technical judgment and the dilutions analyzed, no qualifications were applied to the estimated sulfate concentrations in samples MW-09 (1100 J mg/L) and MW-14 (65 J mg/L) since the field blank PQL (5.0 mg/L) was less than the sample MDLs of 700 mg/L and 42 mg/L, respectively.

2.9 Field Duplicate

One field duplicate was collected with the sample set, DUP-02. Acceptable precision (RPD $\leq$ 30%) was demonstrated between the field duplicate and the original sample, MW-09, with the following exception.

Sulfate was detected at an estimated concentration greater than the MDL and less than the PQL in sample MW-09 and detected greater than the PQL in the field duplicate; resulting in a non-calculable RPD. Therefore, the concentrations of sulfate in the field duplicate pair were J qualified as estimated.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
MW-09	Sulfate	1100	I	NC	1100	J	7
DUP-02	Sulfate	260	NA		260	J	7

mg/L- milligram per liter
I-laboratory flag indicating the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
NA-not applicable

2.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

2.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

400A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	March 31, 2020
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-179848-2**

SITE: Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of eight water samples, one field duplicate, one field blank and one equipment blank, collected November 18-19, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, St Louis, MO, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Combined Radium 226 + 228 by Calculation

EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- American Nuclear Society Verification and Validation of Radiological Data for Use in Management and Environmental Remediation, ANSI/ANS-41.5-2012, February 15, 2012.

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-179848-1	MW-06
400-179848-2	MW-07
400-179848-3	MW-08
400-179848-4	MW-09
400-179848-5	MW-10
400-179848-6	MW-11

Laboratory IDs	Client IDs
400-179848-7	MW-13
400-179848-8	MW-14
400-179848-9	DUP-02
400-179848-10	FB-01
400-179848-11	EB-01

No preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and combined radium 226+228 by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Tracers and Carriers
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

1.1.1 Completeness

The radium-226 and radium-228 data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values

qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

1.1.2 Analysis Anomaly

The radium-226 result in FB-01 was more negative that three sigma (σ) total propagated uncertainty (TPU). Therefore, the radium-226 and combined radium-226 + 228 results in sample FB-01 were UJ qualified as estimated less than the minimum detectable concentrations (MDCs).

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	Reason Code**
FB-01	Radium-226	-0.0976	U	-0.0976	UJ	13
FB-01	Combined Radium-226 +228	-0.0827	U	-0.0827	UJ	13

pCi/L-picocuries per liter
U-not detected at or above the MDC
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.2 Holding Times

The holding time for the radiochemistry analyses of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for radium-226 (batch 452091) and radium-228 (batch 452099). The radiochemistry parameters were not detected in the method blanks above the minimum detectable concentrations (MDCs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD pairs were not reported.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for radium-226 and radium-228. The recovery results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Batch laboratory duplicates were reported for radium-226 and radium-228. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

One equipment blank was collected with the sample set, EB-01. The radiochemistry parameters were not detected in the equipment blank above the MDCs.

1.9 Field Blank

One field blank was collected with the sample set, FB-01. The radiochemistry parameters were not detected in the field blank above the MDCs.

1.10 Field Duplicate

One field duplicate was reported with the sample set, DUP-02. Acceptable precision (RER $\leq$ 3) was demonstrated between the field duplicate and the original sample, MW-09.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	March 27, 2020
To:	Lane Dorman
From:	Jennifer Pinion
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-179848-3**

SITE: CCR Smith Plant

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of eight aqueous samples, one field blank, one equipment blank and one field duplicate, collected November 18-19, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Beryllium by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data are usable for supporting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001);

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-179848-1	MW-06
400-179848-2	MW-07
400-179848-3	MW-08
400-179848-4	MW-09
400-179848-5	MW-10
400-179848-6	MW-11

Laboratory IDs	Client IDs
400-179848-7	MW-13
400-179848-8	MW-14
400-179848-9	DUP-02
400-179848-10	FB-01
400-179848-11	EB-01

The chain of custody (COC) indicates the samples were between 0-6 degrees Celsius (°C). No preservation issues were noted by the laboratory.

Incorrect error corrections were observed on the COC, instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.

1.0 BERYLLIUM

The samples were analyzed for beryllium by US EPA methods 3005A/6020.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
⊗ Laboratory Control Sample
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

1.1.1 Completeness

The beryllium data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.2 Holding Time

The holding time for the analysis of beryllium in a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 467033). Beryllium was not detected in the method blank above the method detection limits (MDLs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Batch MS/MSD pairs were reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria, with the following exception.

The recovery of beryllium in the LCS was low and outside the laboratory specified acceptance criteria. Therefore, the estimated concentrations of beryllium in the associated samples were J qualified as estimated. The non-detect beryllium results in the associated samples were UJ qualified as estimated less than the MDLs.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
DUP-02	Beryllium	0.00017	U J3	0.00017	UJ	5
EB-01	Beryllium	0.00017	U J3	0.00017	UJ	5
FB-01	Beryllium	0.00017	U J3	0.00017	UJ	5
MW-06	Beryllium	0.00098	I J3	0.00098	J	5
MW-07	Beryllium	0.00022	I J3	0.00022	J	5
MW-08	Beryllium	0.001	I J3	0.001	J	5
MW-09	Beryllium	0.00017	U J3	0.00017	UJ	5
MW-10	Beryllium	0.00018	I J3	0.00018	J	5
MW-11	Beryllium	0.00031	I J3	0.00031	J	5
MW-13	Beryllium	0.00017	U J3	0.00017	UJ	5
MW-14	Beryllium	0.00017	U J3	0.00017	UJ	5

mg/L- milligram per liter
U-not detected at or above the MDL
I-laboratory flag indicating the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3-laboratory flag indicating the result is an estimated value; value may not be accurate. Spike recovery or RPD outside of criteria
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Beryllium was not detected in the equipment blank.

1.7 Field Blank

One field blank was collected with the sample set, FB-01. Beryllium was not detected in the field blank.

1.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-02. Acceptable precision (RPD ≤ 30%) was demonstrated between the field duplicate and the original sample, MW-09.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	April 2, 2020
To:	Lane Dorman
From:	Jennifer Pinion
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-179851-1**

SITE: CCR Smith Plant

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of three aqueous samples and one field duplicate, collected November 18, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020
- Total Dissolved Solids (TDS) by Standard Method 2540C
- Chloride by Standard Method 4500 CL-E
- Fluoride by Standard Method 4500 F C
  Sulfate by Standard Method 4500 SO4 E

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001);

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-179851-1	MW-02
400-179851-2	MW-03

Laboratory IDs	Client IDs
400-179851-3	MW-12
400-179851-4	DUP-01

The chain of custody (COC) indicates the samples were between 0-6ºC. No preservation issues were noted by the laboratory.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Time
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

1.1.1 Completeness

The metals data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.1.2 Analysis Anomaly

The percent differences (%Ds) of boron, calcium and chromium in the continuing calibration verification (CCV) in batch 468800 were outside the laboratory acceptance limits with high bias.

Therefore, the concentrations of calcium in samples MW-02 and MW-03 were J+ qualified as estimated with a high bias, based on professional and technical judgement. In addition, boron and chromium were not reported in this batch; therefore, no qualifications were applied to the data.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
MW-02	Calcium	44	NA	44	J+	9
MW-03	Calcium	1.9	NA	1.9	J+	9

mg/L- milligram per liter
NA-not applicable
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three method blanks were reported (batches 467032, 467033 and 473080). Metals were not detected in the method blanks above the method detection limits (MDLs), with the following exceptions.

Arsenic and boron were detected in the method blank in batch 467032 at estimated concentrations greater than the MDLs and less than the practical quantitation limits (PQLs). No qualifications were applied to the concentrations of arsenic and boron greater than the PQLs or the non-detect arsenic and boron results in the associated samples.

Boron was detected in the method blank in batch 473080 at an estimated concentration greater than the MDL and less than the PQL. Therefore, the estimated boron concentration in sample MW-03 was U qualified as not detected at the PQL. No qualifications were applied to the boron concentrations greater than the PQL.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
MW-03	Boron	0.0094	I V	0.01	U	3

mg/L- milligram per liter
I-laboratory flag indicating the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

V-laboratory flag indicating that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Batch MS/MSD pairs were reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported with each batch. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

An equipment blank was not collected with the sample set.

1.7 Field Blank

A field blank was not collected with the sample set.

1.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-01. Acceptable precision (RPD $\leq$ 30%) was demonstrated between the field duplicate and the original sample, MW-02.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 WET CHEMISTRY

The samples were analyzed for chloride by Standard Method 4500 Cl-E, fluoride by Standard Method 4500 F C, sulfate by Standard Method 4500 SO4 E and TDS by Standard Method 2540C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The wet chemistry data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this dataset is 100%.

2.2 Holding Times

The holding time for the fluoride, chloride and sulfate analysis of a water sample is 28 days from sample collection to analysis. The holding time for TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for each analysis and batch (TDS batches 466894 and 466936, chloride batch 467500, fluoride batch 468526 and sulfate batch 468436,). The wet chemistry parameters were not detected in the method blanks above the MDLs.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Batch MS/MSD pairs were reported for to chloride, fluoride and sulfate. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria. MRLs were also reported for chloride and sulfate.

2.6 Laboratory Duplicate

Sample specific laboratory duplicates were reported for TDS, using samples MW-02 and DUP-01. The RPDs were within the laboratory specified acceptance criteria with the following exception.

The RPD for TDS in the laboratory duplicate using sample DUP-01 was high and outside the laboratory specified acceptance criteria. Therefore, based on professional and technical judgement, the concentration of TDS in DUP-01 was J qualified as estimated.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
DUP-01	Total Dissolved Solids	190	NA	190	J	12

mg/L- milligram per liter
NA-not applicable

2.7 Equipment Blank

An equipment blank was not collected with the sample set.

2.8 Field Blank

A field blank was not collected with the sample set.

2.9 Field Duplicate

One field duplicate was collected with the sample set, DUP-01. Acceptable precision (RPD ≤ 30%) was demonstrated between the field duplicate and the original sample, MW-02.

2.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

2.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

400A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	April 1, 2020
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-179851-2**

SITE: Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of three water samples and one field duplicate, collected November 18, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pittsburgh, PA, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Combine Radium 226 + 228 by Calculation

EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data are usable for supporting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- American Nuclear Society Verification and Validation of Radiological Data for Use in Management and Environmental Remediation, ANSI/ANS-41.5-2012, February 15, 2012.

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-179851-1	MW-02
400-179851-2	MW-03

Laboratory IDs	Client IDs
400-179851-3	MW-12
400-179851-4	DUP-01

No preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and combine radium 226+228 by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The radium-226 and radium-228 data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

1.2 Holding Times

The holding times for the radiochemistry analyses of a water sample are 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for radium-226 (batch 452091) and radium-228 (batch 452099). The radiochemistry parameters were not detected in the method blanks above the minimum detectable concentrations (MDCs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD pairs were not reported.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for radium-226 and radium-228. The recovery results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Batch laboratory duplicates were reported for radium-226 and radium-228. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

An equipment blank was not collected with the sample set.

1.9 Field Blank

A field blank was not collected with the sample set.

1.10 Field Duplicate

One field duplicate was collected with the sample set, DUP-01. Acceptable precision [replicate error ratio (RER) ≤ 3] was demonstrated between the field duplicate and the original sample, MW-02.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	April 1, 2020
To:	Lane Dorman
From:	Jennifer Pinion
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-179851-3**

SITE: CCR Smith Plant

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of three aqueous samples and one field duplicate, collected November 18, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Beryllium by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. The qualified data should be used within the limitations of the qualifications.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001);

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-179851-1	MW-02
400-179851-2	MW-03

Laboratory IDs	Client IDs
400-179851-3	MW-12
400-179851-4	DUP-01

The chain of custody (COC) indicates the samples were between 0-6ºC. No preservation issues were noted by the laboratory.

1.0 BERYLLIUM

The samples were analyzed for beryllium by US EPA methods 3005A/6020.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
⊗ Laboratory Control Sample
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The beryllium data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.2 Holding Time

The holding time for the beryllium analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 467032 and 467033). Beryllium was not detected in the method blanks above the method detection limits (MDLs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Batch MS/MSD pairs were reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria, with the following exception.

The recovery of beryllium in the LCS was low and outside the laboratory specified acceptance criteria. Therefore, the non-detect beryllium results in the associated samples were UJ qualified as estimated less than the MDLs.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
MW-02	Beryllium	0.00017	U J3	0.00017	UJ	5
MW-03	Beryllium	0.00017	U J3	0.00017	UJ	5

mg/L- milligram per liter
U-not detected at or above the MDL
J3-laboratory flag indicating the result is an estimated value; value may not be accurate. Spike recovery or RPD outside of criteria
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.6 Equipment Blank

An equipment blank was not collected with the sample set.

1.7 Field Blank

A field blank was not collected with the sample set.

1.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-01. Acceptable precision (RPD ≤ 30%) was demonstrated between the field duplicate and the original sample, MW-02.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	April 2, 2020
To:	Lane Dorman
From:	Jennifer Pinion
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-180015-1**

SITE: CCR Smith Plant

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of four aqueous samples, one equipment blank and one field blank, collected November 19, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020
- Mercury by US EPA 7470A
- Total Dissolved Solids (TDS) by Standard Method 2540C
- Chloride by Standard Method 4500 CL-E
- Fluoride by Standard Method 4500 F C
- Sulfate by Standard Method 4500 SO4 E

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001);

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-180015-1	MWI-12A
400-180015-2	PZ-11D
400-180015-3	PZ-14

Laboratory IDs	Client IDs
400-180015-4	PZ-13D
400-180015-5	FB-02
400-180015-6	EB-02

The chain of custody (COC) indicates the samples were received between 0-6ºC. No preservation issues were noted by the laboratory.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Equipment Blank
⊗ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

1.1.1 Completeness

The metals data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to

the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.1.2 Analysis Anomaly

The laboratory narrative notes that the percent difference (%D) of lithium in the continuing calibration verification (CCV) in batch 468594 was outside the laboratory acceptance limits with high bias. Since lithium was not detected in the associated samples, no qualifications were applied to the data.

1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 467467). Metals were not detected in the method blank above the method detection limits (MDLs), with the following exceptions.

Barium was detected in the method blank at an estimated concentration greater than the MDL and less than the practical quantitation limit (PQL). Therefore, the estimated concentrations of barium in samples EB-02 and FB-02 were U qualified as not detected at the PQL. No qualifications were applied to the concentrations of barium greater than the PQL.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
EB-02	Barium	0.00014	I	0.0005	U	3
FB-02	Barium	0.00014	I	0.0005	U	3

mg/L- milligram per liter
I-laboratory flag indicating the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One batch MS/MSD pair was reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank was collected with the sample set, EB-02. Barium and boron were detected in the equipment blank at estimated concentrations greater than the MDL and less than the PQL. Since barium was previously qualified due to method blank contamination, no additional qualifications were applied to the barium data. In addition, since the concentration of Boron was U qualified in the equipment blank based on the field blank contamination, no qualifications were applied to the concentrations of boron greater than the PQL.

1.7 Field Blank

One field blank was collected with the sample set, FB-02. Barium and boron were detected in the field blank at estimated concentrations greater than the MDL and less than the PQL. Since barium was previously qualified due to method blank contamination, no additional qualifications were applied to the barium data. However, the estimated concentration of boron in EB-02 was U qualified as not detected at the PQL. No qualifications were applied to the concentrations of boron greater than the PQL.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
EB-02	Boron	0.0047	I	0.01	U	3

mg/L- milligram per liter
I-laboratory flag indicating the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

1.8 Field Duplicate

A field duplicate was not collected with the sample set.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2 MERCURY

The samples were analyzed for mercury by US EPA method 7470A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The mercury data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

2.2 Holding Time

The holding time for the mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 467720). Mercury was not detected in the method blank above the MDL.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One batch MS/MSD pair was reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank was collected with the sample set, EB-02. Mercury was not detected in the equipment blank greater than the MDL.

2.7 Field Blank

One field blank was collected with the sample set, FB-02. Mercury was not detected in the equipment blank greater than the MDL.

2.8 Field Duplicate

Field duplicates were not collected with the sample set.

2.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

2.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

3 WET CHEMISTRY

The samples were analyzed for chloride by Standard Method 4500 Cl-E, fluoride by Standard Method 4500 F C, sulfate by Standard Method 4500 SO4 E and TDS by Standard Method 2540C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

3.1 Overall Assessment

The wet chemistry data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this dataset is 100%.

3.2 Holding Times

The holding time for the fluoride, chloride and sulfate analysis of a water sample is 28 days from sample collection to analysis. The holding time for TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for each analysis and batch (TDS batch 467101, chloride batch 467500, fluoride batch 468526 and sulfate batch 467673). The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

One sample specific MS/MSD pair was reported for fluoride, using sample PZ-14. The recoveries and RPD results were within the laboratory specified acceptance criteria, with the following exception.

The RPD for fluoride in the MS/MSD pair using sample PZ-14 was high and outside the laboratory specified acceptance criteria. Therefore, the concentration of fluoride in sample PZ-14 was J qualified as estimated, based on professional and technical judgement.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
PZ-14	Fluoride	0.54	NA	0.54	J	4

mg/L- milligram per liter
NA-not applicable

Batch MS/MSD pairs were reported for to chloride, fluoride and sulfate. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data. MS/MSD pairs were not reported for TDS.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria. MRLs were also reported for chloride and sulfate.

3.6 Laboratory Duplicate

Batch laboratory duplicates were reported for total dissolved solids. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data. Laboratory duplicates were not reported for chloride, fluoride or sulfate.

3.7 Equipment Blank

One equipment blank was collected with the sample set, EB-02. The wet chemistry parameters were not detected in the equipment blank greater than the MDL.

3.8 Field Blank

One field blank was collected with the sample set, FB-02. The wet chemistry parameters were not detected in the field blank greater than the MDL.

3.9 Field Duplicate

A field duplicate was not collected with the sample set.

3.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

3.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

400A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	March 31, 2020
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-180015-2**

SITE: Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of four water samples, one field blank and one equipment blank, collected November 19, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pittsburgh, PA, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Combine Radium 226 + 228 by Calculation

EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- American Nuclear Society Verification and Validation of Radiological Data for Use in Management and Environmental Remediation, ANSI/ANS-41.5-2012, February 15, 2012.

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-180015-1	MWI-12A
400-180015-2	PZ-11D
400-180015-3	PZ-14

Laboratory IDs	Client IDs
400-180015-4	PZ-13D
400-180015-5	FB-02
400-180015-6	EB-02

No preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and combine radium 226+228 by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Tracers and Carriers
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

1.1.1 Completeness

The radium-226 and radium-228 data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

1.1.2 Analysis Anomaly

The radium-226 result in FB-02 was more negative that three sigma (σ) total propagated uncertainty (TPU). Therefore, the radium-226 and combined radium-226 + radium-228 results in sample FB-02 were UJ qualified as estimated less than the minimum detectable concentrations (MDCs).

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	Reason Code**
FB-02	Radium-226	-0.0902	U	-0.0902	UJ	13
FB-02	Combined Radium-226 +228	-0.0739	U	-0.0739	UJ	13

pCi/L-picocuries per liter
U-not detected at or above the MDC
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.2 Holding Times

The holding times for the radiochemistry analyses of a water sample are 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for radium-226 (batches 452212 and 452673) and radium-228 (batch 452214). The radiochemistry parameters were not detected in the method blanks above the MDCs.

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD pairs were not reported.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs and LCS/LCSD pair were reported for radium-226 and radium-228. The recovery and replicate error ratio (RER) results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Batch laboratory duplicates were reported for radium-226 and radium-228. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

One equipment blank was collected with the sample set, EB-02. The radiochemistry parameters were not detected in the equipment blank above the MDCs.

1.9 Field Blank

One field blank was collected with the sample set, FB-02. The radiochemistry parameters were not detected in the field blank above the MDCs.

1.10 Field Duplicate

A field duplicate was not collected with the sample set.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	April 2, 2020
To:	Lane Dorman
From:	Jennifer Pinion
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-180015-3**

SITE: CCR Smith Plant

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of four aqueous samples, one equipment blank and one field blank, collected November 19, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical test:

- Beryllium by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data are usable for supporting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001);

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
400-180015-1	MWI-12A
400-180015-2	PZ-11D
400-180015-3	PZ-14

Laboratory IDs	Client IDs
400-180015-4	PZ-13D
400-180015-5	FB-02
400-180015-6	EB-02

The chain of custody (COC) indicates the samples were between 0-6ºC. No preservation issues were noted by the laboratory.

1.0 BERYLLIUM

The samples were analyzed for beryllium by US EPA methods 3005A/6020.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Equipment Blank
⊗ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The beryllium data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.2 Holding Time

The holding time for the beryllium analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 467467). Beryllium was not detected in the method blank above the method detection limit (MDL).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One batch MS/MSD pair was reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank was collected with the sample set, EB-02. Beryllium was not detected in the equipment blank greater than the MDL.

1.7 Field Blank

One field blank was collected with the sample set, FB-02. Beryllium was not detected in the field blank greater than the MDL.

1.8 Field Duplicate

A field duplicate was not collected with the sample set.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Product Name: Low-Flow System

Date: 2020-05-05 12:59:17

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	27 ft

Well Information:		Pumping Information:	
Well ID	MW-12	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	32 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	82.86 in
Depth to Water	9.96 ft	Total Volume Pumped	38 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:32:28	4503.02	23.80	6.14	862.13	4.56	16.65	0.17	-14.37
Last 5	12:37:28	4803.02	23.79	6.12	848.72	4.20	16.70	0.16	-13.43
Last 5	12:42:28	5103.01	23.83	6.10	836.67	3.66	16.76	0.15	-12.94
Last 5	12:47:34	5409.01	23.86	6.10	825.36	2.10	16.80	0.16	-12.94
Last 5	12:52:34	5709.02	23.84	6.09	819.20	1.87	16.85	0.15	-12.55
Variance 0			0.05	-0.02	-12.05			-0.01	0.49
Variance 1			0.03	-0.00	-11.32			0.00	-0.00
Variance 2			-0.03	-0.01	-6.16			-0.01	0.40

Notes

Sample time @ 1300. Sunny 84.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-05 15:05:32

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	28 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	21.4 ft

Well Information:		Pumping Information:	
Well ID	MW-02	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2149758 L
Well Total Depth	26.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.8 in
Depth to Water	5.20 ft	Total Volume Pumped	30 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:41:48	3303.02	22.59	5.90	104.00	2.20	5.35	0.10	-16.45
Last 5	14:46:49	3604.02	22.45	5.89	105.83	2.06	5.35	0.10	-17.99
Last 5	14:51:49	3904.02	22.41	5.90	105.38	1.97	5.35	0.09	-19.31
Last 5	14:56:50	4205.02	22.26	5.90	105.62	1.95	5.35	0.09	-19.96
Last 5	15:01:50	4505.02	22.26	5.91	105.76	1.92	5.35	0.09	-21.00
Variance 0			-0.04	0.01	-0.45			-0.00	-1.32
Variance 1			-0.15	-0.00	0.24			0.00	-0.65
Variance 2			-0.00	0.01	0.14			-0.00	-1.04

Notes

Sample time @ 1505. Sunny 85. FB-01@ 1500.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-05 17:13:07

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	28.4 ft

Well Information:		Pumping Information:	
Well ID	MW-03	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	33.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.64 in
Depth to Water	6.03 ft	Total Volume Pumped	38 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	16:45:51	4501.02	22.17	5.02	54.50	5.70	6.25	0.10	81.01
Last 5	16:50:51	4801.02	22.13	5.03	54.69	5.95	6.25	0.10	80.10
Last 5	16:55:54	5104.02	22.14	5.03	54.66	6.02	6.25	0.11	79.31
Last 5	17:00:54	5404.02	22.13	5.03	54.74	6.08	6.25	0.10	78.67
Last 5	17:05:54	5704.02	22.09	5.04	54.65	6.18	6.25	0.10	78.79
Variance 0			0.01	-0.00	-0.02			0.01	-0.78
Variance 1			-0.01	0.01	0.08			-0.01	-0.64
Variance 2			-0.04	0.01	-0.09			-0.00	0.12

Notes

Sample time @ 1715. Sunny 85. DUP-01@ fake time 1615.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-06 08:22:09

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	42 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	34.6 ft

Well Information:		Pumping Information:	
Well ID	MW-06	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2774638 L
Well Total Depth	39.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	35.64 in
Depth to Water	13.85 ft	Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:59:58	600.08	22.71	6.04	6163.24	1.20	15.92	0.19	-70.39
Last 5	08:04:58	900.02	22.80	5.86	6467.76	0.95	16.18	0.18	-73.14
Last 5	08:09:58	1200.02	22.98	5.79	6620.49	0.68	16.34	0.17	-75.83
Last 5	08:14:58	1500.02	23.07	5.71	6719.34	0.43	16.65	0.16	-77.59
Last 5	08:19:58	1800.02	23.13	5.61	6954.14	0.40	16.82	0.16	-77.85
Variance 0			0.18	-0.07	152.73			-0.01	-2.69
Variance 1			0.09	-0.07	98.85			-0.01	-1.75
Variance 2			0.06	-0.10	234.80			-0.00	-0.26

Notes

Sample time @ 0820. Sunny 75. DUP-02@ fake time 0720.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-06 10:51:45

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	42 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	34.7 ft

Well Information:		Pumping Information:	
Well ID	MW-07	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2774638 L
Well Total Depth	39.7 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.76 in
Depth to Water	13.07 ft	Total Volume Pumped	42 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:29:08	5106.02	23.55	6.40	8385.04	2.30	13.55	0.12	-165.80
Last 5	10:34:08	5406.02	23.61	6.40	8363.20	2.18	13.55	0.12	-166.47
Last 5	10:39:08	5706.02	23.61	6.40	8356.28	1.96	13.55	0.12	-166.50
Last 5	10:44:08	6006.02	23.57	6.40	8374.00	1.90	13.55	0.12	-166.74
Last 5	10:49:08	6306.02	23.71	6.41	8362.49	1.88	13.55	0.12	-167.41
Variance 0			-0.00	0.01	-6.91			-0.00	-0.03
Variance 1			-0.04	-0.00	17.72			0.00	-0.24
Variance 2			0.14	0.01	-11.51			-0.00	-0.67

Notes

Sample time @ 1055. Sunny 80. EB-01@ 0900.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-06 11:49:14

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	28.4 ft

Well Information:		Pumping Information:	
Well ID	MW-11	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	33.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	25.44 in
Depth to Water	9.38 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:26:26	300.02	24.98	7.00	6651.69	2.14	10.60	0.14	-183.67
Last 5	11:31:26	600.02	24.73	7.00	6671.02	1.91	11.02	0.12	-186.89
Last 5	11:36:26	900.02	25.00	6.86	7310.41	1.78	11.20	0.12	-206.09
Last 5	11:41:26	1200.02	25.03	6.78	7426.87	1.48	11.44	0.12	-209.76
Last 5	11:46:26	1500.02	25.01	6.78	7402.21	1.32	11.50	0.12	-211.38
Variance 0			0.27	-0.14	639.39			0.00	-19.20
Variance 1			0.03	-0.08	116.46			0.00	-3.67
Variance 2			-0.02	-0.00	-24.66			-0.00	-1.62

Notes

Sample time @ 1150. Sunny 85.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-06 13:54:23

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	MW-10	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	33 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	10.2 in
Depth to Water	10.27 ft	Total Volume Pumped	34 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	13:28:15	3905.03	26.94	5.05	7880.28	6.89	11.12	0.15	-79.17
Last 5	13:33:15	4205.02	26.90	5.07	7890.80	6.77	11.12	0.15	-79.94
Last 5	13:38:15	4505.02	26.90	5.07	7901.57	6.50	11.12	0.15	-80.60
Last 5	13:43:15	4805.02	26.77	5.08	7907.61	6.48	11.12	0.15	-80.75
Last 5	13:48:15	5105.02	26.73	5.09	7926.80	6.44	11.12	0.15	-81.05
Variance 0			-0.00	0.01	10.77			0.00	-0.66
Variance 1			-0.13	0.01	6.04			-0.00	-0.15
Variance 2			-0.04	0.01	19.19			-0.00	-0.30

Notes

Sample time @ 1350. Sunny 85.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-06 15:20:07

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	27.5 ft

Well Information:		Pumping Information:	
Well ID	MW-09	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	32.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9.48 in
Depth to Water	12.45 ft	Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:57:37	600.03	26.47	6.74	6638.31	2.75	13.24	0.20	-187.33
Last 5	15:02:38	901.03	26.51	6.75	6657.76	1.55	13.24	0.23	-189.91
Last 5	15:07:38	1201.03	26.29	6.75	6667.91	1.28	13.24	0.17	-193.81
Last 5	15:12:40	1503.03	26.37	6.75	6696.23	1.20	13.24	0.14	-195.27
Last 5	15:17:40	1803.03	26.42	6.75	6704.07	1.18	13.24	0.13	-196.45
Variance 0			-0.22	0.00	10.15			-0.06	-3.90
Variance 1			0.08	-0.00	28.32			-0.02	-1.46
Variance 2			0.05	-0.00	7.84			-0.01	-1.19

Notes

Sample time @ 1525. Sunny 85.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-07 07:51:30

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	38.3 ft

Well Information:		Pumping Information:	
Well ID	MW-13	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	43.3 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	35.64 in
Depth to Water	16.90 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:28:05	300.03	21.56	7.11	12875.39	3.41	19.03	0.20	-297.41
Last 5	07:33:05	600.03	22.04	7.16	12840.97	3.09	19.25	0.16	-309.28
Last 5	07:38:05	900.03	22.16	7.17	12906.13	1.73	19.65	0.14	-326.36
Last 5	07:43:05	1200.03	22.15	7.16	12893.65	1.31	19.75	0.14	-332.28
Last 5	07:48:05	1500.03	22.18	7.14	12980.23	0.93	19.87	0.13	-336.17
Variance 0			0.12	0.01	65.16			-0.01	-17.08
Variance 1			-0.01	-0.02	-12.47			-0.01	-5.92
Variance 2			0.03	-0.02	86.58			-0.00	-3.89

Notes

Sample time @ 0755. Sunny 75. DUP-03 @ fake time 0655.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-07 10:06:02

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	38.1 ft

Well Information:		Pumping Information:	
Well ID	MW-08	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	43.1 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	66.48 in
Depth to Water	19.36 ft	Total Volume Pumped	30 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:43:35	3300.03	21.91	4.58	10834.69	2.16	24.72	0.15	-74.35
Last 5	09:48:35	3600.03	21.91	4.60	10774.82	1.78	24.76	0.15	-74.41
Last 5	09:53:36	3901.03	22.13	4.62	10804.63	1.86	24.83	0.15	-76.00
Last 5	09:58:38	4203.03	22.24	4.64	10825.35	1.80	24.86	0.15	-77.73
Last 5	10:03:38	4503.03	22.18	4.66	10810.73	1.72	24.90	0.15	-77.19
Variance 0			0.22	0.02	29.80			0.00	-1.60
Variance 1			0.10	0.03	20.72			-0.00	-1.72
Variance 2			-0.06	0.01	-14.62			-0.00	0.54

Notes

Sample time @ 1005. Sunny 80

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-07 11:08:49

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	36.04 ft

Well Information:		Pumping Information:	
Well ID	MW-14	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	41.04 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8.04 in
Depth to Water	22.40 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:47:02	300.03	23.16	7.27	5275.04	3.21	23.00	4.02	-39.77
Last 5	10:52:02	600.03	23.26	7.02	6438.14	1.82	23.05	0.26	-281.00
Last 5	10:57:02	900.03	23.34	7.02	6543.38	1.04	23.05	0.17	-292.72
Last 5	11:02:02	1200.03	23.51	7.01	6599.21	0.88	23.07	0.14	-298.23
Last 5	11:07:02	1500.03	23.43	7.02	6602.54	0.80	23.07	0.14	-296.56
Variance 0			0.08	-0.01	105.24			-0.09	-11.71
Variance 1			0.17	-0.01	55.83			-0.03	-5.52
Variance 2			-0.09	0.00	3.33			-0.00	1.68

Notes

Sample time @ 1110. Sunny 80.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-07 12:53:53

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	60 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	53 ft

Well Information:		Pumping Information:	
Well ID	PZ-11D	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.3578054 L
Well Total Depth	58 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	10.44 in
Depth to Water	8.48 ft	Total Volume Pumped	20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:31:00	1801.03	25.38	6.91	5418.80	3.44	9.35	0.16	-138.76
Last 5	12:36:00	2101.03	25.25	6.90	5441.08	2.90	9.35	0.15	-136.46
Last 5	12:41:01	2402.03	25.49	6.91	5446.61	2.46	9.35	0.16	-135.95
Last 5	12:46:01	2702.03	25.48	6.90	5431.97	1.92	9.35	0.15	-135.39
Last 5	12:51:01	3002.03	25.62	6.88	5466.80	1.88	9.35	0.15	-133.97
Variance 0			0.23	0.01	5.52			0.01	0.51
Variance 1			-0.00	-0.01	-14.63			-0.01	0.57
Variance 2			0.14	-0.02	34.83			-0.00	1.42

Notes

Sample time @ 1255. Sunny 80. FB-02@ 1250.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-07 14:48:02

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	10.5 ft

Well Information:		Pumping Information:	
Well ID	MWI-12A	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	15.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	31.2 in
Depth to Water	7.50 ft	Total Volume Pumped	28 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:25:33	3003.03	26.61	5.43	1353.68	1.42	9.95	0.15	62.54
Last 5	14:30:36	3306.04	26.07	5.48	1384.83	1.18	10.00	0.15	63.46
Last 5	14:35:36	3606.03	26.28	5.49	1360.88	1.05	10.04	0.15	61.17
Last 5	14:40:36	3906.03	26.32	5.49	1343.11	0.90	10.07	0.15	58.12
Last 5	14:45:37	4207.04	26.13	5.53	1363.49	0.85	10.10	0.15	56.03
Variance 0			0.21	0.01	-23.95			0.00	-2.28
Variance 1			0.04	-0.00	-17.78			-0.00	-3.05
Variance 2			-0.20	0.04	20.38			0.00	-2.09

Notes

Sample time @ 1450. Sunny 80.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-08 09:02:02

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	60 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	52.4 ft

Well Information:		Pumping Information:	
Well ID	PZ-13D	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.3578054 L
Well Total Depth	57.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	15.96 in
Depth to Water	18.52 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:45:15	300.04	23.25	4.38	13444.18	0.80	19.45	0.19	-64.49
Last 5	08:50:15	600.04	23.18	4.38	13439.28	0.95	19.70	0.18	-67.83
Last 5	08:55:15	900.04	23.38	4.43	13347.09	1.10	19.74	0.17	-68.75
Last 5	09:00:18	1203.04	23.34	4.49	13329.43	1.28	19.85	0.17	-68.90
Last 5									
Variance 0			-0.07	-0.00	-4.90			-0.01	-3.35
Variance 1			0.20	0.05	-92.19			-0.01	-0.92
Variance 2			-0.04	0.06	-17.66			-0.00	-0.15

Notes

Sample time @ 0900. Sunny 75. DUP-04@ fake time 0800.

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-08 09:40:32

Project Information:		Pump Information:	
Operator Name	Philip Evans	Pump Model/Type	PP
Company Name	RDH Environmental	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant	Tubing Length	25 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	19.8 ft

Well Information:		Pumping Information:	
Well ID	PZ-14	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2015856 L
Well Total Depth	24.8 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	35.16 in
Depth to Water	2.12 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:22:43	300.04	21.76	6.74	9551.61	2.45	4.45	0.16	-229.10
Last 5	09:27:43	600.04	21.77	6.74	9768.45	2.05	4.88	0.14	-232.62
Last 5	09:32:43	900.04	21.73	6.67	10199.62	1.90	5.00	0.14	-235.80
Last 5	09:37:43	1200.04	21.77	6.66	10261.22	1.85	5.05	0.13	-236.56
Last 5 Variance 0			0.02	0.00	216.84			-0.02	-3.52
Variance 1			-0.04	-0.07	431.18			-0.00	-3.18
Variance 2			0.04	-0.01	61.59			-0.01	-0.76

Notes

Sample time @ 0940. Sunny 75. EB-02@ 0915.

Grab Samples

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187738-1
Laboratory Sample Delivery Group: Upgradient
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne R Whitmire

Authorized for release by:
6/15/2020 4:36:44 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187738-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187738-1

Metals
Method 6020: The serial dilution performed for the following sample associated with batch 400-488701 was outside control limits: (400-187737-B-1-A SD ^5)

Method 6020: The method blank for preparation batch 400-488351 and analytical batch 400-488701 contained Beryllium and Lead between laboratory method detection limits and the laboratory practical quantitation limit.This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6020: The post digestion spike % recovery for Arsenic, Chromium and Selenium associated with batch 400-488701 was outside of control limits. The associated sample is: (400-187737-B-1-A PDS).

Method 6020: The following samples were diluted due to the nature of the sample matrix: (400-187737-B-1-A ^10), (400-187737-B-1-B MS ^10) and (400-187737-B-1-C MSD ^10). Elevated reporting limits (RLs) are provided.

Method 6020: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-488351 and analytical batch 400-488996 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

General Chemistry
Method SM 2540C: Sample over weight limit ran in different batch: (400-187741-A-33) and (400-187741-A-33 DU).

Method SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-490745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method SM 4500 F C: The method blank for analytical batch 400-490745 contained Fluoride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method SM 4500 Cl- E: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-12 (400-187738-1). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-490074 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Client Sample ID: MW-12 — Lab Sample ID: 400-187738-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.012		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.000043	I V	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	0.11		0.010	0.0036	mg/L	1		6020	Total Recoverable
Calcium	31		0.050	0.025	mg/L	1		6020	Total Recoverable
Chromium	0.00050		0.00050	0.00020	mg/L	1		6020	Total Recoverable
Lithium	0.014		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	430		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	200		20	14	mg/L	10		SM 4500 Cl- E	Total/NA
Fluoride	0.15	V	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Field pH	6.09				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-02 — Lab Sample ID: 400-187738-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.013		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.000057	I V	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	0.041		0.010	0.0036	mg/L	1		6020	Total Recoverable
Calcium	13		0.050	0.025	mg/L	1		6020	Total Recoverable
Chromium	0.0016		0.00050	0.00020	mg/L	1		6020	Total Recoverable
Lithium	0.0019		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	54		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.090	I V	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	4.4	I	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.91				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-03 — Lab Sample ID: 400-187738-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.024		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.00011	I V	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	0.0073	I	0.010	0.0036	mg/L	1		6020	Total Recoverable
Calcium	2.3		0.050	0.025	mg/L	1		6020	Total Recoverable
Chromium	0.00064		0.00050	0.00020	mg/L	1		6020	Total Recoverable
Lithium	0.013		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	34		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	15		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	I V	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-03 (Continued) — Lab Sample ID: 400-187738-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Field pH	5.04				SU	1		Field Sampling	Total/NA

Client Sample ID: FB-01 — Lab Sample ID: 400-187738-4

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 400-187738-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.023		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.00010	I V	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	0.0061	I	0.010	0.0036	mg/L	1		6020	Total Recoverable
Calcium	2.3		0.050	0.025	mg/L	1		6020	Total Recoverable
Chromium	0.00036	I	0.00050	0.00020	mg/L	1		6020	Total Recoverable
Lithium	0.013		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Chloride	15		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	I V	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Field pH	5.04				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN
SM 4500 F C	Fluoride	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN
Field Sampling	Field Sampling	EPA	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187738-1	MW-12	Water	05/05/20 13:00	05/07/20 08:43	
400-187738-2	MW-02	Water	05/05/20 15:05	05/07/20 08:43	
400-187738-3	MW-03	Water	05/05/20 17:15	05/07/20 08:43	
400-187738-4	FB-01	Water	05/05/20 15:00	05/07/20 08:43	
400-187738-5	DUP-01	Water	05/05/20 16:15	05/07/20 08:43	

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Client Sample ID: MW-12

Date Collected: 05/05/20 13:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-1

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:52	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/07/20 13:17	05/12/20 15:23	1
Barium	**0.012**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:52	1
Beryllium	**0.000043**	**I V**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:52	1
Boron	**0.11**		0.010	0.0036	mg/L		05/07/20 13:17	05/13/20 14:56	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:52	1
Calcium	**31**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:52	1
Chromium	**0.00050**		0.00050	0.00020	mg/L		05/07/20 13:17	05/08/20 20:52	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:52	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:52	1
Lithium	**0.014**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:52	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:52	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/07/20 13:17	05/08/20 20:52	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:34	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**430**		5.0	5.0	mg/L			05/08/20 16:07	1
Chloride	**200**		20	14	mg/L			05/26/20 18:52	10
Fluoride	**0.15**	**V**	0.10	0.032	mg/L			05/28/20 13:37	1
Sulfate	1.4	U	5.0	1.4	mg/L			05/21/20 15:37	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.09**				SU			05/05/20 13:00	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Client Sample ID: MW-02
Date Collected: 05/05/20 15:05
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-2
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:55	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/07/20 13:17	05/13/20 15:42	1
Barium	**0.013**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:55	1
Beryllium	**0.000057**	**I V**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:55	1
Boron	**0.041**		0.010	0.0036	mg/L		05/07/20 13:17	05/13/20 15:42	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:55	1
Calcium	**13**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:55	1
Chromium	**0.0016**		0.00050	0.00020	mg/L		05/07/20 13:17	05/08/20 20:55	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:55	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:55	1
Lithium	**0.0019**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:55	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:55	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/07/20 13:17	05/08/20 20:55	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:35	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**54**		5.0	5.0	mg/L			05/08/20 16:07	1
Chloride	**13**		2.0	1.4	mg/L			05/26/20 18:22	1
Fluoride	**0.090**	**I V**	0.10	0.032	mg/L			05/28/20 13:45	1
Sulfate	**4.4**	**I**	5.0	1.4	mg/L			05/21/20 15:37	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.91**				SU			05/05/20 15:05	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Client Sample ID: MW-03
Date Collected: 05/05/20 17:15
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-3
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:59	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/07/20 13:17	05/08/20 20:59	1
Barium	**0.024**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:59	1
Beryllium	**0.00011**	**I V**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:59	1
Boron	**0.0073**	**I**	0.010	0.0036	mg/L		05/07/20 13:17	05/13/20 15:48	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:59	1
Calcium	**2.3**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:59	1
Chromium	**0.00064**		0.00050	0.00020	mg/L		05/07/20 13:17	05/08/20 20:59	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:59	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:59	1
Lithium	**0.013**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:59	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:59	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/07/20 13:17	05/08/20 20:59	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:37	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**34**		5.0	5.0	mg/L			05/08/20 16:07	1
Chloride	**15**		2.0	1.4	mg/L			05/26/20 18:25	1
Fluoride	**0.050**	**I V**	0.10	0.032	mg/L			05/28/20 13:49	1
Sulfate	1.4	U	5.0	1.4	mg/L			05/21/20 15:37	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.04**				SU			05/05/20 17:15	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Client Sample ID: FB-01

Date Collected: 05/05/20 15:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-4

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 21:09	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/07/20 13:17	05/13/20 15:52	1
Barium	0.00014	U	0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 21:09	1
Beryllium	0.000034	U	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 21:09	1
Boron	0.0036	U	0.010	0.0036	mg/L		05/07/20 13:17	05/13/20 15:52	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 21:09	1
Calcium	0.025	U	0.050	0.025	mg/L		05/07/20 13:17	05/08/20 21:09	1
Chromium	0.00020	U	0.00050	0.00020	mg/L		05/07/20 13:17	05/08/20 21:09	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 21:09	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 21:09	1
Lithium	0.00038	U	0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 21:09	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 21:09	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/07/20 13:17	05/08/20 21:09	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 21:09	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:39	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/08/20 16:23	1
Chloride	1.4	U	2.0	1.4	mg/L			05/26/20 18:25	1
Fluoride	0.032	U	0.10	0.032	mg/L			05/28/20 13:53	1
Sulfate	1.4	U	5.0	1.4	mg/L			05/21/20 15:37	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Client Sample ID: DUP-01
Date Collected: 05/05/20 16:15
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-5
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 21:12	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/07/20 13:17	05/12/20 15:37	1
Barium	**0.023**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 21:12	1
Beryllium	**0.00010**	**I V**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 21:12	1
Boron	**0.0061**	**I**	0.010	0.0036	mg/L		05/07/20 13:17	05/13/20 15:58	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 21:12	1
Calcium	**2.3**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 21:12	1
Chromium	**0.00036**	**I**	0.00050	0.00020	mg/L		05/07/20 13:17	05/08/20 21:12	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 21:12	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 21:12	1
Lithium	**0.013**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 21:12	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 21:12	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/07/20 13:17	05/08/20 21:12	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 21:12	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:41	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/08/20 16:23	1
Chloride	**15**		2.0	1.4	mg/L			05/26/20 18:25	1
Fluoride	**0.040**	**I V**	0.10	0.032	mg/L			05/28/20 13:57	1
Sulfate	1.4	U	5.0	1.4	mg/L			05/21/20 15:37	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.04**				SU			05/05/20 16:15	1

Qualifiers

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.

General Chemistry

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
L	Off-scale high. Actual value is known to be greater than the value given.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample 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)
MQL	Method Quantitation Limit
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)

Client Sample ID: MW-12

Lab Sample ID: 400-187738-1

Date Collected: 05/05/20 13:00

Matrix: Water

Date Received: 05/07/20 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:52	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488888	05/12/20 15:23	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488996	05/13/20 14:56	LDC	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:34	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488550	05/08/20 16:07	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		10	490456	05/26/20 18:52	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490745	05/28/20 13:37	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	490074	05/21/20 15:37	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/05/20 13:00	EHS	TAL PEN

Client Sample ID: MW-02

Lab Sample ID: 400-187738-2

Date Collected: 05/05/20 15:05

Matrix: Water

Date Received: 05/07/20 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:55	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489103	05/13/20 15:42	AW	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:35	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488550	05/08/20 16:07	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	490456	05/26/20 18:22	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490745	05/28/20 13:45	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	490074	05/21/20 15:37	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/05/20 15:05	EHS	TAL PEN

Client Sample ID: MW-03

Lab Sample ID: 400-187738-3

Date Collected: 05/05/20 17:15

Matrix: Water

Date Received: 05/07/20 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:59	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489103	05/13/20 15:48	AW	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:37	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488550	05/08/20 16:07	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	490456	05/26/20 18:25	HES	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Client Sample ID: MW-03
Date Collected: 05/05/20 17:15
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	490745	05/28/20 13:49	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	490074	05/21/20 15:37	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/05/20 17:15	EHS	TAL PEN

Client Sample ID: FB-01
Date Collected: 05/05/20 15:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 21:09	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489103	05/13/20 15:52	AW	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:39	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488555	05/08/20 16:23	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	490456	05/26/20 18:25	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490745	05/28/20 13:53	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	490074	05/21/20 15:37	HES	TAL PEN

Client Sample ID: DUP-01
Date Collected: 05/05/20 16:15
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 21:12	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488888	05/12/20 15:37	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489103	05/13/20 15:58	AW	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:41	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488555	05/08/20 16:23	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	490456	05/26/20 18:25	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490745	05/28/20 13:57	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	490074	05/21/20 15:37	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/05/20 16:15	EHS	TAL PEN

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

Metals

Prep Batch: 488351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total Recoverable	Water	3005A	
400-187738-2	MW-02	Total Recoverable	Water	3005A	
400-187738-3	MW-03	Total Recoverable	Water	3005A	
400-187738-4	FB-01	Total Recoverable	Water	3005A	
400-187738-5	DUP-01	Total Recoverable	Water	3005A	
MB 400-488351/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 400-488351/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-187737-B-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
400-187737-B-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 488701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total Recoverable	Water	6020	488351
400-187738-2	MW-02	Total Recoverable	Water	6020	488351
400-187738-3	MW-03	Total Recoverable	Water	6020	488351
400-187738-4	FB-01	Total Recoverable	Water	6020	488351
400-187738-5	DUP-01	Total Recoverable	Water	6020	488351
MB 400-488351/1-A	Method Blank	Total Recoverable	Water	6020	488351
LCS 400-488351/2-A	Lab Control Sample	Total Recoverable	Water	6020	488351
400-187737-B-1-B MS	Matrix Spike	Total Recoverable	Water	6020	488351
400-187737-B-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	488351

Analysis Batch: 488888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total Recoverable	Water	6020	488351
400-187738-5	DUP-01	Total Recoverable	Water	6020	488351

Analysis Batch: 488996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total Recoverable	Water	6020	488351
MB 400-488351/1-A	Method Blank	Total Recoverable	Water	6020	488351

Analysis Batch: 489103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-2	MW-02	Total Recoverable	Water	6020	488351
400-187738-3	MW-03	Total Recoverable	Water	6020	488351
400-187738-4	FB-01	Total Recoverable	Water	6020	488351
400-187738-5	DUP-01	Total Recoverable	Water	6020	488351

Prep Batch: 489950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	7470A	
400-187738-2	MW-02	Total/NA	Water	7470A	
400-187738-3	MW-03	Total/NA	Water	7470A	
400-187738-4	FB-01	Total/NA	Water	7470A	
400-187738-5	DUP-01	Total/NA	Water	7470A	
MB 400-489950/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-489950/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-188100-A-3-E MS	Matrix Spike	Total/NA	Water	7470A	
400-188100-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Metals

Analysis Batch: 490419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	7470A	489950
400-187738-2	MW-02	Total/NA	Water	7470A	489950
400-187738-3	MW-03	Total/NA	Water	7470A	489950
400-187738-4	FB-01	Total/NA	Water	7470A	489950
400-187738-5	DUP-01	Total/NA	Water	7470A	489950
MB 400-489950/14-A	Method Blank	Total/NA	Water	7470A	489950
LCS 400-489950/15-A	Lab Control Sample	Total/NA	Water	7470A	489950
400-188100-A-3-E MS	Matrix Spike	Total/NA	Water	7470A	489950
400-188100-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	489950

General Chemistry

Analysis Batch: 488550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	SM 2540C	
400-187738-2	MW-02	Total/NA	Water	SM 2540C	
400-187738-3	MW-03	Total/NA	Water	SM 2540C	
MB 400-488550/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-488550/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-187738-2 DU	MW-02	Total/NA	Water	SM 2540C	

Analysis Batch: 488555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-4	FB-01	Total/NA	Water	SM 2540C	
400-187738-5	DUP-01	Total/NA	Water	SM 2540C	
MB 400-488555/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-488555/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-187741-A-33 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 490074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-187738-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
400-187738-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
400-187738-4	FB-01	Total/NA	Water	SM 4500 SO4 E	
400-187738-5	DUP-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-490074/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-490074/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-490074/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-188086-J-4 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-188086-J-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 490456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-187738-2	MW-02	Total/NA	Water	SM 4500 Cl- E	
400-187738-3	MW-03	Total/NA	Water	SM 4500 Cl- E	
400-187738-4	FB-01	Total/NA	Water	SM 4500 Cl- E	
400-187738-5	DUP-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-490456/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-490456/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 490456 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 400-490456/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-187892-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-187892-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 490745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	SM 4500 F C	
400-187738-2	MW-02	Total/NA	Water	SM 4500 F C	
400-187738-3	MW-03	Total/NA	Water	SM 4500 F C	
400-187738-4	FB-01	Total/NA	Water	SM 4500 F C	
400-187738-5	DUP-01	Total/NA	Water	SM 4500 F C	
MB 400-490745/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-490745/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-187738-1 MS	MW-12	Total/NA	Water	SM 4500 F C	
400-187738-1 MSD	MW-12	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 491172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	Field Sampling	
400-187738-2	MW-02	Total/NA	Water	Field Sampling	
400-187738-3	MW-03	Total/NA	Water	Field Sampling	
400-187738-5	DUP-01	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-488351/1-A
Matrix: Water
Analysis Batch: 488701

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 14:46	1
Barium	0.00014	U	0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 14:46	1
Beryllium	0.0000350	I	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 14:46	1
Boron	0.0036	U	0.010	0.0036	mg/L		05/07/20 13:17	05/08/20 14:46	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 14:46	1
Calcium	0.025	U	0.050	0.025	mg/L		05/07/20 13:17	05/08/20 14:46	1
Chromium	0.00020	U	0.00050	0.00020	mg/L		05/07/20 13:17	05/08/20 14:46	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 14:46	1
Lead	0.0000590	I	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 14:46	1
Lithium	0.00038	U	0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 14:46	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 14:46	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/07/20 13:17	05/08/20 14:46	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 14:46	1

Lab Sample ID: MB 400-488351/1-A
Matrix: Water
Analysis Batch: 488996

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/07/20 13:17	05/13/20 14:15	1

Lab Sample ID: LCS 400-488351/2-A
Matrix: Water
Analysis Batch: 488701

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0560		mg/L		112	80 - 120
Arsenic	0.0500	0.0516		mg/L		103	80 - 120
Barium	0.0500	0.0494		mg/L		99	80 - 120
Beryllium	0.0500	0.0501		mg/L		100	80 - 120
Boron	0.100	0.0989		mg/L		99	80 - 120
Cadmium	0.0500	0.0510		mg/L		102	80 - 120
Calcium	5.00	4.77		mg/L		95	80 - 120
Chromium	0.0500	0.0516		mg/L		103	80 - 120
Cobalt	0.0500	0.0508		mg/L		102	80 - 120
Lead	0.0500	0.0486		mg/L		97	80 - 120
Lithium	0.0500	0.0505		mg/L		101	80 - 120
Molybdenum	0.0500	0.0517		mg/L		103	80 - 120
Selenium	0.0500	0.0502		mg/L		100	80 - 120
Thallium	0.0100	0.0101		mg/L		101	80 - 120

Lab Sample ID: 400-187737-B-1-B MS
Matrix: Water
Analysis Batch: 488701

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00030	U	0.0500	0.0548		mg/L		110	75 - 125
Barium	0.068		0.0500	0.115		mg/L		95	75 - 125
Beryllium	0.00049	I	0.0500	0.0477		mg/L		94	75 - 125

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

Lab Sample ID: 400-187737-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 488701 — **Prep Batch: 488351**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.000056	U	0.0500	0.0474		mg/L		95	75 - 125
Calcium	180		5.00	173	J3	mg/L		-157	75 - 125
Cobalt	0.00011	U	0.0500	0.0429		mg/L		86	75 - 125
Lead	0.000058	U	0.0500	0.0473		mg/L		95	75 - 125
Lithium	0.0085		0.0500	0.0559		mg/L		95	75 - 125
Molybdenum	0.00090	U	0.0500	0.0532		mg/L		106	75 - 125
Thallium	0.000024	U	0.0100	0.00912		mg/L		91	75 - 125

Lab Sample ID: 400-187737-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 488701 — **Prep Batch: 488351**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00030	U	0.0500	0.0559		mg/L		112	75 - 125	2	20
Barium	0.068		0.0500	0.115		mg/L		94	75 - 125	0	20
Beryllium	0.00049	I	0.0500	0.0478		mg/L		95	75 - 125	0	20
Cadmium	0.000056	U	0.0500	0.0476		mg/L		95	75 - 125	0	20
Calcium	180		5.00	174	J3	mg/L		-148	75 - 125	0	20
Cobalt	0.00011	U	0.0500	0.0433		mg/L		87	75 - 125	1	20
Lead	0.000058	U	0.0500	0.0467		mg/L		93	75 - 125	1	20
Lithium	0.0085		0.0500	0.0563		mg/L		95	75 - 125	1	20
Molybdenum	0.00090	U	0.0500	0.0530		mg/L		106	75 - 125	0	20
Thallium	0.000024	U	0.0100	0.00903		mg/L		90	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-489950/14-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 490419 — **Prep Batch: 489950**

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 12:49	1

Lab Sample ID: LCS 400-489950/15-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 490419 — **Prep Batch: 489950**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.000978		mg/L		97	80 - 120

Lab Sample ID: 400-188100-A-3-E MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 490419 — **Prep Batch: 489950**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000070	U	0.00201	0.00190		mg/L		94	80 - 120

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

Lab Sample ID: 400-188100-A-3-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 490419 — **Prep Batch: 489950**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000070	U	0.00201	0.00185		mg/L		92	80 - 120	3	20

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

Lab Sample ID: MB 400-488550/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488550

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/08/20 16:07	1

Lab Sample ID: LCS 400-488550/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488550

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	348		mg/L		119	78 - 122

Lab Sample ID: 400-187738-2 DU — **Client Sample ID: MW-02**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488550

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	54		56.0		mg/L		4	5

Lab Sample ID: MB 400-488555/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488555

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/08/20 16:23	1

Lab Sample ID: LCS 400-488555/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488555

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	352		mg/L		120	78 - 122

Lab Sample ID: 400-187741-A-33 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488555

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	75000	L	75500	L	mg/L		1	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-490456/6
Matrix: Water
Analysis Batch: 490456

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	U	2.0	1.4	mg/L			05/26/20 18:22	1

Lab Sample ID: LCS 400-490456/7
Matrix: Water
Analysis Batch: 490456

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	33.0		mg/L		110	90 - 110

Lab Sample ID: MRL 400-490456/3
Matrix: Water
Analysis Batch: 490456

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.94	I	mg/L		97	50 - 150

Lab Sample ID: 400-187892-A-1 MS
Matrix: Water
Analysis Batch: 490456

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.7		10.0	18.1		mg/L		114	73 - 120

Lab Sample ID: 400-187892-A-1 MSD
Matrix: Water
Analysis Batch: 490456

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.7		10.0	18.1		mg/L		115	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-490745/3
Matrix: Water
Analysis Batch: 490745

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0700	I	0.10	0.032	mg/L			05/28/20 13:27	1

Lab Sample ID: LCS 400-490745/4
Matrix: Water
Analysis Batch: 490745

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.68		mg/L		92	90 - 110

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-187738-1 MS
Matrix: Water
Analysis Batch: 490745

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.15	V	1.00	1.23		mg/L		108	75 - 125

Lab Sample ID: 400-187738-1 MSD
Matrix: Water
Analysis Batch: 490745

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.15	V	1.00	1.14	J3	mg/L		99	75 - 125	8	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-490074/6
Matrix: Water
Analysis Batch: 490074

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.4	U	5.0	1.4	mg/L			05/21/20 15:26	1

Lab Sample ID: LCS 400-490074/7
Matrix: Water
Analysis Batch: 490074

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.1		mg/L		101	90 - 110

Lab Sample ID: MRL 400-490074/3
Matrix: Water
Analysis Batch: 490074

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	3.96	I	mg/L		79	50 - 150

Lab Sample ID: 400-188086-J-4 MS
Matrix: Water
Analysis Batch: 490074

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.4	U	10.0	6.84	J3	mg/L		68	77 - 128

Lab Sample ID: 400-188086-J-4 MSD
Matrix: Water
Analysis Batch: 490074

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.4	U	10.0	6.92	J3	mg/L		69	77 - 128	1	5

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93947-29464.1
Client Contact: Mr. Mike Markey	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 1
Company: Gulf Power Company				Job #:

Address: BIN 731 One Energy Place	Due Date Requested:	
City: Pensacola	TAT Requested (days):	
State, Zip: FL, 32520		
Phone: 850-444-6573(Tel)	PO #: Pay by Credit Card	
Email: richard.markey@nexteraenergy.com	WO #:	
Project Name: CCR Smith Plant upgradient	Project #: 40006609	
Site: Florida	SSOW#:	

Analysis Requested

400-187738 COC

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_F_C - Fluoride	6020, 7470A	2540C - TDS	SM4500_SO4_E - Sulfate	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - (MOD) Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N	D	N	N		
[redacted] MW-12	5/5/20	1300	G	Water			X	X	X	X	X	X	X		
[redacted] MW-02	"	1505	"	Water			"	"	"	"	"	"	"		
[redacted] MW-03	"	1715	"	Water			"	"	"	"	"	"	"		
[redacted] FB-01	"	1500	"	Water			"	"	"	"	"	"	"		
[redacted] DUP-01	5/5/20	1615	G	Water			X	X	X	X	X	X	X		
[redacted]				Water											
[redacted]				Water											
[redacted]				Water											
				Water											
				Water											
				Water											

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	5/6/20 1739	RDH	[signature]	5/6/20 1739	RDH
2	[signature]	5/7/20 843		Kathy R Owen	5.7.20 843	ETA
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.8°C IR7

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-187738-1
SDG Number: Upgradient

Login Number: 187738
List Number: 1
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	3.8°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-1
SDG: Upgradient

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187738-2
Laboratory Sample Delivery Group: Upgradient
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne R Whitmire

Authorized for release by:
6/15/2020 4:38:05 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187738-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187738-2

RAD

Method 9315: Radium-226 Prep Batch 160-470229. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-12 (400-187738-1), MW-02 (400-187738-2), MW-03 (400-187738-3), FB-01 (400-187738-4), DUP-01 (400-187738-5), (LCS 160-470229/1-A), (MB 160-470229/23-A), (480-169633-E-4-A), (480-169633-D-4-A MS) and (480-169633-E-4-B MSD)

Method 9320: Radium-228 Prep Batch 160-470230. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-12 (400-187738-1), MW-02 (400-187738-2), MW-03 (400-187738-3), FB-01 (400-187738-4), DUP-01 (400-187738-5), (LCS 160-470230/1-A), (MB 160-470230/23-A), (480-169633-E-4-C), (480-169633-D-4-B MS) and (480-169633-E-4-D MSD)

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-2
SDG: Upgradient

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

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-2
SDG: Upgradient

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187738-1	MW-12	Water	05/05/20 13:00	05/07/20 08:43	
400-187738-2	MW-02	Water	05/05/20 15:05	05/07/20 08:43	
400-187738-3	MW-03	Water	05/05/20 17:15	05/07/20 08:43	
400-187738-4	FB-01	Water	05/05/20 15:00	05/07/20 08:43	
400-187738-5	DUP-01	Water	05/05/20 16:15	05/07/20 08:43	

Client Sample ID: MW-12

Date Collected: 05/05/20 13:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.37		0.186	0.223	1.00	0.0703	pCi/L	05/12/20 15:03	06/03/20 05:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*05/12/20 15:03*	*06/03/20 05:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.498		0.240	0.244	1.00	0.350	pCi/L	05/12/20 15:38	05/21/20 16:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*
Y Carrier	*92.7*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.87		0.304	0.331	5.00	0.350	pCi/L		06/04/20 09:14	1

Client Sample ID: MW-02

Date Collected: 05/05/20 15:05
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.865**		0.148	0.168	1.00	0.0668	pCi/L	05/12/20 15:03	06/03/20 05:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*05/12/20 15:03*	*06/03/20 05:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0606	U	0.222	0.222	1.00	0.405	pCi/L	05/12/20 15:38	05/21/20 16:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*
Y Carrier	*89.0*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.805**		0.267	0.278	5.00	0.405	pCi/L		06/04/20 09:14	1

Client Sample ID: MW-03

Date Collected: 05/05/20 17:15
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.19**		0.177	0.207	1.00	0.0992	pCi/L	05/12/20 15:03	06/03/20 05:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*05/12/20 15:03*	*06/03/20 05:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.230	U	0.235	0.236	1.00	0.383	pCi/L	05/12/20 15:38	05/21/20 16:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*
Y Carrier	*88.2*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.42**		0.294	0.314	5.00	0.383	pCi/L		06/04/20 09:14	1

Client Sample ID: FB-01

Date Collected: 05/05/20 15:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00304	U	0.0336	0.0336	1.00	0.0717	pCi/L	05/12/20 15:03	06/03/20 05:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*05/12/20 15:03*	*06/03/20 05:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.114	U	0.221	0.221	1.00	0.376	pCi/L	05/12/20 15:38	05/21/20 16:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*
Y Carrier	*89.0*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.117	U	0.224	0.224	5.00	0.376	pCi/L		06/04/20 09:14	1

Client Sample ID: DUP-01

Date Collected: 05/05/20 16:15
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.17**		0.172	0.201	1.00	0.0691	pCi/L	05/12/20 15:03	06/03/20 05:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*100*		*40 - 110*	*05/12/20 15:03*	*06/03/20 05:59*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.285	U	0.253	0.255	1.00	0.407	pCi/L	05/12/20 15:38	05/21/20 16:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*100*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*
Y Carrier	*84.9*		*40 - 110*	*05/12/20 15:38*	*05/21/20 16:36*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.46**		0.306	0.325	5.00	0.407	pCi/L		06/04/20 09:14	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-2
SDG: Upgradient

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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)
MQL	Method Quantitation Limit
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)

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-2
SDG: Upgradient

Client Sample ID: MW-12
Date Collected: 05/05/20 13:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470229	05/12/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	471868	06/03/20 05:58	AJD	TAL SL
Total/NA	Prep	PrecSep_0			470230	05/12/20 15:38	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 16:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472405	06/04/20 09:14	SMP	TAL SL

Client Sample ID: MW-02
Date Collected: 05/05/20 15:05
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470229	05/12/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	471868	06/03/20 05:58	AJD	TAL SL
Total/NA	Prep	PrecSep_0			470230	05/12/20 15:38	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 16:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472405	06/04/20 09:14	SMP	TAL SL

Client Sample ID: MW-03
Date Collected: 05/05/20 17:15
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470229	05/12/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	471868	06/03/20 05:58	AJD	TAL SL
Total/NA	Prep	PrecSep_0			470230	05/12/20 15:38	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 16:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472405	06/04/20 09:14	SMP	TAL SL

Client Sample ID: FB-01
Date Collected: 05/05/20 15:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470229	05/12/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	471868	06/03/20 05:58	AJD	TAL SL
Total/NA	Prep	PrecSep_0			470230	05/12/20 15:38	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 16:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472405	06/04/20 09:14	SMP	TAL SL

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-2
SDG: Upgradient

Client Sample ID: DUP-01
Date Collected: 05/05/20 16:15
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187738-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470229	05/12/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	471868	06/03/20 05:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			470230	05/12/20 15:38	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 16:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472405	06/04/20 09:14	SMP	TAL SL

Laboratory References:

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

Rad

Prep Batch: 470229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	PrecSep-21	
400-187738-2	MW-02	Total/NA	Water	PrecSep-21	
400-187738-3	MW-03	Total/NA	Water	PrecSep-21	
400-187738-4	FB-01	Total/NA	Water	PrecSep-21	
400-187738-5	DUP-01	Total/NA	Water	PrecSep-21	
MB 160-470229/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-470229/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
480-169633-D-4-A MS	Matrix Spike	Total/NA	Water	PrecSep-21	
480-169633-E-4-B MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 470230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187738-1	MW-12	Total/NA	Water	PrecSep_0	
400-187738-2	MW-02	Total/NA	Water	PrecSep_0	
400-187738-3	MW-03	Total/NA	Water	PrecSep_0	
400-187738-4	FB-01	Total/NA	Water	PrecSep_0	
400-187738-5	DUP-01	Total/NA	Water	PrecSep_0	
MB 160-470230/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-470230/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
480-169633-D-4-B MS	Matrix Spike	Total/NA	Water	PrecSep_0	
480-169633-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-470229/23-A
Matrix: Water
Analysis Batch: 471868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470229

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03524	U	0.0432	0.0433	1.00	0.0704	pCi/L	05/12/20 15:03	06/03/20 07:57	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*05/12/20 15:03*	*06/03/20 07:57*	*1*

Lab Sample ID: LCS 160-470229/1-A
Matrix: Water
Analysis Batch: 471868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470229

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.62		1.08	1.00	0.0635	pCi/L	94	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*101*		*40 - 110*

Lab Sample ID: 480-169633-D-4-A MS
Matrix: Water
Analysis Batch: 471868

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 470229

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.178		11.3	10.59		1.08	1.00	0.0644	pCi/L	92	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*98.5*		*40 - 110*

Lab Sample ID: 480-169633-E-4-B MSD
Matrix: Water
Analysis Batch: 471868

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 470229

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.178		11.3	9.988		1.03	1.00	0.0727	pCi/L	86	75 - 138	0.28	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*96.4*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-470230/23-A
Matrix: Water
Analysis Batch: 471024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470230

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2201	U	0.226	0.227	1.00	0.368	pCi/L	05/12/20 15:38	05/21/20 16:34	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110	05/12/20 15:38	05/21/20 16:34	1
Y Carrier	88.2		40 - 110	05/12/20 15:38	05/21/20 16:34	1

Lab Sample ID: LCS 160-470230/1-A
Matrix: Water
Analysis Batch: 471097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470230

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.82	8.420		0.992	1.00	0.381	pCi/L	95	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	90.5		40 - 110

Lab Sample ID: 480-169633-D-4-B MS
Matrix: Water
Analysis Batch: 471024

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 470230

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.0754	U	8.82	8.879		1.03	1.00	0.346	pCi/L	100	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	98.5		40 - 110
Y Carrier	89.0		40 - 110

Lab Sample ID: 480-169633-E-4-D MSD
Matrix: Water
Analysis Batch: 471024

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 470230

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.0754	U	8.82	7.658		0.929	1.00	0.378	pCi/L	86	45 - 150	0.62	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	96.4		40 - 110
Y Carrier	86.7		40 - 110

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93947-29464.1
Client Contact: Mr. Mike Markey	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6573(Tel)	PO #: Pay by Credit Card			
Email: richard.markey@nexteraenergy.com	WO #:			
Project Name: CCR Smith Plant upgradient	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Requested

400-187738 COC

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_F_C - Fluoride	6020, 7470A	2540C - TDS	SM4500_SO4_E - Sulfate	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - (MOD) Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N	D	N	N		
[redacted] MW-12	5/5/20	1300	G	Water			X	X	X	X	X	X	X		
[redacted] MW-02	↓	1505	↓	Water			↓	↓	↓	↓	↓	↓	↓		
[redacted] MW-03		1715		Water											
[redacted] FB-01		1500		Water											
[redacted] DUP-01	5/5/20	1615	G	Water			X	X	X	X	X	X	X		
[redacted]				Water											
[redacted]				Water											
[redacted]				Water											
				Water											
				Water											
				Water											

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[redacted]	5/6/20 1739	RDH	[redacted]	5/6/20 1739	RDH
Relinquished by: [redacted]	Date/Time: 5/7/20 843	Company	Received by: Kathy R Owen	Date/Time: 5.7.20 843	Company ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.8°C IR7

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-187738-2
SDG Number: Upgradient

Login Number: 187738
List Number: 1
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	3.8°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: Gulf Power Company

Job Number: 400-187738-2
SDG Number: Upgradient

Login Number: 187738
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/08/20 07:39 PM

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

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-2
SDG: Upgradient

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187738-2
SDG: Upgradient

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187737-1
Laboratory Sample Delivery Group: Downgradient
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne R Whitmire

Authorized for release by:
6/15/2020 8:48:45 AM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187737-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187737-1

Metals
Method 6020: The serial dilution performed for the following sample associated with batch 400-488701 was outside control limits: (400-187737-B-1-A SD ^5).

Method 6020: The method blank for preparation batch 400-488351 and analytical batch 400-488701 contained Beryllium and Lead between laboratory method detection limits and the laboratory practical quantitation limit.This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6020: The post digestion spike % recovery for Arsenic, Chromium and Selenium associated with batch 400-488701 was outside of control limits. The associated sample is: (400-187737-B-1-A PDS).

Method 6020: The following samples were diluted due to the nature of the sample matrix: MW-06 (400-187737-1), MW-07 (400-187737-2), MW-09 (400-187737-3), MW-10 (400-187737-4), MW-11 (400-187737-5), DUP-02 (400-187737-6), EB-01 (400-187737-7), MW-08 (400-187737-8), MW-13 (400-187737-9), MW-14 (400-187737-10), (400-187737-B-1-B MS ^10), (400-187737-B-1-C MSD ^10) and DUP-03 (400-187737-11). Elevated reporting limits (RLs) are provided.

Method 6020: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-488351 and analytical batch 400-488996 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-488587 and analytical batch 400-489733 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The internal standards were also impacted.

Method 6020: The method blank for preparation batch 400-488587 contained Selenium above the reporting limit (RL). None samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 6020: The following samples were diluted due to the nature of the sample matrix: (400-187825-C-1-A ^500), (400-187825-C-1-B MS ^500) and (400-187825-C-1-C MSD ^500). Elevated reporting limits (RLs) are provided.

Method 6020: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-08 (400-187737-8). Elevated reporting limits (RLs) are provided.

General Chemistry
Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-489058 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-490609 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-490456 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method SM 4500 Cl- E: Due to the concentration of chlorides in the parent sample, the MS/MSD was diluted after the spike. The Spike amount was adjusted by the dilution factor. (400-187737-A-5 MS) and (400-187737-A-5 MSD)

Method SM 4500 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-06 (400-187737-1), MW-07 (400-187737-2), MW-09 (400-187737-3), MW-10 (400-187737-4), MW-11 (400-187737-5), DUP-02 (400-187737-6), MW-08 (400-187737-8), MW-13 (400-187737-9), MW-14 (400-187737-10), DUP-03 (400-187737-11), (400-187737-A-5

Job ID: 400-187737-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

MS) and (400-187737-A-5 MSD). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-490074 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-490088 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method SM 4500 SO4 E: Due to the concentration of sulfates in the parent sample, the MS/MSD was diluted after the spike. The spike amount was adjusted by the dilution factor. (400-187737-A-3 MS) and (400-187737-A-3 MSD)

Method SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-06 (400-187737-1), MW-07 (400-187737-2), MW-09 (400-187737-3), MW-10 (400-187737-4), MW-11 (400-187737-5), DUP-02 (400-187737-6), MW-08 (400-187737-8), MW-13 (400-187737-9), MW-14 (400-187737-10), DUP-03 (400-187737-11), (400-187737-A-3 MS) and (400-187737-A-3 MSD). Elevated reporting limits (RLs) are provided.

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-06 — Lab Sample ID: 400-187737-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0034		0.0025	0.00078	mg/L	10		6020	Total Recoverable
Barium	0.068		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.00049	I	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	7.7		0.10	0.036	mg/L	10		6020	Total Recoverable
Calcium	180		0.050	0.025	mg/L	1		6020	Total Recoverable
Lithium	0.0085		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	5000		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2500		120	84	mg/L	60		SM 4500 Cl- E	Total/NA
Sulfate	320		100	28	mg/L	20		SM 4500 SO4 E	Total/NA
Field pH	5.61				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-07 — Lab Sample ID: 400-187737-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.12		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.00020	I V	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	3.6		0.10	0.036	mg/L	10		6020	Total Recoverable
Calcium	290		0.050	0.025	mg/L	1		6020	Total Recoverable
Cobalt	0.00029	I	0.00050	0.00011	mg/L	1		6020	Total Recoverable
Lithium	0.0019		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Molybdenum	0.012		0.0030	0.00090	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	6100		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2600		120	84	mg/L	60		SM 4500 Cl- E	Total/NA
Sulfate	550		150	42	mg/L	30		SM 4500 SO4 E	Total/NA
Field pH	6.41				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-09 — Lab Sample ID: 400-187737-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.093		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.000053	I V	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	11		0.20	0.072	mg/L	20		6020	Total Recoverable
Calcium	260		0.050	0.025	mg/L	1		6020	Total Recoverable
Cobalt	0.00018	I	0.00050	0.00011	mg/L	1		6020	Total Recoverable
Lithium	0.0034		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Molybdenum	0.0060		0.0030	0.00090	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	5000		50	50	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-09 (Continued) — Lab Sample ID: 400-187737-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2200		120	84	mg/L	60		SM 4500 Cl- E	Total/NA
Fluoride	0.040	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	440		200	56	mg/L	40		SM 4500 SO4 E	Total/NA
Field pH	6.75				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 400-187737-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.00063		0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	10		0.10	0.036	mg/L	10		6020	Total Recoverable
Calcium	450		0.050	0.025	mg/L	1		6020	Total Recoverable
Lithium	0.0071		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	5400		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2500		120	84	mg/L	60		SM 4500 Cl- E	Total/NA
Fluoride	0.040	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	640		250	70	mg/L	50		SM 4500 SO4 E	Total/NA
Field pH	5.09				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-11 — Lab Sample ID: 400-187737-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.011		0.0025	0.00078	mg/L	10		6020	Total Recoverable
Barium	0.15		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.000052	I V	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	3.8		0.10	0.036	mg/L	10		6020	Total Recoverable
Calcium	160		0.050	0.025	mg/L	1		6020	Total Recoverable
Cobalt	0.00032	I	0.00050	0.00011	mg/L	1		6020	Total Recoverable
Molybdenum	0.032		0.0030	0.00090	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	5200		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2700		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Sulfate	270		200	56	mg/L	40		SM 4500 SO4 E	Total/NA
Field pH	6.78				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 400-187737-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.070		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.00046	I	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	8.6		0.20	0.072	mg/L	20		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-02 (Continued) — Lab Sample ID: 400-187737-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	190		0.050	0.025	mg/L	1		6020	Total Recoverable
Lithium	0.0076		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	5100		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2500		120	84	mg/L	60		SM 4500 Cl- E	Total/NA
Sulfate	270		200	56	mg/L	40		SM 4500 SO4 E	Total/NA
Field pH	5.61				SU	1		Field Sampling	Total/NA

Client Sample ID: EB-01 — Lab Sample ID: 400-187737-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.000036	I V	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	0.026		0.010	0.0036	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	52		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-08 — Lab Sample ID: 400-187737-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0034		0.0025	0.00078	mg/L	10		6020	Total Recoverable
Barium	0.070		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.0015		0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	15		1.0	0.36	mg/L	100		6020	Total Recoverable
Calcium	550		0.050	0.025	mg/L	1		6020	Total Recoverable
Lithium	0.011		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	8100		130	130	mg/L	1		SM 2540C	Total/NA
Chloride	3600		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Sulfate	760		250	70	mg/L	50		SM 4500 SO4 E	Total/NA
Field pH	4.66				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13 — Lab Sample ID: 400-187737-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.083		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Boron	14		1.0	0.36	mg/L	100		6020	Total Recoverable
Calcium	560		0.050	0.025	mg/L	1		6020	Total Recoverable
Lithium	0.15		0.010	0.0038	mg/L	10		6020	Total Recoverable
Molybdenum	0.0085		0.0030	0.00090	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	9100		130	130	mg/L	1		SM 2540C	Total/NA
Chloride	4300		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Fluoride	0.040	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	530		250	70	mg/L	50		SM 4500 SO4 E	Total/NA
Field pH	7.14				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-14 — Lab Sample ID: 400-187737-10

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0019	I	0.0025	0.00078	mg/L	10		6020	Total Recoverable
Barium	0.062		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Calcium	290		0.050	0.025	mg/L	1		6020	Total Recoverable
Lithium	0.0037		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Molybdenum	0.094		0.0030	0.00090	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	4400		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	1900		80	56	mg/L	40		SM 4500 Cl- E	Total/NA
Fluoride	0.090	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	490		250	70	mg/L	50		SM 4500 SO4 E	Total/NA
Field pH	7.02				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-03 — Lab Sample ID: 400-187737-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00081	I	0.0025	0.00078	mg/L	10		6020	Total Recoverable
Barium	0.083		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Boron	15		1.0	0.36	mg/L	100		6020	Total Recoverable
Calcium	580		0.050	0.025	mg/L	1		6020	Total Recoverable
Lead	0.00013	I	0.00025	0.000058	mg/L	1		6020	Total Recoverable
Lithium	0.15		0.010	0.0038	mg/L	10		6020	Total Recoverable
Molybdenum	0.0093		0.0030	0.00090	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	9600		130	130	mg/L	1		SM 2540C	Total/NA
Chloride	4400		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Fluoride	0.050	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	540		250	70	mg/L	50		SM 4500 SO4 E	Total/NA
Field pH	7.14				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN
SM 4500 F C	Fluoride	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN
Field Sampling	Field Sampling	EPA	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187737-1	MW-06	Water	05/06/20 08:20	05/07/20 08:43	
400-187737-2	MW-07	Water	05/06/20 10:55	05/07/20 08:43	
400-187737-3	MW-09	Water	05/06/20 15:25	05/07/20 08:43	
400-187737-4	MW-10	Water	05/06/20 13:50	05/07/20 08:43	
400-187737-5	MW-11	Water	05/06/20 11:50	05/07/20 08:43	
400-187737-6	DUP-02	Water	05/06/20 07:20	05/07/20 08:43	
400-187737-7	EB-01	Water	05/06/20 09:00	05/07/20 08:43	
400-187737-8	MW-08	Water	05/07/20 10:05	05/08/20 13:20	
400-187737-9	MW-13	Water	05/07/20 07:55	05/08/20 13:20	
400-187737-10	MW-14	Water	05/07/20 11:10	05/08/20 13:20	
400-187737-11	DUP-03	Water	05/07/20 06:55	05/08/20 13:20	

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-06
Date Collected: 05/06/20 08:20
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-1
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:08	1
Arsenic	**0.0034**		0.0025	0.00078	mg/L		05/07/20 13:17	05/12/20 14:40	10
Barium	**0.068**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:08	1
Beryllium	**0.00049**	**I**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:08	1
Boron	**7.7**		0.10	0.036	mg/L		05/07/20 13:17	05/13/20 14:25	10
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:08	1
Calcium	**180**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:08	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/07/20 13:17	05/12/20 14:40	10
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:08	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:08	1
Lithium	**0.0085**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:08	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:08	1
Selenium	0.0016	U	0.0025	0.0016	mg/L		05/07/20 13:17	05/13/20 13:32	10
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:06	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5000**		50	50	mg/L			05/11/20 16:55	1
Chloride	**2500**		120	84	mg/L			05/26/20 18:52	60
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 18:28	1
Sulfate	**320**		100	28	mg/L			05/21/20 16:23	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.61**				SU			05/06/20 08:20	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-07
Date Collected: 05/06/20 10:55
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-2
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:32	1
Arsenic	0.00078	U	0.0025	0.00078	mg/L		05/07/20 13:17	05/12/20 14:50	10
Barium	**0.12**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:32	1
Beryllium	**0.00020**	**I V**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:32	1
Boron	**3.6**		0.10	0.036	mg/L		05/07/20 13:17	05/13/20 14:35	10
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:32	1
Calcium	**290**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:32	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/07/20 13:17	05/12/20 14:50	10
Cobalt	**0.00029**	**I**	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:32	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:32	1
Lithium	**0.0019**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:32	1
Molybdenum	**0.012**		0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:32	1
Selenium	0.0016	U	0.0025	0.0016	mg/L		05/07/20 13:17	05/13/20 13:42	10
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:11	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6100**		50	50	mg/L			05/11/20 16:55	1
Chloride	**2600**		120	84	mg/L			05/26/20 18:52	60
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 18:31	1
Sulfate	**550**		150	42	mg/L			05/21/20 16:25	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.41**				SU			05/06/20 10:55	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-09
Date Collected: 05/06/20 15:25
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-3
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:35	1
Arsenic	0.0016	U	0.0050	0.0016	mg/L		05/07/20 13:17	05/12/20 14:56	20
Barium	**0.093**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:35	1
Beryllium	**0.000053**	**I V**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:35	1
Boron	**11**		0.20	0.072	mg/L		05/07/20 13:17	05/13/20 14:39	20
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:35	1
Calcium	**260**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:35	1
Chromium	0.0040	U	0.010	0.0040	mg/L		05/07/20 13:17	05/12/20 14:56	20
Cobalt	**0.00018**	**I**	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:35	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:35	1
Lithium	**0.0034**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:35	1
Molybdenum	**0.0060**		0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:35	1
Selenium	0.0033	U	0.0050	0.0033	mg/L		05/07/20 13:17	05/13/20 14:39	20
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:13	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5000**		50	50	mg/L			05/11/20 16:55	1
Chloride	**2200**		120	84	mg/L			05/26/20 18:52	60
Fluoride	**0.040**	**I**	0.10	0.032	mg/L			05/27/20 18:34	1
Sulfate	**440**		200	56	mg/L			05/21/20 18:15	40

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.75**				SU			05/06/20 15:25	1

Client Sample ID: MW-10

Date Collected: 05/06/20 13:50
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-4

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:38	1
Arsenic	0.00078	U	0.0025	0.00078	mg/L		05/07/20 13:17	05/12/20 15:00	10
Barium	**0.11**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:38	1
Beryllium	**0.00063**		0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:38	1
Boron	**10**		0.10	0.036	mg/L		05/07/20 13:17	05/13/20 14:42	10
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:38	1
Calcium	**450**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:38	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/07/20 13:17	05/12/20 15:00	10
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:38	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:38	1
Lithium	**0.0071**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:38	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:38	1
Selenium	0.0016	U	0.0025	0.0016	mg/L		05/07/20 13:17	05/13/20 14:42	10
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:15	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5400**		50	50	mg/L			05/11/20 16:55	1
Chloride	**2500**		120	84	mg/L			05/26/20 18:55	60
Fluoride	**0.040**	**I**	0.10	0.032	mg/L			05/27/20 18:44	1
Sulfate	**640**		250	70	mg/L			05/21/20 18:21	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.09**				SU			05/06/20 13:50	1

Client Sample ID: MW-11

Date Collected: 05/06/20 11:50
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-5

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:42	1
Arsenic	**0.011**		0.0025	0.00078	mg/L		05/07/20 13:17	05/12/20 15:06	10
Barium	**0.15**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:42	1
Beryllium	**0.000052**	**I V**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:42	1
Boron	**3.8**		0.10	0.036	mg/L		05/07/20 13:17	05/13/20 14:46	10
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:42	1
Calcium	**160**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:42	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/07/20 13:17	05/12/20 15:06	10
Cobalt	**0.00032**	**I**	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:42	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:42	1
Lithium	0.00038	U	0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:42	1
Molybdenum	**0.032**		0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:42	1
Selenium	0.0016	U	0.0025	0.0016	mg/L		05/07/20 13:17	05/13/20 14:46	10
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:42	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:17	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5200**		50	50	mg/L			05/11/20 16:55	1
Chloride	**2700**		200	140	mg/L			05/26/20 18:55	100
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 18:55	1
Sulfate	**270**		200	56	mg/L			05/21/20 18:21	40

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.78**				SU			05/06/20 11:50	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: DUP-02
Date Collected: 05/06/20 07:20
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-6
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:45	1
Arsenic	0.0016	U	0.0050	0.0016	mg/L		05/07/20 13:17	05/13/20 14:49	20
Barium	**0.070**		0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:45	1
Beryllium	**0.00046**	**I**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:45	1
Boron	**8.6**		0.20	0.072	mg/L		05/07/20 13:17	05/13/20 14:49	20
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:45	1
Calcium	**190**		0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:45	1
Chromium	0.0040	U	0.010	0.0040	mg/L		05/07/20 13:17	05/13/20 14:49	20
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:45	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:45	1
Lithium	**0.0076**		0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:45	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:45	1
Selenium	0.0033	U	0.0050	0.0033	mg/L		05/07/20 13:17	05/13/20 14:49	20
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:19	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5100**		50	50	mg/L			05/11/20 16:55	1
Chloride	**2500**		120	84	mg/L			05/26/20 19:02	60
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 18:59	1
Sulfate	**270**		200	56	mg/L			05/21/20 18:21	40

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.61**				SU			05/06/20 07:20	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: EB-01
Date Collected: 05/06/20 09:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-7
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 20:49	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/07/20 13:17	05/08/20 20:49	1
Barium	0.00014	U	0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 20:49	1
Beryllium	**0.000036**	**I V**	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 20:49	1
Boron	**0.026**		0.010	0.0036	mg/L		05/07/20 13:17	05/13/20 14:52	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 20:49	1
Calcium	0.025	U	0.050	0.025	mg/L		05/07/20 13:17	05/08/20 20:49	1
Chromium	0.00020	U	0.00050	0.00020	mg/L		05/07/20 13:17	05/08/20 20:49	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 20:49	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 20:49	1
Lithium	0.00038	U	0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 20:49	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 20:49	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/07/20 13:17	05/08/20 20:49	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 20:49	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:21	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**52**		5.0	5.0	mg/L			05/11/20 16:55	1
Chloride	1.4	U	2.0	1.4	mg/L			05/26/20 18:32	1
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 19:02	1
Sulfate	1.4	U	5.0	1.4	mg/L			05/21/20 18:38	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-08
Date Collected: 05/07/20 10:05
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-8
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.030	U	0.050	0.030	mg/L		05/09/20 10:57	05/27/20 14:17	100
Arsenic	**0.0034**		0.0025	0.00078	mg/L		05/09/20 10:57	05/22/20 18:43	10
Barium	**0.070**		0.00050	0.00014	mg/L		05/09/20 10:57	05/19/20 23:39	1
Beryllium	**0.0015**		0.00050	0.000034	mg/L		05/09/20 10:57	05/19/20 23:39	1
Boron	**15**		1.0	0.36	mg/L		05/09/20 10:57	05/28/20 12:40	100
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/09/20 10:57	05/19/20 23:39	1
Calcium	**550**		0.050	0.025	mg/L		05/09/20 10:57	05/19/20 23:39	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/09/20 10:57	05/21/20 17:23	10
Cobalt	0.0011	U	0.0050	0.0011	mg/L		05/09/20 10:57	05/21/20 17:23	10
Lead	0.000058	U	0.00025	0.000058	mg/L		05/09/20 10:57	05/19/20 23:39	1
Lithium	**0.011**		0.0010	0.00038	mg/L		05/09/20 10:57	05/19/20 23:39	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/09/20 10:57	05/19/20 23:39	1
Selenium	0.0016	U	0.0025	0.0016	mg/L		05/09/20 10:57	05/22/20 18:43	10
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/09/20 10:57	05/19/20 23:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:22	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**8100**		130	130	mg/L			05/13/20 17:59	1
Chloride	**3600**		200	140	mg/L			05/26/20 18:55	100
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 19:06	1
Sulfate	**760**		250	70	mg/L			05/21/20 18:21	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.66**				SU			05/07/20 10:05	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-13
Date Collected: 05/07/20 07:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-9
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/09/20 10:57	05/19/20 23:43	1
Arsenic	0.00078	U	0.0025	0.00078	mg/L		05/09/20 10:57	05/22/20 18:50	10
Barium	**0.083**		0.00050	0.00014	mg/L		05/09/20 10:57	05/19/20 23:43	1
Beryllium	0.00034	U	0.0050	0.00034	mg/L		05/09/20 10:57	05/21/20 17:30	10
Boron	**14**		1.0	0.36	mg/L		05/09/20 10:57	05/27/20 14:27	100
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/09/20 10:57	05/19/20 23:43	1
Calcium	**560**		0.050	0.025	mg/L		05/09/20 10:57	05/19/20 23:43	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/09/20 10:57	05/21/20 17:30	10
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/09/20 10:57	05/19/20 23:43	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/09/20 10:57	05/19/20 23:43	1
Lithium	**0.15**		0.010	0.0038	mg/L		05/09/20 10:57	05/21/20 17:30	10
Molybdenum	**0.0085**		0.0030	0.00090	mg/L		05/09/20 10:57	05/19/20 23:43	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/09/20 10:57	05/19/20 23:43	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/09/20 10:57	05/19/20 23:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:24	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**9100**		130	130	mg/L			05/13/20 17:59	1
Chloride	**4300**		200	140	mg/L			05/26/20 18:55	100
Fluoride	**0.040**	**I**	0.10	0.032	mg/L			05/27/20 19:10	1
Sulfate	**530**		250	70	mg/L			05/21/20 18:24	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.14**				SU			05/07/20 07:55	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-14
Date Collected: 05/07/20 11:10
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-10
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/09/20 10:57	05/19/20 23:46	1
Arsenic	**0.0019**	**I**	0.0025	0.00078	mg/L		05/09/20 10:57	05/22/20 18:57	10
Barium	**0.062**		0.00050	0.00014	mg/L		05/09/20 10:57	05/19/20 23:46	1
Beryllium	0.000034	U	0.00050	0.000034	mg/L		05/09/20 10:57	05/19/20 23:46	1
Boron	0.36	U	1.0	0.36	mg/L		05/09/20 10:57	05/27/20 14:31	100
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/09/20 10:57	05/19/20 23:46	1
Calcium	**290**		0.050	0.025	mg/L		05/09/20 10:57	05/19/20 23:46	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/09/20 10:57	05/21/20 17:37	10
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/09/20 10:57	05/19/20 23:46	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/09/20 10:57	05/19/20 23:46	1
Lithium	**0.0037**		0.0010	0.00038	mg/L		05/09/20 10:57	05/19/20 23:46	1
Molybdenum	**0.094**		0.0030	0.00090	mg/L		05/09/20 10:57	05/19/20 23:46	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/09/20 10:57	05/19/20 23:46	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/09/20 10:57	05/19/20 23:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:26	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4400**		50	50	mg/L			05/13/20 17:59	1
Chloride	**1900**		80	56	mg/L			05/26/20 19:02	40
Fluoride	**0.090**	**I**	0.10	0.032	mg/L			05/27/20 19:13	1
Sulfate	**490**		250	70	mg/L			05/21/20 18:25	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.02**				SU			05/07/20 11:10	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: DUP-03
Date Collected: 05/07/20 06:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-11
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/09/20 10:57	05/19/20 23:49	1
Arsenic	**0.00081**	**I**	0.0025	0.00078	mg/L		05/09/20 10:57	05/22/20 19:03	10
Barium	**0.083**		0.00050	0.00014	mg/L		05/09/20 10:57	05/19/20 23:49	1
Beryllium	0.00034	U	0.0050	0.00034	mg/L		05/09/20 10:57	05/22/20 19:03	10
Boron	**15**		1.0	0.36	mg/L		05/09/20 10:57	05/27/20 14:34	100
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/09/20 10:57	05/19/20 23:49	1
Calcium	**580**		0.050	0.025	mg/L		05/09/20 10:57	05/19/20 23:49	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/09/20 10:57	05/21/20 17:50	10
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/09/20 10:57	05/19/20 23:49	1
Lead	**0.00013**	**I**	0.00025	0.000058	mg/L		05/09/20 10:57	05/19/20 23:49	1
Lithium	**0.15**		0.010	0.0038	mg/L		05/09/20 10:57	05/22/20 19:03	10
Molybdenum	**0.0093**		0.0030	0.00090	mg/L		05/09/20 10:57	05/19/20 23:49	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/09/20 10:57	05/19/20 23:49	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/09/20 10:57	05/19/20 23:49	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 13:28	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**9600**		130	130	mg/L			05/13/20 17:59	1
Chloride	**4400**		200	140	mg/L			05/26/20 19:02	100
Fluoride	**0.050**	**I**	0.10	0.032	mg/L			05/27/20 19:16	1
Sulfate	**540**		250	70	mg/L			05/21/20 18:25	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.14**				SU			05/07/20 06:55	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Qualifiers

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.

General Chemistry

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

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)
MQL	Method Quantitation Limit
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)

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-06

Date Collected: 05/06/20 08:20
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:08	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488888	05/12/20 14:40	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488996	05/13/20 13:32	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488996	05/13/20 14:25	LDC	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:06	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488758	05/11/20 16:55	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		60	490456	05/26/20 18:52	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:28	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	490074	05/21/20 16:23	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/06/20 08:20	EHS	TAL PEN

Client Sample ID: MW-07

Date Collected: 05/06/20 10:55
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:32	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488888	05/12/20 14:50	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488996	05/13/20 13:42	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488996	05/13/20 14:35	LDC	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:11	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488758	05/11/20 16:55	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		60	490456	05/26/20 18:52	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:31	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	490074	05/21/20 16:25	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/06/20 10:55	EHS	TAL PEN

Client Sample ID: MW-09

Date Collected: 05/06/20 15:25
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:35	LDC	TAL PEN

Client Sample ID: MW-09

Lab Sample ID: 400-187737-3

Date Collected: 05/06/20 15:25

Matrix: Water

Date Received: 05/07/20 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		20	488888	05/12/20 14:56	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		20	488996	05/13/20 14:39	LDC	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:13	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488758	05/11/20 16:55	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		60	490456	05/26/20 18:52	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:34	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		40	490088	05/21/20 18:15	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/06/20 15:25	EHS	TAL PEN

Client Sample ID: MW-10

Lab Sample ID: 400-187737-4

Date Collected: 05/06/20 13:50

Matrix: Water

Date Received: 05/07/20 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:38	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488888	05/12/20 15:00	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488996	05/13/20 14:42	LDC	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:15	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488758	05/11/20 16:55	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		60	490456	05/26/20 18:55	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:44	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	490088	05/21/20 18:21	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/06/20 13:50	EHS	TAL PEN

Client Sample ID: MW-11

Lab Sample ID: 400-187737-5

Date Collected: 05/06/20 11:50

Matrix: Water

Date Received: 05/07/20 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:42	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488888	05/12/20 15:06	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		10	488996	05/13/20 14:46	LDC	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:17	JAP	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-11
Date Collected: 05/06/20 11:50
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	488758	05/11/20 16:55	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	490456	05/26/20 18:55	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:55	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		40	490088	05/21/20 18:21	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/06/20 11:50	EHS	TAL PEN

Client Sample ID: DUP-02
Date Collected: 05/06/20 07:20
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:45	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		20	488996	05/13/20 14:49	LDC	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:19	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488758	05/11/20 16:55	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		60	490456	05/26/20 19:02	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:59	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		40	490088	05/21/20 18:21	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/06/20 07:20	EHS	TAL PEN

Client Sample ID: EB-01
Date Collected: 05/06/20 09:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488701	05/08/20 20:49	LDC	TAL PEN
Total Recoverable	Prep	3005A			488351	05/07/20 13:17	NET	TAL PEN
Total Recoverable	Analysis	6020		1	488996	05/13/20 14:52	LDC	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:21	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	488758	05/11/20 16:55	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	490456	05/26/20 18:32	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 19:02	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	490088	05/21/20 18:38	HES	TAL PEN

Client Sample ID: MW-08

Lab Sample ID: 400-187737-8

Date Collected: 05/07/20 10:05

Matrix: Water

Date Received: 05/08/20 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 23:39	LDC	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 17:23	AW	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490314	05/22/20 18:43	LDC	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		100	490622	05/27/20 14:17	AW	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		100	490736	05/28/20 12:40	AW	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:22	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	490456	05/26/20 18:55	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 19:06	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	490088	05/21/20 18:21	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/07/20 10:05	EHS	TAL PEN

Client Sample ID: MW-13

Lab Sample ID: 400-187737-9

Date Collected: 05/07/20 07:55

Matrix: Water

Date Received: 05/08/20 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 23:43	LDC	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 17:30	AW	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490314	05/22/20 18:50	LDC	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		100	490622	05/27/20 14:27	AW	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:24	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	490456	05/26/20 18:55	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 19:10	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	490088	05/21/20 18:24	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/07/20 07:55	EHS	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Client Sample ID: MW-14
Date Collected: 05/07/20 11:10
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 23:46	LDC	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 17:37	AW	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490314	05/22/20 18:57	LDC	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		100	490622	05/27/20 14:31	AW	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:26	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		40	490456	05/26/20 19:02	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 19:13	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	490088	05/21/20 18:25	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/07/20 11:10	EHS	TAL PEN

Client Sample ID: DUP-03
Date Collected: 05/07/20 06:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 23:49	LDC	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 17:50	AW	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490314	05/22/20 19:03	LDC	TAL PEN
Total Recoverable	Prep	3005A			488587	05/09/20 10:57	NET	TAL PEN
Total Recoverable	Analysis	6020		100	490622	05/27/20 14:34	AW	TAL PEN
Total/NA	Prep	7470A			489950	05/26/20 08:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490419	05/26/20 13:28	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	490456	05/26/20 19:02	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 19:16	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	490088	05/21/20 18:25	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/07/20 06:55	EHS	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 488351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total Recoverable	Water	3005A	
400-187737-2	MW-07	Total Recoverable	Water	3005A	
400-187737-3	MW-09	Total Recoverable	Water	3005A	
400-187737-4	MW-10	Total Recoverable	Water	3005A	
400-187737-5	MW-11	Total Recoverable	Water	3005A	
400-187737-6	DUP-02	Total Recoverable	Water	3005A	
400-187737-7	EB-01	Total Recoverable	Water	3005A	
MB 400-488351/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 400-488351/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-187737-1 MS	MW-06	Total Recoverable	Water	3005A	
400-187737-1 MSD	MW-06	Total Recoverable	Water	3005A	

Prep Batch: 488587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total Recoverable	Water	3005A	
400-187737-9	MW-13	Total Recoverable	Water	3005A	
400-187737-10	MW-14	Total Recoverable	Water	3005A	
400-187737-11	DUP-03	Total Recoverable	Water	3005A	
MB 400-488587/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 400-488587/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 488701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total Recoverable	Water	6020	488351
400-187737-2	MW-07	Total Recoverable	Water	6020	488351
400-187737-3	MW-09	Total Recoverable	Water	6020	488351
400-187737-4	MW-10	Total Recoverable	Water	6020	488351
400-187737-5	MW-11	Total Recoverable	Water	6020	488351
400-187737-6	DUP-02	Total Recoverable	Water	6020	488351
400-187737-7	EB-01	Total Recoverable	Water	6020	488351
MB 400-488351/1-A	Method Blank	Total Recoverable	Water	6020	488351
LCS 400-488351/2-A	Lab Control Sample	Total Recoverable	Water	6020	488351
400-187737-1 MS	MW-06	Total Recoverable	Water	6020	488351
400-187737-1 MSD	MW-06	Total Recoverable	Water	6020	488351

Analysis Batch: 488888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total Recoverable	Water	6020	488351
400-187737-2	MW-07	Total Recoverable	Water	6020	488351
400-187737-3	MW-09	Total Recoverable	Water	6020	488351
400-187737-4	MW-10	Total Recoverable	Water	6020	488351
400-187737-5	MW-11	Total Recoverable	Water	6020	488351
400-187737-1 MS	MW-06	Total Recoverable	Water	6020	488351
400-187737-1 MSD	MW-06	Total Recoverable	Water	6020	488351

Analysis Batch: 488996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total Recoverable	Water	6020	488351
400-187737-1	MW-06	Total Recoverable	Water	6020	488351
400-187737-2	MW-07	Total Recoverable	Water	6020	488351
400-187737-2	MW-07	Total Recoverable	Water	6020	488351

Metals (Continued)

Analysis Batch: 488996 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-3	MW-09	Total Recoverable	Water	6020	488351
400-187737-4	MW-10	Total Recoverable	Water	6020	488351
400-187737-5	MW-11	Total Recoverable	Water	6020	488351
400-187737-6	DUP-02	Total Recoverable	Water	6020	488351
400-187737-7	EB-01	Total Recoverable	Water	6020	488351
MB 400-488351/1-A	Method Blank	Total Recoverable	Water	6020	488351
400-187737-1 MS	MW-06	Total Recoverable	Water	6020	488351
400-187737-1 MS	MW-06	Total Recoverable	Water	6020	488351
400-187737-1 MSD	MW-06	Total Recoverable	Water	6020	488351
400-187737-1 MSD	MW-06	Total Recoverable	Water	6020	488351

Analysis Batch: 489733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total Recoverable	Water	6020	488587
400-187737-9	MW-13	Total Recoverable	Water	6020	488587
400-187737-10	MW-14	Total Recoverable	Water	6020	488587
400-187737-11	DUP-03	Total Recoverable	Water	6020	488587
MB 400-488587/1-A	Method Blank	Total Recoverable	Water	6020	488587
LCS 400-488587/2-A	Lab Control Sample	Total Recoverable	Water	6020	488587

Prep Batch: 489950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	7470A	
400-187737-2	MW-07	Total/NA	Water	7470A	
400-187737-3	MW-09	Total/NA	Water	7470A	
400-187737-4	MW-10	Total/NA	Water	7470A	
400-187737-5	MW-11	Total/NA	Water	7470A	
400-187737-6	DUP-02	Total/NA	Water	7470A	
400-187737-7	EB-01	Total/NA	Water	7470A	
400-187737-8	MW-08	Total/NA	Water	7470A	
400-187737-9	MW-13	Total/NA	Water	7470A	
400-187737-10	MW-14	Total/NA	Water	7470A	
400-187737-11	DUP-03	Total/NA	Water	7470A	
MB 400-489950/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-489950/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-188100-A-3-E MS	Matrix Spike	Total/NA	Water	7470A	
400-188100-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 490116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total Recoverable	Water	6020	488587
400-187737-9	MW-13	Total Recoverable	Water	6020	488587
400-187737-10	MW-14	Total Recoverable	Water	6020	488587
400-187737-11	DUP-03	Total Recoverable	Water	6020	488587
MB 400-488587/1-A	Method Blank	Total Recoverable	Water	6020	488587
LCS 400-488587/2-A	Lab Control Sample	Total Recoverable	Water	6020	488587

Analysis Batch: 490314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total Recoverable	Water	6020	488587
400-187737-9	MW-13	Total Recoverable	Water	6020	488587

Metals (Continued)

Analysis Batch: 490314 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-10	MW-14	Total Recoverable	Water	6020	488587
400-187737-11	DUP-03	Total Recoverable	Water	6020	488587
MB 400-488587/1-A	Method Blank	Total Recoverable	Water	6020	488587

Analysis Batch: 490419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	7470A	489950
400-187737-2	MW-07	Total/NA	Water	7470A	489950
400-187737-3	MW-09	Total/NA	Water	7470A	489950
400-187737-4	MW-10	Total/NA	Water	7470A	489950
400-187737-5	MW-11	Total/NA	Water	7470A	489950
400-187737-6	DUP-02	Total/NA	Water	7470A	489950
400-187737-7	EB-01	Total/NA	Water	7470A	489950
400-187737-8	MW-08	Total/NA	Water	7470A	489950
400-187737-9	MW-13	Total/NA	Water	7470A	489950
400-187737-10	MW-14	Total/NA	Water	7470A	489950
400-187737-11	DUP-03	Total/NA	Water	7470A	489950
MB 400-489950/14-A	Method Blank	Total/NA	Water	7470A	489950
LCS 400-489950/15-A	Lab Control Sample	Total/NA	Water	7470A	489950
400-188100-A-3-E MS	Matrix Spike	Total/NA	Water	7470A	489950
400-188100-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	489950

Analysis Batch: 490622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total Recoverable	Water	6020	488587
400-187737-9	MW-13	Total Recoverable	Water	6020	488587
400-187737-10	MW-14	Total Recoverable	Water	6020	488587
400-187737-11	DUP-03	Total Recoverable	Water	6020	488587

Analysis Batch: 490736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total Recoverable	Water	6020	488587

General Chemistry

Analysis Batch: 488758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	SM 2540C	
400-187737-2	MW-07	Total/NA	Water	SM 2540C	
400-187737-3	MW-09	Total/NA	Water	SM 2540C	
400-187737-4	MW-10	Total/NA	Water	SM 2540C	
400-187737-5	MW-11	Total/NA	Water	SM 2540C	
400-187737-6	DUP-02	Total/NA	Water	SM 2540C	
400-187737-7	EB-01	Total/NA	Water	SM 2540C	
MB 400-488758/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-488758/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-187753-E-4 DU	Duplicate	Total/NA	Water	SM 2540C	
400-187753-E-9 DU	Duplicate	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 489058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total/NA	Water	SM 2540C	
400-187737-9	MW-13	Total/NA	Water	SM 2540C	
400-187737-10	MW-14	Total/NA	Water	SM 2540C	
400-187737-11	DUP-03	Total/NA	Water	SM 2540C	
MB 400-489058/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-489058/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-187795-D-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 490074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	SM 4500 SO4 E	
400-187737-2	MW-07	Total/NA	Water	SM 4500 SO4 E	
MB 400-490074/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-490074/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-490074/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-188086-J-4 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-188086-J-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 490088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-3	MW-09	Total/NA	Water	SM 4500 SO4 E	
400-187737-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
400-187737-5	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-187737-6	DUP-02	Total/NA	Water	SM 4500 SO4 E	
400-187737-7	EB-01	Total/NA	Water	SM 4500 SO4 E	
400-187737-8	MW-08	Total/NA	Water	SM 4500 SO4 E	
400-187737-9	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-187737-10	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-187737-11	DUP-03	Total/NA	Water	SM 4500 SO4 E	
MB 400-490088/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-490088/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-490088/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-187737-3 MS	MW-09	Total/NA	Water	SM 4500 SO4 E	
400-187737-3 MSD	MW-09	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 490456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	SM 4500 Cl- E	
400-187737-2	MW-07	Total/NA	Water	SM 4500 Cl- E	
400-187737-3	MW-09	Total/NA	Water	SM 4500 Cl- E	
400-187737-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
400-187737-5	MW-11	Total/NA	Water	SM 4500 Cl- E	
400-187737-6	DUP-02	Total/NA	Water	SM 4500 Cl- E	
400-187737-7	EB-01	Total/NA	Water	SM 4500 Cl- E	
400-187737-8	MW-08	Total/NA	Water	SM 4500 Cl- E	
400-187737-9	MW-13	Total/NA	Water	SM 4500 Cl- E	
400-187737-10	MW-14	Total/NA	Water	SM 4500 Cl- E	
400-187737-11	DUP-03	Total/NA	Water	SM 4500 Cl- E	
MB 400-490456/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-490456/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-490456/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 490456 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-5 MS	MW-11	Total/NA	Water	SM 4500 Cl- E	
400-187737-5 MSD	MW-11	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 490609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	SM 4500 F C	
400-187737-2	MW-07	Total/NA	Water	SM 4500 F C	
400-187737-3	MW-09	Total/NA	Water	SM 4500 F C	
400-187737-4	MW-10	Total/NA	Water	SM 4500 F C	
400-187737-5	MW-11	Total/NA	Water	SM 4500 F C	
400-187737-6	DUP-02	Total/NA	Water	SM 4500 F C	
400-187737-7	EB-01	Total/NA	Water	SM 4500 F C	
400-187737-8	MW-08	Total/NA	Water	SM 4500 F C	
400-187737-9	MW-13	Total/NA	Water	SM 4500 F C	
400-187737-10	MW-14	Total/NA	Water	SM 4500 F C	
400-187737-11	DUP-03	Total/NA	Water	SM 4500 F C	
MB 400-490609/6	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-490609/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-187737-4 MS	MW-10	Total/NA	Water	SM 4500 F C	
400-187737-4 MSD	MW-10	Total/NA	Water	SM 4500 F C	
400-187802-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-187802-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 491172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	Field Sampling	
400-187737-2	MW-07	Total/NA	Water	Field Sampling	
400-187737-3	MW-09	Total/NA	Water	Field Sampling	
400-187737-4	MW-10	Total/NA	Water	Field Sampling	
400-187737-5	MW-11	Total/NA	Water	Field Sampling	
400-187737-6	DUP-02	Total/NA	Water	Field Sampling	
400-187737-8	MW-08	Total/NA	Water	Field Sampling	
400-187737-9	MW-13	Total/NA	Water	Field Sampling	
400-187737-10	MW-14	Total/NA	Water	Field Sampling	
400-187737-11	DUP-03	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-488351/1-A
Matrix: Water
Analysis Batch: 488701

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/07/20 13:17	05/08/20 14:46	1
Barium	0.00014	U	0.00050	0.00014	mg/L		05/07/20 13:17	05/08/20 14:46	1
Beryllium	0.0000350	I	0.00050	0.000034	mg/L		05/07/20 13:17	05/08/20 14:46	1
Boron	0.0036	U	0.010	0.0036	mg/L		05/07/20 13:17	05/08/20 14:46	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/07/20 13:17	05/08/20 14:46	1
Calcium	0.025	U	0.050	0.025	mg/L		05/07/20 13:17	05/08/20 14:46	1
Chromium	0.00020	U	0.00050	0.00020	mg/L		05/07/20 13:17	05/08/20 14:46	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/07/20 13:17	05/08/20 14:46	1
Lead	0.0000590	I	0.00025	0.000058	mg/L		05/07/20 13:17	05/08/20 14:46	1
Lithium	0.00038	U	0.0010	0.00038	mg/L		05/07/20 13:17	05/08/20 14:46	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/07/20 13:17	05/08/20 14:46	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/07/20 13:17	05/08/20 14:46	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/07/20 13:17	05/08/20 14:46	1

Lab Sample ID: MB 400-488351/1-A
Matrix: Water
Analysis Batch: 488996

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/07/20 13:17	05/13/20 14:15	1

Lab Sample ID: LCS 400-488351/2-A
Matrix: Water
Analysis Batch: 488701

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0560		mg/L		112	80 - 120
Arsenic	0.0500	0.0516		mg/L		103	80 - 120
Barium	0.0500	0.0494		mg/L		99	80 - 120
Beryllium	0.0500	0.0501		mg/L		100	80 - 120
Boron	0.100	0.0989		mg/L		99	80 - 120
Cadmium	0.0500	0.0510		mg/L		102	80 - 120
Calcium	5.00	4.77		mg/L		95	80 - 120
Chromium	0.0500	0.0516		mg/L		103	80 - 120
Cobalt	0.0500	0.0508		mg/L		102	80 - 120
Lead	0.0500	0.0486		mg/L		97	80 - 120
Lithium	0.0500	0.0505		mg/L		101	80 - 120
Molybdenum	0.0500	0.0517		mg/L		103	80 - 120
Selenium	0.0500	0.0502		mg/L		100	80 - 120
Thallium	0.0100	0.0101		mg/L		101	80 - 120

Lab Sample ID: 400-187737-1 MS
Matrix: Water
Analysis Batch: 488701

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00030	U	0.0500	0.0548		mg/L		110	75 - 125
Barium	0.068		0.0500	0.115		mg/L		95	75 - 125
Beryllium	0.00049	I	0.0500	0.0477		mg/L		94	75 - 125

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

Lab Sample ID: 400-187737-1 MS
Matrix: Water
Analysis Batch: 488701

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.000056	U	0.0500	0.0474		mg/L		95	75 - 125
Calcium	180		5.00	173	J3	mg/L		-157	75 - 125
Cobalt	0.00011	U	0.0500	0.0429		mg/L		86	75 - 125
Lead	0.000058	U	0.0500	0.0473		mg/L		95	75 - 125
Lithium	0.0085		0.0500	0.0559		mg/L		95	75 - 125
Molybdenum	0.00090	U	0.0500	0.0532		mg/L		106	75 - 125
Thallium	0.000024	U	0.0100	0.00912		mg/L		91	75 - 125

Lab Sample ID: 400-187737-1 MS
Matrix: Water
Analysis Batch: 488888

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0034		0.0500	0.0499		mg/L		93	75 - 125
Barium	0.088		0.0500	0.116	J3	mg/L		56	75 - 125
Cadmium	0.00056	U	0.0500	0.0520		mg/L		104	75 - 125
Calcium	190		5.00	190	J3	mg/L		6	75 - 125
Chromium	0.0020	U	0.0500	0.0442		mg/L		88	75 - 125
Cobalt	0.0011	U	0.0500	0.0488		mg/L		98	75 - 125
Lead	0.00058	U	0.0500	0.0465		mg/L		93	75 - 125
Thallium	0.00024	U	0.0100	0.00945		mg/L		95	75 - 125

Lab Sample ID: 400-187737-1 MS
Matrix: Water
Analysis Batch: 488996

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.0030		0.0500	0.0181	J3	mg/L		30	75 - 125

Lab Sample ID: 400-187737-1 MS
Matrix: Water
Analysis Batch: 488996

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	7.7		0.100	7.76	J3	mg/L		25	75 - 125

Lab Sample ID: 400-187737-1 MSD
Matrix: Water
Analysis Batch: 488701

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 488351

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00030	U	0.0500	0.0559		mg/L		112	75 - 125	2	20
Barium	0.068		0.0500	0.115		mg/L		94	75 - 125	0	20
Beryllium	0.00049	I	0.0500	0.0478		mg/L		95	75 - 125	0	20
Cadmium	0.000056	U	0.0500	0.0476		mg/L		95	75 - 125	0	20
Calcium	180		5.00	174	J3	mg/L		-148	75 - 125	0	20
Cobalt	0.00011	U	0.0500	0.0433		mg/L		87	75 - 125	1	20
Lead	0.000058	U	0.0500	0.0467		mg/L		93	75 - 125	1	20
Lithium	0.0085		0.0500	0.0563		mg/L		95	75 - 125	1	20
Molybdenum	0.00090	U	0.0500	0.0530		mg/L		106	75 - 125	0	20

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

Lab Sample ID: 400-187737-1 MSD — **Client Sample ID: MW-06**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 488701 — **Prep Batch: 488351**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thallium	0.000024	U	0.0100	0.00903		mg/L		90	75 - 125	1	20

Lab Sample ID: 400-187737-1 MSD — **Client Sample ID: MW-06**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 488888 — **Prep Batch: 488351**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0034		0.0500	0.0472		mg/L		88	75 - 125	5	20
Barium	0.088		0.0500	0.113	J3	mg/L		51	75 - 125	2	20
Cadmium	0.00056	U	0.0500	0.0509		mg/L		102	75 - 125	2	20
Calcium	190		5.00	187	J3	mg/L		-54	75 - 125	2	20
Chromium	0.0020	U	0.0500	0.0522		mg/L		104	75 - 125	17	20
Cobalt	0.0011	U	0.0500	0.0498		mg/L		100	75 - 125	2	20
Lead	0.00058	U	0.0500	0.0471		mg/L		94	75 - 125	1	20
Thallium	0.00024	U	0.0100	0.00941		mg/L		94	75 - 125	0	20

Lab Sample ID: 400-187737-1 MSD — **Client Sample ID: MW-06**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 488996 — **Prep Batch: 488351**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	0.0030		0.0500	0.0298	J3	mg/L		54	75 - 125	49	20

Lab Sample ID: 400-187737-1 MSD — **Client Sample ID: MW-06**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 488996 — **Prep Batch: 488351**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	7.7		0.100	7.86	J3	mg/L		129	75 - 125	1	20

Lab Sample ID: MB 400-488587/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 489733 — **Prep Batch: 488587**

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/09/20 10:57	05/19/20 22:32	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/09/20 10:57	05/19/20 22:32	1
Barium	0.000225	I	0.00050	0.00014	mg/L		05/09/20 10:57	05/19/20 22:32	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/09/20 10:57	05/19/20 22:32	1
Calcium	0.025	U	0.050	0.025	mg/L		05/09/20 10:57	05/19/20 22:32	1
Chromium	0.00020	U	0.00050	0.00020	mg/L		05/09/20 10:57	05/19/20 22:32	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/09/20 10:57	05/19/20 22:32	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/09/20 10:57	05/19/20 22:32	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/09/20 10:57	05/19/20 22:32	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/09/20 10:57	05/19/20 22:32	1

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

Lab Sample ID: MB 400-488587/1-A
Matrix: Water
Analysis Batch: 490116

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 488587

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0036	U	0.010	0.0036	mg/L		05/09/20 10:57	05/21/20 12:31	1

Lab Sample ID: MB 400-488587/1-A
Matrix: Water
Analysis Batch: 490314

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 488587

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.000272		0.00025	0.00016	mg/L		05/09/20 10:57	05/22/20 17:12	1

Lab Sample ID: LCS 400-488587/2-A
Matrix: Water
Analysis Batch: 489733

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 488587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0542		mg/L		108	80 - 120
Arsenic	0.0500	0.0496		mg/L		99	80 - 120
Barium	0.0500	0.0494		mg/L		99	80 - 120
Beryllium	0.0500	0.0511		mg/L		102	80 - 120
Cadmium	0.0500	0.0494		mg/L		99	80 - 120
Calcium	5.00	4.94		mg/L		99	80 - 120
Chromium	0.0500	0.0499		mg/L		100	80 - 120
Cobalt	0.0500	0.0507		mg/L		101	80 - 120
Lead	0.0500	0.0483		mg/L		97	80 - 120
Lithium	0.0500	0.0509		mg/L		102	80 - 120
Molybdenum	0.0500	0.0503		mg/L		101	80 - 120
Selenium	0.0500	0.0507		mg/L		101	80 - 120
Thallium	0.0100	0.00982		mg/L		98	80 - 120

Lab Sample ID: LCS 400-488587/2-A
Matrix: Water
Analysis Batch: 490116

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 488587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0882		mg/L		88	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-489950/14-A
Matrix: Water
Analysis Batch: 490419

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 489950

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/26/20 08:15	05/26/20 12:49	1

Lab Sample ID: LCS 400-489950/15-A
Matrix: Water
Analysis Batch: 490419

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 489950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.000978		mg/L		97	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: 400-188100-A-3-E MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 490419 — **Prep Batch: 489950**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000070	U	0.00201	0.00190		mg/L		94	80 - 120

Lab Sample ID: 400-188100-A-3-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 490419 — **Prep Batch: 489950**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000070	U	0.00201	0.00185		mg/L		92	80 - 120	3	20

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

Lab Sample ID: MB 400-488758/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488758

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/11/20 16:55	1

Lab Sample ID: LCS 400-488758/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488758

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	348		mg/L		119	78 - 122

Lab Sample ID: 400-187753-E-4 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488758

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	560		560		mg/L		0	5

Lab Sample ID: 400-187753-E-9 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 488758

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	450		452		mg/L		0	5

Lab Sample ID: MB 400-489058/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 489058

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/13/20 17:59	1

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

Lab Sample ID: LCS 400-489058/2
Matrix: Water
Analysis Batch: 489058

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			293	344		mg/L		117	78 - 122		

Lab Sample ID: 400-187795-D-3 DU
Matrix: Water
Analysis Batch: 489058

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	210			234	J3	mg/L				11	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-490456/6
Matrix: Water
Analysis Batch: 490456

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	U	2.0	1.4	mg/L			05/26/20 18:22	1

Lab Sample ID: LCS 400-490456/7
Matrix: Water
Analysis Batch: 490456

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			30.0	33.0		mg/L		110	90 - 110		

Lab Sample ID: MRL 400-490456/3
Matrix: Water
Analysis Batch: 490456

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			2.00	1.94	I	mg/L		97	50 - 150		

Lab Sample ID: 400-187737-5 MS
Matrix: Water
Analysis Batch: 490456

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	2700		10.0	2600	J3	mg/L		-992	73 - 120		

Lab Sample ID: 400-187737-5 MSD
Matrix: Water
Analysis Batch: 490456

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2700		10.0	2690	J3	mg/L		-100	73 - 120	3	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-490609/6
Matrix: Water
Analysis Batch: 490609

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 17:51	1

Lab Sample ID: LCS 400-490609/4
Matrix: Water
Analysis Batch: 490609

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	4.00		mg/L		100	90 - 110

Lab Sample ID: 400-187737-4 MS
Matrix: Water
Analysis Batch: 490609

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.040	I	1.00	0.640	J3	mg/L		60	75 - 125

Lab Sample ID: 400-187737-4 MSD
Matrix: Water
Analysis Batch: 490609

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.040	I	1.00	0.690	J3	mg/L		65	75 - 125	8	4

Lab Sample ID: 400-187802-A-1 MS
Matrix: Water
Analysis Batch: 490609

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.060	I	1.00	0.940		mg/L		88	75 - 125

Lab Sample ID: 400-187802-A-1 MSD
Matrix: Water
Analysis Batch: 490609

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.060	I	1.00	0.950		mg/L		89	75 - 125	1	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-490074/6
Matrix: Water
Analysis Batch: 490074

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.4	U	5.0	1.4	mg/L			05/21/20 15:26	1

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-490074/7
Matrix: Water
Analysis Batch: 490074

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.1		mg/L		101	90 - 110

Lab Sample ID: MRL 400-490074/3
Matrix: Water
Analysis Batch: 490074

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	3.96	I	mg/L		79	50 - 150

Lab Sample ID: 400-188086-J-4 MS
Matrix: Water
Analysis Batch: 490074

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.4	U	10.0	6.84	J3	mg/L		68	77 - 128

Lab Sample ID: 400-188086-J-4 MSD
Matrix: Water
Analysis Batch: 490074

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.4	U	10.0	6.92	J3	mg/L		69	77 - 128	1	5

Lab Sample ID: MB 400-490088/6
Matrix: Water
Analysis Batch: 490088

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.4	U	5.0	1.4	mg/L			05/21/20 18:10	1

Lab Sample ID: LCS 400-490088/7
Matrix: Water
Analysis Batch: 490088

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.6		mg/L		104	90 - 110

Lab Sample ID: MRL 400-490088/3
Matrix: Water
Analysis Batch: 490088

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.79	I	mg/L		96	50 - 150

Lab Sample ID: 400-187737-3 MS
Matrix: Water
Analysis Batch: 490088

Client Sample ID: MW-09
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	440		10.0	428	J3	mg/L		-112	77 - 128

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: 400-187737-3 MSD
Matrix: Water
Analysis Batch: 490088

Client Sample ID: MW-09
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	440		10.0	429	J3	mg/L		-95	77 - 128	0	5

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93948-31203.1
Client Contact: Mr. Mike Markey	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6573(Tel)	PO #: Pay by Credit Card			
Email: richard.markey@nexteraenergy.com	WO #:			
Project Name: Downgradient CCR Smith Plant [redacted]	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Requested

400-187737 COC

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	6020, 7470A	2540C - Total Dissolved S	4500_F_C - Fluoride	SM4500_SO4_E - Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	D	N	N	N		
[redacted] MW-06	5/6/20	0820	G	Water			X	X	X	X	X	X	X		
[redacted] MW-07		1055		Water											
[redacted] MW-09		1525		Water											
[redacted] MW-10		1350		Water											
MW-11		1150		Water											
DUP-02		0720		Water											
EB-01	5/6/20	0900	G	Water			X	X	X	X	X	X	X		
				Water											

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

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

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

Special Instructions/QC Requirements:

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

	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	5/6/20 1719	RDH		5/7/20 1731	RDH
Relinquished by:	5/7/20 843	RDH	Kathy R Avery	5-7-20 843	ETA
Relinquished by:			Received by:		

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

Cooler Temperature(s) °C and Other Remarks: 0.2°C IR 7

Ver: 01/16/2019

Eurofins TestAmerica, Pensacola
3355 McLemore Drive

Pensacola, FL 32514-7045
phone 850.474.1001 fax 850.474.4789

Chain of Custody Record

eurofins | Environment Testing

400-187737 COC

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eur

Client Contact	**Project Manager:**	**Site Contact:**	**Date:** 5/18/20
	Email:	**Lab Contact:** Cheyenne W.	**Carrier:** Philip Evans
	Tel/Fax:		
Project Name: CCR Smith Downgradient	**Analysis Turnaround Time** ☐ CALENDAR DAYS ☐ WORKING DAYS		
Site:	TAT if different from Below _____		
PO#	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		

COC No: 1 of 1

TALS Project #:

Sampler:

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	9315 Ra226 Ra228 GFPC	SM4500_Cl_E_Chloride	6020, 7470A	2540C TDS	4500_F_C - Fluoride	SM4500-SO4_E - Sulfate	Sample Specific No.
MW-08	5/7/20	1005	G	Water				X	X	X	X	X	X	
MW-13	5/7/20	0755	G	Water				↓	↓	↓	↓	↓	↓	
MW-14	5/7/20	1110	G	Water				↓	↓	↓	↓	↓	↓	
DUP-03	5/7/20	0655	G	Water				X	X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments:

4.6°C, 5.5°C IR8

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____	Corr'd: _____	Therm ID No.: _____
Relinquished by:	Company: RDH	Date/Time: 5/18/20 1320	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAL Pen	Date/Time: 5/18/20 13:20

Form No. CA-C-WI-002, Rev. 4.26, dated 7/25/2019

6/15/2020

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-187737-1
SDG Number: Downgradient

Login Number: 187737
List Number: 1
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	0.2°C IR-7, 4.6°C, 5.5°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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-1
SDG: Downgradient

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187737-2
Laboratory Sample Delivery Group: Downgradient
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne R Whitmire

Authorized for release by:
6/15/2020 4:31:06 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187737-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187737-2

RAD

Method 9315: Ra-226 Prep Batch 160-470017. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-06 (400-187737-1), MW-07 (400-187737-2), MW-09 (400-187737-3), MW-10 (400-187737-4), MW-11 (400-187737-5), DUP-02 (400-187737-6), EB-01 (400-187737-7), (LCS 160-470017/1-A), (MB 160-470017/22-A), (160-37998-J-1-A) and (160-37998-J-1-B DU)

Method 9315: Ra-226 Prep Batch 160-470435. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-08 (400-187737-8), MW-13 (400-187737-9), MW-14 (400-187737-10), DUP-03 (400-187737-11), (LCS 160-470435/1-A), (LCSD 160-470435/2-A) and (MB 160-470435/23-A)

Method 9320: Ra-228 Prep Batch 160-470021. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-06 (400-187737-1), MW-07 (400-187737-2), MW-09 (400-187737-3), MW-10 (400-187737-4), MW-11 (400-187737-5), DUP-02 (400-187737-6), EB-01 (400-187737-7), (LCS 160-470021/1-A), (MB 160-470021/22-A), (160-37998-J-1-C) and (160-37998-J-1-D DU)

Method 9320: Ra-228 Prep Batch 160-470476. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-08 (400-187737-8), MW-13 (400-187737-9), MW-14 (400-187737-10), DUP-03 (400-187737-11), (LCS 160-470476/1-A), (LCSD 160-470476/2-A) and (MB 160-470476/23-A)

Method PrecSep_0: Radium 228 Prep Batch 160-470021. Sample 310-179964-7 was prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis. Samples 280-136214-1, 2, 6, 7, and 8 were reduced due to heavy sediment levels causing a cloudy appearance. Samples 400-187737-2 & 5 were reduced due to yellow discoloration: MW-07 (400-187737-2) and MW-11 (400-187737-5)

Method PrecSep_0: Radium 228 Prep Batch 160-470476. Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-08 (400-187737-8) and DUP-03 (400-187737-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-470476. The following samples were prepared at a reduced aliquot due to yellow discoloration: MW-13 (400-187737-9) and MW-14 (400-187737-10). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-470017. Sample 310-179964-7 was prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis. Samples 280-136214-1, 2, 6, 7, and 8 were reduced due to heavy sediment levels causing a cloudy appearance. Samples 400-187737-2 & 5 were reduced due to yellow discoloration: MW-07 (400-187737-2) and MW-11 (400-187737-5).

Method PrecSep-21: Radium 226 Prep Batch 160-470435. The following samples were prepared at a reduced aliquot due to yellow discoloration: MW-13 (400-187737-9) and MW-14 (400-187737-10). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-470435. Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-08 (400-187737-8) and DUP-03 (400-187737-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

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

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187737-1	MW-06	Water	05/06/20 08:20	05/07/20 08:43	
400-187737-2	MW-07	Water	05/06/20 10:55	05/07/20 08:43	
400-187737-3	MW-09	Water	05/06/20 15:25	05/07/20 08:43	
400-187737-4	MW-10	Water	05/06/20 13:50	05/07/20 08:43	
400-187737-5	MW-11	Water	05/06/20 11:50	05/07/20 08:43	
400-187737-6	DUP-02	Water	05/06/20 07:20	05/07/20 08:43	
400-187737-7	EB-01	Water	05/06/20 09:00	05/07/20 08:43	
400-187737-8	MW-08	Water	05/07/20 10:05	05/08/20 13:20	
400-187737-9	MW-13	Water	05/07/20 07:55	05/08/20 13:20	
400-187737-10	MW-14	Water	05/07/20 11:10	05/08/20 13:20	
400-187737-11	DUP-03	Water	05/07/20 06:55	05/08/20 13:20	

Client Sample ID: MW-06

Date Collected: 05/06/20 08:20
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	9.19		0.499	0.966	1.00	0.0755	pCi/L	05/11/20 14:42	06/02/20 04:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*40 - 110*	*05/11/20 14:42*	*06/02/20 04:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	12.6		0.785	1.40	1.00	0.417	pCi/L	05/11/20 15:09	05/21/20 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:22*	*1*
Y Carrier	*90.8*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:22*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	21.8		0.930	1.70	5.00	0.417	pCi/L		06/02/20 12:27	1

Client Sample ID: MW-07

Date Collected: 05/06/20 10:55
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	27.6		0.969	2.67	1.00	0.102	pCi/L	05/11/20 14:42	06/02/20 04:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.7*		*40 - 110*	*05/11/20 14:42*	*06/02/20 04:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.19		0.668	0.878	1.00	0.583	pCi/L	05/11/20 15:09	05/21/20 12:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.7*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*
Y Carrier	*93.8*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	33.8		1.18	2.81	5.00	0.583	pCi/L		06/02/20 12:27	1

Client Sample ID: MW-09

Date Collected: 05/06/20 15:25
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	6.28		0.407	0.696	1.00	0.0984	pCi/L	05/11/20 14:42	06/02/20 04:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.4*		*40 - 110*	*05/11/20 14:42*	*06/02/20 04:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.60		0.492	0.649	1.00	0.416	pCi/L	05/11/20 15:09	05/21/20 12:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.4*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*
Y Carrier	*94.6*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	10.9		0.639	0.952	5.00	0.416	pCi/L		06/02/20 12:27	1

Client Sample ID: MW-10

Date Collected: 05/06/20 13:50
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	6.15		0.403	0.685	1.00	0.0831	pCi/L	05/11/20 14:42	06/02/20 04:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.0*		*40 - 110*	*05/11/20 14:42*	*06/02/20 04:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	13.3		0.779	1.45	1.00	0.450	pCi/L	05/11/20 15:09	05/21/20 12:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.0*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*
Y Carrier	*93.8*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	19.5		0.877	1.60	5.00	0.450	pCi/L		06/02/20 12:27	1

Client Sample ID: MW-11

Date Collected: 05/06/20 11:50
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	22.2		0.880	2.19	1.00	0.0903	pCi/L	05/11/20 14:42	06/02/20 06:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.3*		*40 - 110*	*05/11/20 14:42*	*06/02/20 06:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.70		0.625	0.760	1.00	0.623	pCi/L	05/11/20 15:09	05/21/20 12:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.3*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*
Y Carrier	*91.6*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	26.9		1.08	2.32	5.00	0.623	pCi/L		06/02/20 12:27	1

Client Sample ID: DUP-02
Date Collected: 05/06/20 07:20
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-6
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	8.65		0.471	0.910	1.00	0.0734	pCi/L	05/11/20 14:42	06/02/20 06:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.0*		*40 - 110*	*05/11/20 14:42*	*06/02/20 06:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	13.2		0.773	1.44	1.00	0.389	pCi/L	05/11/20 15:09	05/21/20 12:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.0*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*
Y Carrier	*92.0*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	21.9		0.905	1.70	5.00	0.389	pCi/L		06/02/20 12:27	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

Client Sample ID: EB-01
Date Collected: 05/06/20 09:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-7
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0428	U	0.0439	0.0440	1.00	0.0664	pCi/L	05/11/20 14:42	06/02/20 06:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.8*		*40 - 110*	*05/11/20 14:42*	*06/02/20 06:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0437	U	0.208	0.208	1.00	0.381	pCi/L	05/11/20 15:09	05/21/20 12:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.8*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*
Y Carrier	*92.7*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:18*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.000882	U	0.213	0.213	5.00	0.381	pCi/L		06/02/20 12:27	1

Client Sample ID: MW-08

Date Collected: 05/07/20 10:05
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-8

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	13.9		0.754	1.46	1.00	0.160	pCi/L	05/14/20 12:45	06/05/20 06:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.7*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	22.8		1.05	2.34	1.00	0.369	pCi/L	05/14/20 13:17	06/01/20 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.7*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:02*	*1*
Y Carrier	*83.4*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	36.7		1.29	2.76	5.00	0.369	pCi/L		06/05/20 09:33	1

Client Sample ID: MW-13

Date Collected: 05/07/20 07:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	4.87		0.539	0.695	1.00	0.214	pCi/L	05/14/20 12:45	06/05/20 06:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.03		0.752	0.934	1.00	0.602	pCi/L	05/14/20 13:17	06/01/20 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:02*	*1*
Y Carrier	*76.3*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	10.9		0.925	1.16	5.00	0.602	pCi/L		06/05/20 09:33	1

Client Sample ID: MW-14

Date Collected: 05/07/20 11:10
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-10

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.39		0.372	0.430	1.00	0.190	pCi/L	05/14/20 12:45	06/05/20 06:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.1*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.84		0.528	0.590	1.00	0.552	pCi/L	05/14/20 13:17	06/01/20 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.1*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:02*	*1*
Y Carrier	*82.6*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	5.23		0.646	0.730	5.00	0.552	pCi/L		06/05/20 09:33	1

Client Sample ID: DUP-03

Date Collected: 05/07/20 06:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-11

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	4.89		0.465	0.641	1.00	0.135	pCi/L	05/14/20 12:45	06/05/20 06:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.66		0.608	0.800	1.00	0.465	pCi/L	05/14/20 13:17	06/01/20 14:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*
Y Carrier	*80.4*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	10.6		0.765	1.03	5.00	0.465	pCi/L		06/05/20 09:33	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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)
MQL	Method Quantitation Limit
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)

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

Client Sample ID: MW-06
Date Collected: 05/06/20 08:20
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470017	05/11/20 14:42	MNH	TAL SL
Total/NA	Analysis	9315		1	471667	06/02/20 04:08	KLS	TAL SL
Total/NA	Prep	PrecSep_0			470021	05/11/20 15:09	MNH	TAL SL
Total/NA	Analysis	9320		1	471096	05/21/20 12:22	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: MW-07
Date Collected: 05/06/20 10:55
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470017	05/11/20 14:42	MNH	TAL SL
Total/NA	Analysis	9315		1	471667	06/02/20 04:08	KLS	TAL SL
Total/NA	Prep	PrecSep_0			470021	05/11/20 15:09	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 12:18	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: MW-09
Date Collected: 05/06/20 15:25
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470017	05/11/20 14:42	MNH	TAL SL
Total/NA	Analysis	9315		1	471667	06/02/20 04:08	KLS	TAL SL
Total/NA	Prep	PrecSep_0			470021	05/11/20 15:09	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 12:18	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: MW-10
Date Collected: 05/06/20 13:50
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470017	05/11/20 14:42	MNH	TAL SL
Total/NA	Analysis	9315		1	471667	06/02/20 04:08	KLS	TAL SL
Total/NA	Prep	PrecSep_0			470021	05/11/20 15:09	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 12:18	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

Client Sample ID: MW-11
Date Collected: 05/06/20 11:50
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470017	05/11/20 14:42	MNH	TAL SL
Total/NA	Analysis	9315		1	471667	06/02/20 06:03	KLS	TAL SL
Total/NA	Prep	PrecSep_0			470021	05/11/20 15:09	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 12:18	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: DUP-02
Date Collected: 05/06/20 07:20
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470017	05/11/20 14:42	MNH	TAL SL
Total/NA	Analysis	9315		1	471667	06/02/20 06:03	KLS	TAL SL
Total/NA	Prep	PrecSep_0			470021	05/11/20 15:09	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 12:18	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: EB-01
Date Collected: 05/06/20 09:00
Date Received: 05/07/20 08:43

Lab Sample ID: 400-187737-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470017	05/11/20 14:42	MNH	TAL SL
Total/NA	Analysis	9315		1	471667	06/02/20 06:03	KLS	TAL SL
Total/NA	Prep	PrecSep_0			470021	05/11/20 15:09	MNH	TAL SL
Total/NA	Analysis	9320		1	471097	05/21/20 12:18	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: MW-08
Date Collected: 05/07/20 10:05
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:20	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:02	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

Client Sample ID: MW-13
Date Collected: 05/07/20 07:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:20	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:02	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Client Sample ID: MW-14
Date Collected: 05/07/20 11:10
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:20	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:02	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Client Sample ID: DUP-03
Date Collected: 05/07/20 06:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187737-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:20	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:03	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Laboratory References:

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

Rad

Prep Batch: 470017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	PrecSep-21	
400-187737-2	MW-07	Total/NA	Water	PrecSep-21	
400-187737-3	MW-09	Total/NA	Water	PrecSep-21	
400-187737-4	MW-10	Total/NA	Water	PrecSep-21	
400-187737-5	MW-11	Total/NA	Water	PrecSep-21	
400-187737-6	DUP-02	Total/NA	Water	PrecSep-21	
400-187737-7	EB-01	Total/NA	Water	PrecSep-21	
MB 160-470017/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-470017/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-37998-J-1-B DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 470021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-1	MW-06	Total/NA	Water	PrecSep_0	
400-187737-2	MW-07	Total/NA	Water	PrecSep_0	
400-187737-3	MW-09	Total/NA	Water	PrecSep_0	
400-187737-4	MW-10	Total/NA	Water	PrecSep_0	
400-187737-5	MW-11	Total/NA	Water	PrecSep_0	
400-187737-6	DUP-02	Total/NA	Water	PrecSep_0	
400-187737-7	EB-01	Total/NA	Water	PrecSep_0	
MB 160-470021/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-470021/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-37998-J-1-D DU	Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 470435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total/NA	Water	PrecSep-21	
400-187737-9	MW-13	Total/NA	Water	PrecSep-21	
400-187737-10	MW-14	Total/NA	Water	PrecSep-21	
400-187737-11	DUP-03	Total/NA	Water	PrecSep-21	
MB 160-470435/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-470435/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-470435/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 470476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187737-8	MW-08	Total/NA	Water	PrecSep_0	
400-187737-9	MW-13	Total/NA	Water	PrecSep_0	
400-187737-10	MW-14	Total/NA	Water	PrecSep_0	
400-187737-11	DUP-03	Total/NA	Water	PrecSep_0	
MB 160-470476/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-470476/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-470476/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-470017/22-A
Matrix: Water
Analysis Batch: 471667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470017

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01108	U	0.0358	0.0358	1.00	0.0713	pCi/L	05/11/20 14:42	06/02/20 06:03	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*40 - 110*	*05/11/20 14:42*	*06/02/20 06:03*	*1*

Lab Sample ID: LCS 160-470017/1-A
Matrix: Water
Analysis Batch: 471667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470017

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.89		1.11	1.00	0.0668	pCi/L	96	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*96.1*		*40 - 110*

Lab Sample ID: 160-37998-J-1-B DU
Matrix: Water
Analysis Batch: 471667

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 470017

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.298			0.3051		0.109	1.00	0.110	pCi/L			0.03	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*92.8*		*40 - 110*

Lab Sample ID: MB 160-470435/23-A
Matrix: Water
Analysis Batch: 472441

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470435

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1210	U	0.108	0.108	1.00	0.164	pCi/L	05/14/20 12:45	06/05/20 06:21	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:21*	*1*

Lab Sample ID: LCS 160-470435/1-A
Matrix: Water
Analysis Batch: 472436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470435

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.60		1.29	1.00	0.124	pCi/L	102	75 - 125		

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-470435/1-A
Matrix: Water
Analysis Batch: 472436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470435

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	72.3		40 - 110

Lab Sample ID: LCSD 160-470435/2-A
Matrix: Water
Analysis Batch: 472436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 470435

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	10.11		1.14	1.00	0.188	pCi/L	89	75 - 125	0.61	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	77.7		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-470021/22-A
Matrix: Water
Analysis Batch: 471097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470021

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.01685	U	0.247	0.247	1.00	0.440	pCi/L	05/11/20 15:09	05/21/20 12:18	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110	05/11/20 15:09	05/21/20 12:18	1
Y Carrier	93.5		40 - 110	05/11/20 15:09	05/21/20 12:18	1

Lab Sample ID: LCS 160-470021/1-A
Matrix: Water
Analysis Batch: 471096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470021

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.82	8.132		0.976	1.00	0.400	pCi/L	92	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	96.1		40 - 110
Y Carrier	89.7		40 - 110

Lab Sample ID: 160-37998-J-1-D DU
Matrix: Water
Analysis Batch: 471096

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 470021

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.396			0.4435		0.249	1.00	0.368	pCi/L			0.1	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 160-37998-J-1-D DU
Matrix: Water
Analysis Batch: 471096

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 470021

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	92.8		40 - 110
Y Carrier	94.6		40 - 110

Lab Sample ID: MB 160-470476/23-A
Matrix: Water
Analysis Batch: 471628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470476

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3179	U	0.247	0.249	1.00	0.388	pCi/L	05/14/20 13:17	06/01/20 14:04	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.8		40 - 110	05/14/20 13:17	06/01/20 14:04	1
Y Carrier	85.2		40 - 110	05/14/20 13:17	06/01/20 14:04	1

Lab Sample ID: LCS 160-470476/1-A
Matrix: Water
Analysis Batch: 471626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470476

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.79	10.64		1.35	1.00	0.642	pCi/L	121	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	72.3		40 - 110
Y Carrier	76.3		40 - 110

Lab Sample ID: LCSD 160-470476/2-A
Matrix: Water
Analysis Batch: 471626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 470476

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			8.79	9.806		1.21	1.00	0.517	pCi/L	112	75 - 125	0.32	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	77.7		40 - 110
Y Carrier	83.0		40 - 110

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93948-31203.1
Client Contact: Mr. Mike Markey	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6573(Tel)	PO #: Pay by Credit Card			
Email: richard.markey@nexteraenergy.com	WO #:			
Project Name: Downgradient CCR Smith Plant [redacted]	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

400-187737 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	6020, 7470A	2540C - Total Dissolved Si	4500_F_C - Fluoride	SM4500_SO4_E - Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	D	N	N	N		
[redacted] MW-06	5/6/20	0820	G	Water			X	X	X	X	X	X	X		
[redacted] MW-07		1055		Water											
[redacted] MW-09		1525		Water											
[redacted] MW-10		1350		Water											
MW-11		1150		Water											
DUP-02		0720		Water											
EB-01	5/6/20	0900	G	Water			X	X	X	X	X	X	X		
				Water											

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

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

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

Special Instructions/QC Requirements:

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

	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	5/6/20 1719	RDH		5/7/20 1731	RDH
Relinquished by:	5/7/20 843	RDH	Kathy R Avery	5-7-20 843	EJA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.2°C IR 7

Ver: 01/16/2019

TestAmerica, Pensacola
3355 McLemore Drive

Pensacola, FL 32514-7045
phone 850.474.1001 fax 850.474.4789

Chain of Custody Record

eurofins | Environment Testing

400-187737 COC

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eur

Client Contact	**Project Manager:**	**Site Contact:**	**Date:** 5/18/20
	Email:	**Lab Contact:** Cheyenne W.	**Carrier:** Philip Evans
	Tel/Fax:		COC No: 1 of 1
	Analysis Turnaround Time ☐ CALENDAR DAYS ☐ WORKING DAYS		TALS Project #:
Project Name: CCR Smith Downgradient	TAT if different from Below ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Sampler:
Site:			**For Lab Use Only:** Walk-in Client: Lab Sampling:
PO#			Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	9315 Ra226 Ra228 GFPC	SM4500_Cl_E_Chloride	6020, 7470A	2540C TDS	4500_F_C - Fluoride	SM4500-SO4_E - Sulfate	Sample Specific N
MW-08	5/7/20	1005	G	Water				X	X	X	X	X	X	
MW-13	5/7/20	0755	G	Water				↓	↓	↓	↓	↓	↓	
MW-14	5/7/20	1110	G	Water				↓	↓	↓	↓	↓	↓	
DUP-03	5/7/20	0655	G	Water				X	X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments:

4.6°C, 5.5°C IR8

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by:	Company: RDH	Date/Time: 5/18/20 1320	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAL Pen	Date/Time: 5/18/20 13:20

Form No. CA-C-WI-002, Rev. 4.26, dated 7/25/2019

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-187737-2
SDG Number: Downgradient

Login Number: 187737
List Number: 1
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	0.2°C IR-7, 4.6°C, 5.5°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 <6mm (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: Gulf Power Company

Job Number: 400-187737-2
SDG Number: Downgradient

Login Number: 187737
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/08/20 07:39 PM

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

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-187737-2
SDG Number: Downgradient

Login Number: 187737
List Number: 3
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/12/20 12:05 PM

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

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187737-2
SDG: Downgradient

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187802-1
Laboratory Sample Delivery Group: Delineation Wells
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne R Whitmire

Authorized for release by:
6/15/2020 4:49:52 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187802-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187802-1

Metals
Method 6020: The method blank for preparation batch 400-488544 and analytical batch 400-489733 contained Arsenic and Selenium between the laboratory detection limit and the laboratory practical quantitation limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6020: The following sample was diluted due to the nature of the sample matrix: PZ-13D (400-187802-4). Elevated reporting limits (RLs) are provided.

General Chemistry
Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-489058 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-490609 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method SM 4500 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MWI-12A (400-187802-1), PZ-11D (400-187802-2), PZ-14 (400-187802-3), PZ-13D (400-187802-4), DUP-04 (400-187802-7), (400-187900-A-2), (400-187900-A-2 MS) and (400-187900-A-2 MSD). Elevated reporting limits (RLs) are provided.

Method SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-490455 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method SM 4500 Cl- E: Due to the concentration of Chlorides in the parent sample, the MS/MSD was diluted after the spike. The spike amount was adjusted by the dilution factor. (400-187900-A-2 MS) and (400-187900-A-2 MSD)

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-489564 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method SM 4500 SO4 E: Due to the concentration of sulfates in the parent sample the MS/MSD was diluted after the spike. The spike amount was adjusted by the dilution factor. (400-187802-A-1 MS) and (400-187802-A-1 MSD)

Method SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MWI-12A (400-187802-1), PZ-11D (400-187802-2), PZ-14 (400-187802-3), PZ-13D (400-187802-4), DUP-04 (400-187802-7), (400-187802-A-1 MS) and (400-187802-A-1 MSD). Elevated reporting limits (RLs) are provided.

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: MWI-12A — Lab Sample ID: 400-187802-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00060	V	0.00025	0.000078	mg/L	1		6020	Total Recoverable
Barium	0.12		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.00017	I	0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	4.0		0.10	0.036	mg/L	10		6020	Total Recoverable
Calcium	79		0.050	0.025	mg/L	1		6020	Total Recoverable
Chromium	0.00070		0.00050	0.00020	mg/L	1		6020	Total Recoverable
Lead	0.000062	I	0.00025	0.000058	mg/L	1		6020	Total Recoverable
Lithium	0.0059		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Molybdenum	0.019		0.0030	0.00090	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	840		10	10	mg/L	1		SM 2540C	Total/NA
Chloride	320		20	14	mg/L	10		SM 4500 Cl- E	Total/NA
Fluoride	0.060	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	170		50	14	mg/L	10		SM 4500 SO4 E	Total/NA
Field pH	5.53				SU	1		Field Sampling	Total/NA

Client Sample ID: PZ-11D — Lab Sample ID: 400-187802-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00094	V	0.00025	0.000078	mg/L	1		6020	Total Recoverable
Barium	0.11		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Boron	1.2		0.10	0.036	mg/L	10		6020	Total Recoverable
Calcium	220		0.050	0.025	mg/L	1		6020	Total Recoverable
Chromium	0.00064		0.00050	0.00020	mg/L	1		6020	Total Recoverable
Lithium	0.035		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Selenium	0.00017	I V	0.00025	0.00016	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	3500		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	1700		120	84	mg/L	60		SM 4500 Cl- E	Total/NA
Fluoride	0.21		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	150		50	14	mg/L	10		SM 4500 SO4 E	Total/NA
Field pH	6.88				SU	1		Field Sampling	Total/NA

Client Sample ID: PZ-14 — Lab Sample ID: 400-187802-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.013		0.00025	0.000078	mg/L	1		6020	Total Recoverable
Barium	0.16		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Boron	13		0.50	0.18	mg/L	50		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Client Sample ID: PZ-14 (Continued) — Lab Sample ID: 400-187802-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	700		0.050	0.025	mg/L	1		6020	Total Recoverable
Cobalt	0.00015	I	0.00050	0.00011	mg/L	1		6020	Total Recoverable
Molybdenum	0.0021	I	0.0030	0.00090	mg/L	1		6020	Total Recoverable
Selenium	0.00020	I V	0.00025	0.00016	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	8000		130	130	mg/L	1		SM 2540C	Total/NA
Chloride	3200		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Fluoride	0.51		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	1200		200	56	mg/L	40		SM 4500 SO4 E	Total/NA
Field pH	6.66				SU	1		Field Sampling	Total/NA

Client Sample ID: PZ-13D — Lab Sample ID: 400-187802-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0030		0.00025	0.000078	mg/L	1		6020	Total Recoverable
Barium	0.061		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.0023		0.00050	0.000034	mg/L	1		6020	Total Recoverable
Boron	11		0.10	0.036	mg/L	10		6020	Total Recoverable
Calcium	720		0.050	0.025	mg/L	1		6020	Total Recoverable
Lithium	0.019		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	8700		130	130	mg/L	1		SM 2540C	Total/NA
Chloride	4600		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Sulfate	950		200	56	mg/L	40		SM 4500 SO4 E	Total/NA
Field pH	4.49				SU	1		Field Sampling	Total/NA

Client Sample ID: FB-02 — Lab Sample ID: 400-187802-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.013		0.010	0.0036	mg/L	1		6020	Total Recoverable
Calcium	0.046	I	0.050	0.025	mg/L	1		6020	Total Recoverable

Client Sample ID: EB-02 — Lab Sample ID: 400-187802-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.030	I	0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	0.033	I	0.050	0.025	mg/L	1		6020	Total Recoverable

Client Sample ID: DUP-04 — Lab Sample ID: 400-187802-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.062		0.00050	0.00014	mg/L	1		6020	Total Recoverable
Beryllium	0.0024		0.00050	0.000034	mg/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: DUP-04 (Continued)

Lab Sample ID: 400-187802-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	15		0.10	0.036	mg/L	10		6020	Total Recoverable
Calcium	720		0.050	0.025	mg/L	1		6020	Total Recoverable
Lithium	0.019		0.0010	0.00038	mg/L	1		6020	Total Recoverable
Total Dissolved Solids	11000		130	130	mg/L	1		SM 2540C	Total/NA
Chloride	4400		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Sulfate	940		200	56	mg/L	40		SM 4500 SO4 E	Total/NA
Field pH	4.49				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN
SM 4500 F C	Fluoride	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN
Field Sampling	Field Sampling	EPA	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187802-1	MWI-12A	Water	05/07/20 14:50	05/08/20 13:20	
400-187802-2	PZ-11D	Water	05/07/20 12:55	05/08/20 13:20	
400-187802-3	PZ-14	Water	05/08/20 09:40	05/08/20 13:20	
400-187802-4	PZ-13D	Water	05/08/20 09:00	05/08/20 13:20	
400-187802-5	FB-02	Water	05/07/20 12:50	05/08/20 13:20	
400-187802-6	EB-02	Water	05/08/20 09:15	05/08/20 13:20	
400-187802-7	DUP-04	Water	05/08/20 08:00	05/08/20 13:20	

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: MWI-12A

Date Collected: 05/07/20 14:50
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-1

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/08/20 16:45	05/19/20 20:31	1
Arsenic	**0.00060**	**V**	0.00025	0.000078	mg/L		05/08/20 16:45	05/19/20 20:31	1
Barium	**0.12**		0.00050	0.00014	mg/L		05/08/20 16:45	05/19/20 20:31	1
Beryllium	**0.00017**	**I**	0.00050	0.000034	mg/L		05/08/20 16:45	05/19/20 20:31	1
Boron	**4.0**		0.10	0.036	mg/L		05/08/20 16:45	05/21/20 14:15	10
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/08/20 16:45	05/19/20 20:31	1
Calcium	**79**		0.050	0.025	mg/L		05/08/20 16:45	05/19/20 20:31	1
Chromium	**0.00070**		0.00050	0.00020	mg/L		05/08/20 16:45	05/19/20 20:31	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/08/20 16:45	05/19/20 20:31	1
Lead	**0.000062**	**I**	0.00025	0.000058	mg/L		05/08/20 16:45	05/19/20 20:31	1
Lithium	**0.0059**		0.0010	0.00038	mg/L		05/08/20 16:45	05/19/20 20:31	1
Molybdenum	**0.019**		0.0030	0.00090	mg/L		05/08/20 16:45	05/19/20 20:31	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/08/20 16:45	05/19/20 20:31	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/08/20 16:45	05/19/20 20:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/21/20 08:06	05/21/20 12:33	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**840**		10	10	mg/L			05/13/20 17:59	1
Chloride	**320**		20	14	mg/L			05/11/20 18:49	10
Fluoride	**0.060**	**I**	0.10	0.032	mg/L			05/27/20 17:59	1
Sulfate	**170**		50	14	mg/L			05/18/20 18:05	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.53**				SU			05/07/20 14:50	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: PZ-11D

Date Collected: 05/07/20 12:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-2

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/08/20 16:45	05/19/20 20:41	1
Arsenic	**0.00094**	**V**	0.00025	0.000078	mg/L		05/08/20 16:45	05/19/20 20:41	1
Barium	**0.11**		0.00050	0.00014	mg/L		05/08/20 16:45	05/19/20 20:41	1
Beryllium	0.000034	U	0.00050	0.000034	mg/L		05/08/20 16:45	05/19/20 20:41	1
Boron	**1.2**		0.10	0.036	mg/L		05/08/20 16:45	05/21/20 14:19	10
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/08/20 16:45	05/19/20 20:41	1
Calcium	**220**		0.050	0.025	mg/L		05/08/20 16:45	05/19/20 20:41	1
Chromium	**0.00064**		0.00050	0.00020	mg/L		05/08/20 16:45	05/19/20 20:41	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/08/20 16:45	05/19/20 20:41	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/08/20 16:45	05/19/20 20:41	1
Lithium	**0.035**		0.0010	0.00038	mg/L		05/08/20 16:45	05/19/20 20:41	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/08/20 16:45	05/19/20 20:41	1
Selenium	**0.00017**	**I V**	0.00025	0.00016	mg/L		05/08/20 16:45	05/19/20 20:41	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/08/20 16:45	05/19/20 20:41	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/21/20 08:06	05/21/20 12:45	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**3500**		50	50	mg/L			05/13/20 17:59	1
Chloride	**1700**		120	84	mg/L			05/11/20 18:49	60
Fluoride	**0.21**		0.10	0.032	mg/L			05/27/20 18:08	1
Sulfate	**150**		50	14	mg/L			05/18/20 18:11	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.88**				SU			05/07/20 12:55	1

Client Sample ID: PZ-14

Date Collected: 05/08/20 09:40
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-3

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/08/20 16:45	05/19/20 20:45	1
Arsenic	**0.013**		0.00025	0.000078	mg/L		05/08/20 16:45	05/22/20 13:38	1
Barium	**0.16**		0.00050	0.00014	mg/L		05/08/20 16:45	05/19/20 20:45	1
Beryllium	0.000034	U	0.00050	0.000034	mg/L		05/08/20 16:45	05/19/20 20:45	1
Boron	**13**		0.50	0.18	mg/L		05/08/20 16:45	05/21/20 14:25	50
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/08/20 16:45	05/19/20 20:45	1
Calcium	**700**		0.050	0.025	mg/L		05/08/20 16:45	05/19/20 20:45	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/08/20 16:45	05/21/20 14:22	10
Cobalt	**0.00015**	**I**	0.00050	0.00011	mg/L		05/08/20 16:45	05/19/20 20:45	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/08/20 16:45	05/19/20 20:45	1
Lithium	0.00038	U	0.0010	0.00038	mg/L		05/08/20 16:45	05/19/20 20:45	1
Molybdenum	**0.0021**	**I**	0.0030	0.00090	mg/L		05/08/20 16:45	05/19/20 20:45	1
Selenium	**0.00020**	**I V**	0.00025	0.00016	mg/L		05/08/20 16:45	05/19/20 20:45	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/08/20 16:45	05/19/20 20:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/21/20 08:06	05/21/20 12:46	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**8000**		130	130	mg/L			05/13/20 17:59	1
Chloride	**3200**		200	140	mg/L			05/11/20 18:49	100
Fluoride	**0.51**		0.10	0.032	mg/L			05/27/20 18:10	1
Sulfate	**1200**		200	56	mg/L			05/18/20 18:11	40

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.66**				SU			05/08/20 09:40	1

Client Sample ID: PZ-13D

Date Collected: 05/08/20 09:00
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-4

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0030	U	0.0050	0.0030	mg/L		05/08/20 16:45	05/26/20 16:57	10
Arsenic	**0.0030**		0.00025	0.000078	mg/L		05/08/20 16:45	05/22/20 13:44	1
Barium	**0.061**		0.00050	0.00014	mg/L		05/08/20 16:45	05/19/20 20:48	1
Beryllium	**0.0023**		0.00050	0.000034	mg/L		05/08/20 16:45	05/19/20 20:48	1
Boron	**11**		0.10	0.036	mg/L		05/08/20 16:45	05/21/20 14:29	10
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/08/20 16:45	05/19/20 20:48	1
Calcium	**720**		0.050	0.025	mg/L		05/08/20 16:45	05/19/20 20:48	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/08/20 16:45	05/21/20 14:29	10
Cobalt	0.0011	U	0.0050	0.0011	mg/L		05/08/20 16:45	05/21/20 14:29	10
Lead	0.000058	U	0.00025	0.000058	mg/L		05/08/20 16:45	05/19/20 20:48	1
Lithium	**0.019**		0.0010	0.00038	mg/L		05/08/20 16:45	05/19/20 20:48	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/08/20 16:45	05/19/20 20:48	1
Selenium	0.0016	U	0.0025	0.0016	mg/L		05/08/20 16:45	05/26/20 16:57	10
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/08/20 16:45	05/19/20 20:48	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/21/20 08:06	05/21/20 12:48	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**8700**		130	130	mg/L			05/13/20 17:59	1
Chloride	**4600**		200	140	mg/L			05/11/20 18:49	100
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 18:14	1
Sulfate	**950**		200	56	mg/L			05/18/20 18:11	40

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.49**				SU			05/08/20 09:00	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: FB-02
Date Collected: 05/07/20 12:50
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-5
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/08/20 16:45	05/19/20 20:51	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/08/20 16:45	05/21/20 14:35	1
Barium	0.00014	U	0.00050	0.00014	mg/L		05/08/20 16:45	05/19/20 20:51	1
Beryllium	0.000034	U	0.00050	0.000034	mg/L		05/08/20 16:45	05/19/20 20:51	1
Boron	**0.013**		0.010	0.0036	mg/L		05/08/20 16:45	05/21/20 14:35	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/08/20 16:45	05/19/20 20:51	1
Calcium	**0.046**	**I**	0.050	0.025	mg/L		05/08/20 16:45	05/19/20 20:51	1
Chromium	0.00020	U	0.00050	0.00020	mg/L		05/08/20 16:45	05/19/20 20:51	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/08/20 16:45	05/19/20 20:51	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/08/20 16:45	05/19/20 20:51	1
Lithium	0.00038	U	0.0010	0.00038	mg/L		05/08/20 16:45	05/19/20 20:51	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/08/20 16:45	05/19/20 20:51	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/08/20 16:45	05/19/20 20:51	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/08/20 16:45	05/19/20 20:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/21/20 08:06	05/21/20 12:50	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/13/20 17:59	1
Chloride	1.4	U	2.0	1.4	mg/L			05/11/20 18:41	1
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 18:17	1
Sulfate	1.4	U	5.0	1.4	mg/L			05/18/20 17:54	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: EB-02

Date Collected: 05/08/20 09:15
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-6

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/08/20 16:45	05/19/20 20:55	1
Arsenic	0.000078	U	0.00025	0.000078	mg/L		05/08/20 16:45	05/26/20 17:01	1
Barium	0.00014	U	0.00050	0.00014	mg/L		05/08/20 16:45	05/19/20 20:55	1
Beryllium	0.00017	U	0.0025	0.00017	mg/L		05/08/20 16:45	05/21/20 14:39	5
Boron	**0.030**	**I**	0.050	0.018	mg/L		05/08/20 16:45	05/21/20 14:39	5
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/08/20 16:45	05/19/20 20:55	1
Calcium	**0.033**	**I**	0.050	0.025	mg/L		05/08/20 16:45	05/19/20 20:55	1
Chromium	0.00020	U	0.00050	0.00020	mg/L		05/08/20 16:45	05/19/20 20:55	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/08/20 16:45	05/19/20 20:55	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/08/20 16:45	05/19/20 20:55	1
Lithium	0.0019	U	0.0050	0.0019	mg/L		05/08/20 16:45	05/21/20 14:39	5
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/08/20 16:45	05/19/20 20:55	1
Selenium	0.00016	U	0.00025	0.00016	mg/L		05/08/20 16:45	05/19/20 20:55	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/08/20 16:45	05/19/20 20:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/21/20 08:06	05/21/20 12:52	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/15/20 17:32	1
Chloride	1.4	U	2.0	1.4	mg/L			05/26/20 17:06	1
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 18:20	1
Sulfate	1.4	U	5.0	1.4	mg/L			05/18/20 17:54	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: DUP-04
Date Collected: 05/08/20 08:00
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-7
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0030	U	0.0050	0.0030	mg/L		05/08/20 16:45	05/26/20 17:11	10
Arsenic	0.00078	U	0.0025	0.00078	mg/L		05/08/20 16:45	05/21/20 14:42	10
Barium	**0.062**		0.00050	0.00014	mg/L		05/08/20 16:45	05/19/20 20:58	1
Beryllium	**0.0024**		0.00050	0.000034	mg/L		05/08/20 16:45	05/19/20 20:58	1
Boron	**15**		0.10	0.036	mg/L		05/08/20 16:45	05/21/20 14:42	10
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/08/20 16:45	05/19/20 20:58	1
Calcium	**720**		0.050	0.025	mg/L		05/08/20 16:45	05/19/20 20:58	1
Chromium	0.0020	U	0.0050	0.0020	mg/L		05/08/20 16:45	05/21/20 14:42	10
Cobalt	0.0011	U	0.0050	0.0011	mg/L		05/08/20 16:45	05/21/20 14:42	10
Lead	0.000058	U	0.00025	0.000058	mg/L		05/08/20 16:45	05/19/20 20:58	1
Lithium	**0.019**		0.0010	0.00038	mg/L		05/08/20 16:45	05/19/20 20:58	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/08/20 16:45	05/19/20 20:58	1
Selenium	0.0016	U	0.0025	0.0016	mg/L		05/08/20 16:45	05/26/20 17:11	10
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/08/20 16:45	05/19/20 20:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/21/20 08:06	05/21/20 12:54	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**11000**		130	130	mg/L			05/15/20 17:32	1
Chloride	**4400**		200	140	mg/L			05/26/20 17:38	100
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 18:24	1
Sulfate	**940**		200	56	mg/L			05/18/20 18:11	40

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.49**				SU			05/08/20 08:00	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Qualifiers

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.

General Chemistry

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

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)
MQL	Method Quantitation Limit
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)

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: MWI-12A
Date Collected: 05/07/20 14:50
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 20:31	LDC	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 14:15	AW	TAL PEN
Total/NA	Prep	7470A			489743	05/21/20 08:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490052	05/21/20 12:33	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		10	488780	05/11/20 18:49	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 17:59	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	489564	05/18/20 18:05	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/07/20 14:50	EHS	TAL PEN

Client Sample ID: PZ-11D
Date Collected: 05/07/20 12:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 20:41	LDC	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 14:19	AW	TAL PEN
Total/NA	Prep	7470A			489743	05/21/20 08:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490052	05/21/20 12:45	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		60	488780	05/11/20 18:49	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:08	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	489564	05/18/20 18:11	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/07/20 12:55	EHS	TAL PEN

Client Sample ID: PZ-14
Date Collected: 05/08/20 09:40
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 20:45	LDC	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 14:22	AW	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		50	490116	05/21/20 14:25	AW	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	490314	05/22/20 13:38	LDC	TAL PEN
Total/NA	Prep	7470A			489743	05/21/20 08:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490052	05/21/20 12:46	JAP	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: PZ-14
Date Collected: 05/08/20 09:40
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	488780	05/11/20 18:49	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:10	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		40	489564	05/18/20 18:11	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/08/20 09:40	EHS	TAL PEN

Client Sample ID: PZ-13D
Date Collected: 05/08/20 09:00
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 20:48	LDC	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 14:29	AW	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	490314	05/22/20 13:44	LDC	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490477	05/26/20 16:57	AW	TAL PEN
Total/NA	Prep	7470A			489743	05/21/20 08:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490052	05/21/20 12:48	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	488780	05/11/20 18:49	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:14	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		40	489564	05/18/20 18:11	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/08/20 09:00	EHS	TAL PEN

Client Sample ID: FB-02
Date Collected: 05/07/20 12:50
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 20:51	LDC	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	490116	05/21/20 14:35	AW	TAL PEN
Total/NA	Prep	7470A			489743	05/21/20 08:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490052	05/21/20 12:50	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489058	05/13/20 17:59	CLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	488780	05/11/20 18:41	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:17	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	489564	05/18/20 17:54	HES	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Client Sample ID: EB-02

Date Collected: 05/08/20 09:15
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 20:55	LDC	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		5	490116	05/21/20 14:39	AW	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	490477	05/26/20 17:01	AW	TAL PEN
Total/NA	Prep	7470A			489743	05/21/20 08:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490052	05/21/20 12:52	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489377	05/15/20 17:32	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	490455	05/26/20 17:06	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:20	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	489564	05/18/20 17:54	HES	TAL PEN

Client Sample ID: DUP-04

Date Collected: 05/08/20 08:00
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		1	489733	05/19/20 20:58	LDC	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490116	05/21/20 14:42	AW	TAL PEN
Total Recoverable	Prep	3005A			488544	05/08/20 16:45	NET	TAL PEN
Total Recoverable	Analysis	6020		10	490477	05/26/20 17:11	AW	TAL PEN
Total/NA	Prep	7470A			489743	05/21/20 08:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	490052	05/21/20 12:54	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	489377	05/15/20 17:32	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	490455	05/26/20 17:38	HES	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	490609	05/27/20 18:24	MAF	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		40	489564	05/18/20 18:11	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	491172	05/08/20 08:00	EHS	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 488544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total Recoverable	Water	3005A	
400-187802-2	PZ-11D	Total Recoverable	Water	3005A	
400-187802-3	PZ-14	Total Recoverable	Water	3005A	
400-187802-4	PZ-13D	Total Recoverable	Water	3005A	
400-187802-5	FB-02	Total Recoverable	Water	3005A	
400-187802-6	EB-02	Total Recoverable	Water	3005A	
400-187802-7	DUP-04	Total Recoverable	Water	3005A	
MB 400-488544/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 400-488544/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-187795-F-4-B MS	Matrix Spike	Total Recoverable	Water	3005A	
400-187795-F-4-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 489733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total Recoverable	Water	6020	488544
400-187802-2	PZ-11D	Total Recoverable	Water	6020	488544
400-187802-3	PZ-14	Total Recoverable	Water	6020	488544
400-187802-4	PZ-13D	Total Recoverable	Water	6020	488544
400-187802-5	FB-02	Total Recoverable	Water	6020	488544
400-187802-6	EB-02	Total Recoverable	Water	6020	488544
400-187802-7	DUP-04	Total Recoverable	Water	6020	488544
MB 400-488544/1-A	Method Blank	Total Recoverable	Water	6020	488544
LCS 400-488544/2-A	Lab Control Sample	Total Recoverable	Water	6020	488544
400-187795-F-4-B MS	Matrix Spike	Total Recoverable	Water	6020	488544
400-187795-F-4-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	488544

Prep Batch: 489743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	7470A	
400-187802-2	PZ-11D	Total/NA	Water	7470A	
400-187802-3	PZ-14	Total/NA	Water	7470A	
400-187802-4	PZ-13D	Total/NA	Water	7470A	
400-187802-5	FB-02	Total/NA	Water	7470A	
400-187802-6	EB-02	Total/NA	Water	7470A	
400-187802-7	DUP-04	Total/NA	Water	7470A	
MB 400-489743/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-489743/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-187802-1 MS	MWI-12A	Total/NA	Water	7470A	
400-187802-1 MSD	MWI-12A	Total/NA	Water	7470A	

Analysis Batch: 490052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	7470A	489743
400-187802-2	PZ-11D	Total/NA	Water	7470A	489743
400-187802-3	PZ-14	Total/NA	Water	7470A	489743
400-187802-4	PZ-13D	Total/NA	Water	7470A	489743
400-187802-5	FB-02	Total/NA	Water	7470A	489743
400-187802-6	EB-02	Total/NA	Water	7470A	489743
400-187802-7	DUP-04	Total/NA	Water	7470A	489743
MB 400-489743/14-A	Method Blank	Total/NA	Water	7470A	489743
LCS 400-489743/15-A	Lab Control Sample	Total/NA	Water	7470A	489743

Metals (Continued)

Analysis Batch: 490052 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1 MS	MWI-12A	Total/NA	Water	7470A	489743
400-187802-1 MSD	MWI-12A	Total/NA	Water	7470A	489743

Analysis Batch: 490116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total Recoverable	Water	6020	488544
400-187802-2	PZ-11D	Total Recoverable	Water	6020	488544
400-187802-3	PZ-14	Total Recoverable	Water	6020	488544
400-187802-3	PZ-14	Total Recoverable	Water	6020	488544
400-187802-4	PZ-13D	Total Recoverable	Water	6020	488544
400-187802-5	FB-02	Total Recoverable	Water	6020	488544
400-187802-6	EB-02	Total Recoverable	Water	6020	488544
400-187802-7	DUP-04	Total Recoverable	Water	6020	488544

Analysis Batch: 490314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-3	PZ-14	Total Recoverable	Water	6020	488544
400-187802-4	PZ-13D	Total Recoverable	Water	6020	488544

Analysis Batch: 490477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-4	PZ-13D	Total Recoverable	Water	6020	488544
400-187802-6	EB-02	Total Recoverable	Water	6020	488544
400-187802-7	DUP-04	Total Recoverable	Water	6020	488544

General Chemistry

Analysis Batch: 488780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	SM 4500 Cl- E	
400-187802-2	PZ-11D	Total/NA	Water	SM 4500 Cl- E	
400-187802-3	PZ-14	Total/NA	Water	SM 4500 Cl- E	
400-187802-4	PZ-13D	Total/NA	Water	SM 4500 Cl- E	
400-187802-5	FB-02	Total/NA	Water	SM 4500 Cl- E	
MB 400-488780/30	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-488780/31	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-488780/27	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-187763-A-9 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-187763-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 489058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	SM 2540C	
400-187802-2	PZ-11D	Total/NA	Water	SM 2540C	
400-187802-3	PZ-14	Total/NA	Water	SM 2540C	
400-187802-4	PZ-13D	Total/NA	Water	SM 2540C	
400-187802-5	FB-02	Total/NA	Water	SM 2540C	
MB 400-489058/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-489058/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-187795-D-3 DU	Duplicate	Total/NA	Water	SM 2540C	
400-187795-D-12 DU	Duplicate	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 489377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-6	EB-02	Total/NA	Water	SM 2540C	
400-187802-7	DUP-04	Total/NA	Water	SM 2540C	
MB 400-489377/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-489377/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-187855-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	
400-187856-K-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 489564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	SM 4500 SO4 E	
400-187802-2	PZ-11D	Total/NA	Water	SM 4500 SO4 E	
400-187802-3	PZ-14	Total/NA	Water	SM 4500 SO4 E	
400-187802-4	PZ-13D	Total/NA	Water	SM 4500 SO4 E	
400-187802-5	FB-02	Total/NA	Water	SM 4500 SO4 E	
400-187802-6	EB-02	Total/NA	Water	SM 4500 SO4 E	
400-187802-7	DUP-04	Total/NA	Water	SM 4500 SO4 E	
MB 400-489564/18	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-489564/19	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-489564/15	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-187802-1 MS	MWI-12A	Total/NA	Water	SM 4500 SO4 E	
400-187802-1 MSD	MWI-12A	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 490455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-6	EB-02	Total/NA	Water	SM 4500 Cl- E	
400-187802-7	DUP-04	Total/NA	Water	SM 4500 Cl- E	
MB 400-490455/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-490455/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-490455/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-187900-A-2 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-187900-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 490609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	SM 4500 F C	
400-187802-2	PZ-11D	Total/NA	Water	SM 4500 F C	
400-187802-3	PZ-14	Total/NA	Water	SM 4500 F C	
400-187802-4	PZ-13D	Total/NA	Water	SM 4500 F C	
400-187802-5	FB-02	Total/NA	Water	SM 4500 F C	
400-187802-6	EB-02	Total/NA	Water	SM 4500 F C	
400-187802-7	DUP-04	Total/NA	Water	SM 4500 F C	
MB 400-490609/6	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-490609/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-187737-A-4 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-187737-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-187802-1 MS	MWI-12A	Total/NA	Water	SM 4500 F C	
400-187802-1 MSD	MWI-12A	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 491172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	Field Sampling	
400-187802-2	PZ-11D	Total/NA	Water	Field Sampling	
400-187802-3	PZ-14	Total/NA	Water	Field Sampling	
400-187802-4	PZ-13D	Total/NA	Water	Field Sampling	
400-187802-7	DUP-04	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-488544/1-A
Matrix: Water
Analysis Batch: 489733

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 488544

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00030	U	0.00050	0.00030	mg/L		05/08/20 16:45	05/19/20 19:21	1
Arsenic	0.000223	I	0.00025	0.000078	mg/L		05/08/20 16:45	05/19/20 19:21	1
Barium	0.00014	U	0.00050	0.00014	mg/L		05/08/20 16:45	05/19/20 19:21	1
Beryllium	0.000034	U	0.00050	0.000034	mg/L		05/08/20 16:45	05/19/20 19:21	1
Boron	0.0036	U	0.010	0.0036	mg/L		05/08/20 16:45	05/19/20 19:21	1
Cadmium	0.000056	U	0.00050	0.000056	mg/L		05/08/20 16:45	05/19/20 19:21	1
Calcium	0.025	U	0.050	0.025	mg/L		05/08/20 16:45	05/19/20 19:21	1
Chromium	0.00020	U	0.00050	0.00020	mg/L		05/08/20 16:45	05/19/20 19:21	1
Cobalt	0.00011	U	0.00050	0.00011	mg/L		05/08/20 16:45	05/19/20 19:21	1
Lead	0.000058	U	0.00025	0.000058	mg/L		05/08/20 16:45	05/19/20 19:21	1
Lithium	0.00038	U	0.0010	0.00038	mg/L		05/08/20 16:45	05/19/20 19:21	1
Molybdenum	0.00090	U	0.0030	0.00090	mg/L		05/08/20 16:45	05/19/20 19:21	1
Selenium	0.000170	I	0.00025	0.00016	mg/L		05/08/20 16:45	05/19/20 19:21	1
Thallium	0.000024	U	0.00010	0.000024	mg/L		05/08/20 16:45	05/19/20 19:21	1

Lab Sample ID: LCS 400-488544/2-A
Matrix: Water
Analysis Batch: 489733

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 488544

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0550		mg/L		110	80 - 120
Arsenic	0.0500	0.0496		mg/L		99	80 - 120
Barium	0.0500	0.0510		mg/L		102	80 - 120
Beryllium	0.0500	0.0512		mg/L		102	80 - 120
Boron	0.100	0.101		mg/L		101	80 - 120
Cadmium	0.0500	0.0513		mg/L		103	80 - 120
Calcium	5.00	4.77		mg/L		95	80 - 120
Chromium	0.0500	0.0498		mg/L		100	80 - 120
Cobalt	0.0500	0.0509		mg/L		102	80 - 120
Lead	0.0500	0.0486		mg/L		97	80 - 120
Lithium	0.0500	0.0508		mg/L		102	80 - 120
Molybdenum	0.0500	0.0512		mg/L		102	80 - 120
Selenium	0.0500	0.0492		mg/L		98	80 - 120
Thallium	0.0100	0.00999		mg/L		100	80 - 120

Lab Sample ID: 400-187795-F-4-B MS
Matrix: Water
Analysis Batch: 489733

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 488544

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00030	U	0.0500	0.0584		mg/L		117	75 - 125
Arsenic	0.0013	V	0.0500	0.0539		mg/L		105	75 - 125
Barium	0.065		0.0500	0.113		mg/L		97	75 - 125
Beryllium	0.000034	U	0.0500	0.0514		mg/L		103	75 - 125
Boron	0.043		0.100	0.142		mg/L		99	75 - 125
Cadmium	0.000056	U	0.0500	0.0522		mg/L		104	75 - 125
Calcium	250		5.00	242	J3	mg/L		-144	75 - 125
Chromium	0.00020	U	0.0500	0.0507		mg/L		101	75 - 125
Cobalt	0.00014	I	0.0500	0.0510		mg/L		102	75 - 125

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

Lab Sample ID: 400-187795-F-4-B MS
Matrix: Water
Analysis Batch: 489733

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 488544

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.000058	U	0.0500	0.0503		mg/L		101	75 - 125
Lithium	0.020		0.0500	0.0701		mg/L		100	75 - 125
Molybdenum	0.00090	U	0.0500	0.0533		mg/L		107	75 - 125
Selenium	0.00016	U	0.0500	0.0506		mg/L		101	75 - 125
Thallium	0.000024	U	0.0100	0.0102		mg/L		102	75 - 125

Lab Sample ID: 400-187795-F-4-C MSD
Matrix: Water
Analysis Batch: 489733

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 488544

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00030	U	0.0500	0.0569		mg/L		114	75 - 125	3	20
Arsenic	0.0013	V	0.0500	0.0520		mg/L		101	75 - 125	3	20
Barium	0.065		0.0500	0.112		mg/L		95	75 - 125	1	20
Beryllium	0.000034	U	0.0500	0.0491		mg/L		98	75 - 125	5	20
Boron	0.043		0.100	0.139		mg/L		96	75 - 125	2	20
Cadmium	0.000056	U	0.0500	0.0519		mg/L		104	75 - 125	1	20
Calcium	250		5.00	234	J3	mg/L		-305	75 - 125	3	20
Chromium	0.00020	U	0.0500	0.0495		mg/L		99	75 - 125	2	20
Cobalt	0.00014	I	0.0500	0.0500		mg/L		100	75 - 125	2	20
Lead	0.000058	U	0.0500	0.0492		mg/L		98	75 - 125	2	20
Lithium	0.020		0.0500	0.0675		mg/L		95	75 - 125	4	20
Molybdenum	0.00090	U	0.0500	0.0519		mg/L		104	75 - 125	3	20
Selenium	0.00016	U	0.0500	0.0499		mg/L		100	75 - 125	2	20
Thallium	0.000024	U	0.0100	0.0101		mg/L		101	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-489743/14-A
Matrix: Water
Analysis Batch: 490052

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 489743

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		05/21/20 08:06	05/21/20 12:24	1

Lab Sample ID: LCS 400-489743/15-A
Matrix: Water
Analysis Batch: 490052

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 489743

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00101		mg/L		100	80 - 120

Lab Sample ID: 400-187802-1 MS
Matrix: Water
Analysis Batch: 490052

Client Sample ID: MWI-12A
Prep Type: Total/NA
Prep Batch: 489743

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000070	U	0.00201	0.00211		mg/L		105	80 - 120

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

Lab Sample ID: 400-187802-1 MSD
Matrix: Water
Analysis Batch: 490052

Client Sample ID: MWI-12A
Prep Type: Total/NA
Prep Batch: 489743

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000070	U	0.00201	0.00203		mg/L		101	80 - 120	4	20

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

Lab Sample ID: MB 400-489058/1
Matrix: Water
Analysis Batch: 489058

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/13/20 17:59	1

Lab Sample ID: LCS 400-489058/2
Matrix: Water
Analysis Batch: 489058

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	293	344		mg/L		117	78 - 122

Lab Sample ID: 400-187795-D-3 DU
Matrix: Water
Analysis Batch: 489058

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	210		234	J3	mg/L		11	5

Lab Sample ID: 400-187795-D-12 DU
Matrix: Water
Analysis Batch: 489058

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	340		392	J3	mg/L		13	5

Lab Sample ID: MB 400-489377/1
Matrix: Water
Analysis Batch: 489377

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/15/20 17:32	1

Lab Sample ID: LCS 400-489377/2
Matrix: Water
Analysis Batch: 489377

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	293	344		mg/L		117	78 - 122

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

Lab Sample ID: 400-187855-C-1 DU
Matrix: Water
Analysis Batch: 489377

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	64000		64400		mg/L		0	5

Lab Sample ID: 400-187856-K-1 DU
Matrix: Water
Analysis Batch: 489377

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	4100		4040		mg/L		1	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-488780/30
Matrix: Water
Analysis Batch: 488780

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	U	2.0	1.4	mg/L			05/11/20 18:47	1

Lab Sample ID: LCS 400-488780/31
Matrix: Water
Analysis Batch: 488780

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.1		mg/L		104	90 - 110

Lab Sample ID: MRL 400-488780/27
Matrix: Water
Analysis Batch: 488780

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.95	I	mg/L		98	50 - 150

Lab Sample ID: 400-187763-A-9 MS
Matrix: Water
Analysis Batch: 488780

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	29		10.0	38.1		mg/L		88	73 - 120

Lab Sample ID: 400-187763-A-9 MSD
Matrix: Water
Analysis Batch: 488780

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	29		10.0	37.5		mg/L		82	73 - 120	2	8

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MB 400-490455/6
Matrix: Water
Analysis Batch: 490455

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	U	2.0	1.4	mg/L			05/26/20 17:03	1

Lab Sample ID: LCS 400-490455/7
Matrix: Water
Analysis Batch: 490455

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.9		mg/L		106	90 - 110

Lab Sample ID: MRL 400-490455/3
Matrix: Water
Analysis Batch: 490455

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.39		mg/L		120	50 - 150

Lab Sample ID: 400-187900-A-2 MS
Matrix: Water
Analysis Batch: 490455

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	990		10.0	960	J3	mg/L		-259	73 - 120

Lab Sample ID: 400-187900-A-2 MSD
Matrix: Water
Analysis Batch: 490455

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	990		10.0	1000	J3	mg/L		164	73 - 120	4	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-490609/6
Matrix: Water
Analysis Batch: 490609

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.032	U	0.10	0.032	mg/L			05/27/20 17:51	1

Lab Sample ID: LCS 400-490609/4
Matrix: Water
Analysis Batch: 490609

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	4.00		mg/L		100	90 - 110

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-187737-A-4 MS
Matrix: Water
Analysis Batch: 490609

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.040	I	1.00	0.640	J3	mg/L		60	75 - 125		

Lab Sample ID: 400-187737-A-4 MSD
Matrix: Water
Analysis Batch: 490609

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.040	I	1.00	0.690	J3	mg/L		65	75 - 125	8	4

Lab Sample ID: 400-187802-1 MS
Matrix: Water
Analysis Batch: 490609

Client Sample ID: MWI-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.060	I	1.00	0.940		mg/L		88	75 - 125		

Lab Sample ID: 400-187802-1 MSD
Matrix: Water
Analysis Batch: 490609

Client Sample ID: MWI-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.060	I	1.00	0.950		mg/L		89	75 - 125	1	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-489564/18
Matrix: Water
Analysis Batch: 489564

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.4	U	5.0	1.4	mg/L			05/18/20 18:01	1

Lab Sample ID: LCS 400-489564/19
Matrix: Water
Analysis Batch: 489564

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			15.0	15.2		mg/L		101	90 - 110		

Lab Sample ID: MRL 400-489564/15
Matrix: Water
Analysis Batch: 489564

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			5.00	6.15		mg/L		123	50 - 150		

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-187802-1 MS
Matrix: Water
Analysis Batch: 489564

Client Sample ID: MWI-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	170		10.0	175	J3	mg/L		4	77 - 128		

Lab Sample ID: 400-187802-1 MSD
Matrix: Water
Analysis Batch: 489564

Client Sample ID: MWI-12A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	170		10.0	176	J3	mg/L		15	77 - 128	1	5

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

400-187802 COC

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93948-31203.1
Client Contact: Mr. Mike Markey	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6573(Tel)	PO #: Pay by Credit Card			
Email: richard.markey@nexteraenergy.com	WO #:			
Project Name: CCR Smith Plant Delineation Sampling Event Desc: CCR Smith I	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	6020, 7470A	2540C - Total Dissolved Solids	4500_F_C - Fluoride	SM4500_SO4_E - Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	D	N	N	N		
MWI-12A	5/7/20	1450	G	Water			X	X	X	X	X	X	X		
PZ-11D	5/7/20	1255		Water											
PZ-14	5/8/20	0940		Water											
PZ-13D	5/8/20	0900		Water											
FB-02	5/7/20	1250		Water											
EB-02	5/8/20	0915		Water											
DUP-04	5/8/20	0800	G	Water			X	X	X	X	X	X	X		
				Water											

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/8/20 1320	RDM		5/8/20 13:20	TAPa
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.6°C ID8, 5.5°C ID8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-187802-1
SDG Number: Delineation Wells

Login Number: 187802
List Number: 1
Creator: Conrady, Hank W

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	4.6°C 5.5°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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-1
SDG: Delineation Wells

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-187802-2
Laboratory Sample Delivery Group: Delineation Wells
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne R Whitmire

Authorized for release by:
6/15/2020 4:50:49 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

Table of Contents

Job ID: 400-187802-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187802-2

RAD

Method 9315: Ra-226 Prep Batch 160-470435. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MWI-12A (400-187802-1), PZ-11D (400-187802-2), PZ-14 (400-187802-3), PZ-13D (400-187802-4), FB-02 (400-187802-5), EB-02 (400-187802-6), DUP-04 (400-187802-7), (LCS 160-470435/1-A), (LCSD 160-470435/2-A) and (MB 160-470435/23-A)

Method 9320: Ra-228 Prep Batch 160-470476. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MWI-12A (400-187802-1), PZ-11D (400-187802-2), PZ-14 (400-187802-3), PZ-13D (400-187802-4), FB-02 (400-187802-5), EB-02 (400-187802-6), DUP-04 (400-187802-7), (LCS 160-470476/1-A), (LCSD 160-470476/2-A) and (MB 160-470476/23-A)

Method PrecSep_0: Radium 228 Prep Batch 160-470476. Insufficient sample volume was available to perform a sample duplicate for the following samples: MWI-12A (400-187802-1), PZ-11D (400-187802-2), PZ-14 (400-187802-3), PZ-13D (400-187802-4), FB-02 (400-187802-5), EB-02 (400-187802-6) and DUP-04 (400-187802-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-470435. Insufficient sample volume was available to perform a sample duplicate for the following samples: MWI-12A (400-187802-1), PZ-11D (400-187802-2), PZ-14 (400-187802-3), PZ-13D (400-187802-4), FB-02 (400-187802-5), EB-02 (400-187802-6) and DUP-04 (400-187802-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-2
SDG: Delineation Wells

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

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-2
SDG: Delineation Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187802-1	MWI-12A	Water	05/07/20 14:50	05/08/20 13:20	
400-187802-2	PZ-11D	Water	05/07/20 12:55	05/08/20 13:20	
400-187802-3	PZ-14	Water	05/08/20 09:40	05/08/20 13:20	
400-187802-4	PZ-13D	Water	05/08/20 09:00	05/08/20 13:20	
400-187802-5	FB-02	Water	05/07/20 12:50	05/08/20 13:20	
400-187802-6	EB-02	Water	05/08/20 09:15	05/08/20 13:20	
400-187802-7	DUP-04	Water	05/08/20 08:00	05/08/20 13:20	

Client Sample ID: MWI-12A

Date Collected: 05/07/20 14:50
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	19.2		0.947	1.97	1.00	0.141	pCi/L	05/14/20 12:45	06/05/20 06:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.9*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.77		0.493	0.555	1.00	0.517	pCi/L	05/14/20 13:17	06/01/20 14:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.9*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*
Y Carrier	*83.7*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	21.9		1.07	2.05	5.00	0.517	pCi/L		06/05/20 09:33	1

Client Sample ID: PZ-11D
Date Collected: 05/07/20 12:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-2
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	5.31		0.459	0.662	1.00	0.113	pCi/L	05/14/20 12:45	06/05/20 06:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.6*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.964		0.353	0.364	1.00	0.498	pCi/L	05/14/20 13:17	06/01/20 14:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.6*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*
Y Carrier	*82.6*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.27		0.579	0.755	5.00	0.498	pCi/L		06/05/20 09:33	1

Client Sample ID: PZ-14
Date Collected: 05/08/20 09:40
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	9.56		0.648	1.08	1.00	0.191	pCi/L	05/14/20 12:45	06/05/20 06:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	11.1		0.857	1.33	1.00	0.552	pCi/L	05/14/20 13:17	06/01/20 14:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*
Y Carrier	*68.4*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	20.7		1.07	1.71	5.00	0.552	pCi/L		06/05/20 09:33	1

Client Sample ID: PZ-13D

Date Collected: 05/08/20 09:00
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	10.0		0.638	1.10	1.00	0.131	pCi/L	05/14/20 12:45	06/05/20 06:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	28.4		1.48	3.00	1.00	0.673	pCi/L	05/14/20 13:17	06/01/20 14:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*
Y Carrier	*57.6*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	38.4		1.61	3.20	5.00	0.673	pCi/L		06/05/20 09:33	1

Client Sample ID: FB-02

Date Collected: 05/07/20 12:50
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0166	U	0.0738	0.0738	1.00	0.162	pCi/L	05/14/20 12:45	06/05/20 06:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.140	U	0.233	0.233	1.00	0.444	pCi/L	05/14/20 13:17	06/01/20 14:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*
Y Carrier	*84.5*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.157	U	0.244	0.244	5.00	0.444	pCi/L		06/05/20 09:33	1

Client Sample ID: EB-02
Date Collected: 05/08/20 09:15
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-6
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.111	U	0.115	0.116	1.00	0.183	pCi/L	05/14/20 12:45	06/05/20 06:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.9*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0330	U	0.277	0.277	1.00	0.492	pCi/L	05/14/20 13:17	06/01/20 14:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.9*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:04*	*1*
Y Carrier	*85.2*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:04*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.144	U	0.300	0.300	5.00	0.492	pCi/L		06/05/20 09:33	1

Client Sample ID: DUP-04
Date Collected: 05/08/20 08:00
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-7
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	9.48		0.635	1.06	1.00	0.151	pCi/L	05/14/20 12:45	06/05/20 06:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	23.2		1.07	2.39	1.00	0.432	pCi/L	05/14/20 13:17	06/01/20 14:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:04*	*1*
Y Carrier	*81.5*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:04*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	32.7		1.24	2.61	5.00	0.432	pCi/L		06/05/20 09:33	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-2
SDG: Delineation Wells

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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)
MQL	Method Quantitation Limit
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)

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-2
SDG: Delineation Wells

Client Sample ID: MWI-12A
Date Collected: 05/07/20 14:50
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:20	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:03	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Client Sample ID: PZ-11D
Date Collected: 05/07/20 12:55
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:21	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:03	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Client Sample ID: PZ-14
Date Collected: 05/08/20 09:40
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:21	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:03	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Client Sample ID: PZ-13D
Date Collected: 05/08/20 09:00
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:21	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:03	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-2
SDG: Delineation Wells

Client Sample ID: FB-02
Date Collected: 05/07/20 12:50
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:21	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:03	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Client Sample ID: EB-02
Date Collected: 05/08/20 09:15
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:21	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:04	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Client Sample ID: DUP-04
Date Collected: 05/08/20 08:00
Date Received: 05/08/20 13:20

Lab Sample ID: 400-187802-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470435	05/14/20 12:45	MNH	TAL SL
Total/NA	Analysis	9315		1	472441	06/05/20 06:21	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			470476	05/14/20 13:17	MNH	TAL SL
Total/NA	Analysis	9320		1	471628	06/01/20 14:04	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	472543	06/05/20 09:33	SMP	TAL SL

Laboratory References:

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

Rad

Prep Batch: 470435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	PrecSep-21	
400-187802-2	PZ-11D	Total/NA	Water	PrecSep-21	
400-187802-3	PZ-14	Total/NA	Water	PrecSep-21	
400-187802-4	PZ-13D	Total/NA	Water	PrecSep-21	
400-187802-5	FB-02	Total/NA	Water	PrecSep-21	
400-187802-6	EB-02	Total/NA	Water	PrecSep-21	
400-187802-7	DUP-04	Total/NA	Water	PrecSep-21	
MB 160-470435/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-470435/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-470435/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 470476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187802-1	MWI-12A	Total/NA	Water	PrecSep_0	
400-187802-2	PZ-11D	Total/NA	Water	PrecSep_0	
400-187802-3	PZ-14	Total/NA	Water	PrecSep_0	
400-187802-4	PZ-13D	Total/NA	Water	PrecSep_0	
400-187802-5	FB-02	Total/NA	Water	PrecSep_0	
400-187802-6	EB-02	Total/NA	Water	PrecSep_0	
400-187802-7	DUP-04	Total/NA	Water	PrecSep_0	
MB 160-470476/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-470476/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-470476/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-470435/23-A
Matrix: Water
Analysis Batch: 472441

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470435

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1210	U	0.108	0.108	1.00	0.164	pCi/L	05/14/20 12:45	06/05/20 06:21	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*05/14/20 12:45*	*06/05/20 06:21*	*1*

Lab Sample ID: LCS 160-470435/1-A
Matrix: Water
Analysis Batch: 472436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470435

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.60		1.29	1.00	0.124	pCi/L	102	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.3*		*40 - 110*

Lab Sample ID: LCSD 160-470435/2-A
Matrix: Water
Analysis Batch: 472436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 470435

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	10.11		1.14	1.00	0.188	pCi/L	89	75 - 125	0.61	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*77.7*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-470476/23-A
Matrix: Water
Analysis Batch: 471628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470476

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3179	U	0.247	0.249	1.00	0.388	pCi/L	05/14/20 13:17	06/01/20 14:04	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:04*	*1*
Y Carrier	*85.2*		*40 - 110*	*05/14/20 13:17*	*06/01/20 14:04*	*1*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-470476/1-A
Matrix: Water
Analysis Batch: 471626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470476

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.79	10.64		1.35	1.00	0.642	pCi/L	121	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.3*		*40 - 110*
Y Carrier	*76.3*		*40 - 110*

Lab Sample ID: LCSD 160-470476/2-A
Matrix: Water
Analysis Batch: 471626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 470476

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			8.79	9.806		1.21	1.00	0.517	pCi/L	112	75 - 125	0.32	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*77.7*		*40 - 110*
Y Carrier	*83.0*		*40 - 110*

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

400-187802 COC

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-93948-31203.1
Client Contact: Mr. Mike Markey	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6573(Tel)	PO #: Pay by Credit Card			
Email: richard.markey@nexteraenergy.com	WO #:			
Project Name: CCR Smith Plant Delineation Sampling Event Desc: CCR Smith I	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	6020, 7470A	2540C - Total Dissolved Solids	4500_F_C - Fluoride	SM4500_SO4_E - Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	D	N	N	N		
MWI-12A	5/7/20	1450	G	Water			X	X	X	X	X	X	X		
PZ-11D	5/7/20	1255		Water											
PZ-14	5/8/20	0940		Water											
PZ-13D	5/8/20	0900		Water											
FB-02	5/7/20	1250		Water											
EB-02	5/8/20	0915		Water											
DUP-04	5/8/20	0800	G	Water			X	X	X	X	X	X	X		
				Water											

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/8/20 1320	RDM		5/8/20 13:20	TAPa
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.6°C ID8, 5.5°C ID8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-187802-2
SDG Number: Delineation Wells

Login Number: 187802
List Number: 1
Creator: Conrady, Hank W

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	4.6°C 5.5°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 <6mm (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: Gulf Power Company

Job Number: 400-187802-2
SDG Number: Delineation Wells

Login Number: 187802
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/12/20 12:05 PM

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

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-2
SDG: Delineation Wells

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-187802-2
SDG: Delineation Wells

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	13 August 2020
To:	Lane Dorman
From:	Matthew Richardson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-187737-1**

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of eight aqueous samples, one equipment blank and two field duplicate samples, collected May 6-7, 2020, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020
- Mercury by US EPA Method 7470A
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C
- Chloride by SM 4500 CL-E
- Fluoride by SM 4500 F C
- Sulfate by SM 4500 SO4 E

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and

- US EPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001).

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
400-187737-1	MW-06
400-187737-2	MW-07
400-187737-3	MW-09
400-187737-4	MW-10
400-187737-5	MW-11
400-187737-6	DUP-02

Laboratory ID	Client ID
400-187737-7	EB-01
400-187737-8	MW-08
400-187737-9	MW-13
400-187737-10	MW-14
400-187737-11	DUP-03

The chain of custody (COC) indicates the samples were received at 0.2ºC, 4.6ºC, and 5.5ºC within the criteria of 0-6ºC. No preservation issues were noted by the laboratory.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020. Mercury was assessed separately, in section 2.0, below

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
⊗ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate and Serial Dilution
✓ Laboratory Control Sample
✓ Equipment Blank
✓ Field Blank
⊗ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The metals data reported in this dataset are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total

number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.2 Holding Time

The holding time for the metals analysis of a preserved water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 488351 and 488587). Metals were not detected in the method blanks above the method detection limits (MDLs) with the following exceptions.

Beryllium and lead were detected at estimated concentrations greater than the MDL and less than the practical quantitation limit (PQL) in the method blank (batch 488351). Therefore, the estimated beryllium concentrations in samples EB-01, DUP-02, MW-06, MW-07, MW-09, and MW-11 were U qualified as not detected at the PQL. Since lead was not detected in the associated samples, no qualifications were applied to the lead data based on technical and professional judgment.

Barium was detected at an estimated concentration greater than the MDL and less than the practical quantitation limit (PQL) in the method blank (batch 488587). Since barium was reported at concentrations greater than the PQL in the associated samples, no qualifications were applied to these data base on technical and professional judgment.

Selenium (0.000272 mg/L) was detected at a concentration greater than the PQL in the method blank (batch 488587). Since selenium was not detected in the associated samples, no qualifications were applied to the selenium data based on technical and professional judgment.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
DUP-02	Beryllium	0.00046	I	0.00050	U	3
MW-06	Beryllium	0.00049	I	0.00050	U	3
EB-01	Beryllium	0.000036	I,V	0.00050	U	3
MW-07	Beryllium	0.00020	I,V	0.00050	U	3
MW-09	Beryllium	0.000053	I,V	0.00050	U	3
MW-11	Beryllium	0.000052	I,V	0.00050	U	3

mg/L-milligram per liter
I-laboratory flag indicating the reported value is between the laboratory MDL and the laboratory PQL

V-laboratory flag indicating the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD) and Serial Dilution

One sample set specific MS/MSD pair was reported, using sample MW-06. The recoveries and relative percent differences (RPDs) were within the laboratory specified acceptance criteria with the following exceptions.

The MS recovery of boron was low and the MSD recovery of boron was high in the MS/MSD pair using sample MW-06; both were outside the laboratory specified acceptance criteria. Since the concentration of boron in the parent sample was greater than four times the spike concentration, no qualification was applied to the boron result, based on technical and professional judgment.

The recovery of barium in the MSD and recoveries of calcium and selenium in the MS/MSD pair using sample MW-104 were low and outside the laboratory specified acceptance criteria. Since the concentration of calcium in the parent sample was greater than four times the spike concentration no qualification was applied to the calcium result based on technical and professional judgment. However, the barium concentration in sample MW-06 was J- qualified as estimated with low bias and the non-detect selenium result in sample MW-06 was UJ qualified as estimated less than the MDL.

The laboratory narrative indicated that the post digestion spike (PDS) recoveries for arsenic, chromium, and selenium were outside the laboratory specified acceptance criteria. Information sent from the laboratory indicated the recoveries were confirmed to be low biases. Since the MS/MSD recoveries for arsenic and chromium were within the laboratory specified acceptance criteria, no qualifications were applied to the data. No additional qualification was added to the selenium result since it was qualified due to low MS/MSD recoveries.

The laboratory narrative indicated that the serial dilution using sample MW-06 was outside the laboratory specified acceptance criteria. Information sent from the laboratory indicated the recoveries of boron, barium, and calcium were outside the laboratory specified acceptance criteria. Therefore, the boron, barium, and calcium concentrations were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-06	Barium	0.068	NA	0.068	J-	4,8
MW-06	Boron	7.7	NA	7.7	J	8
MW-06	Calcium	180	NA	180	J	8

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-06	Selenium	0.0016	U	0.0016	UJ	4

mg/L-milligram per liter
NA-not applicable
U-not detected at the MDL

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank, EB-01, was collected with the sample set. Metals were not detected in the equipment blank above the MDLs with the following exceptions.

Beryllium was detected at an estimated concentration greater than the MDL and less than the PQL in EB-01. Since beryllium was detected at concentrations greater than concentration the PQLor qualified as not detected at the PQL in the due to method blank contaminiation, no further qualifications were applied to the data.

Boron (0.026 mg/L) was detected at a concentration greater than the PQL in EB-01. Since boron was detected at concentrations greater than ten times the equipment blank concentration or not detected above the MDL in the associated samples , no qualifications were applied to the data.

1.7 Field Blank

Two field blanks, FB-01 and FB-02 were collected with the sample set and reported in laboratory reports 440-187738-1 and 400-187802-1, respectively. Metals were not detected in the field blanks above the MDLs with the following exceptions.

Boron (0.013 mg/L) was detected at a concentration greater than the PQL in FB-02. Since boron was detected at concentrations greater than ten times the field blank concentration of boron or not detected above the MDL in the associated samples, no qualifications were applied to the data.

Calcium was detected at an estimated concentration greater the MDL and less than the PQL in FB-03. Since calcium was detected at concentrations greater than ten times the field blank concentration of calcium or not detected above the MDL in the associated samples, no qualifications were applied to the data.

1.8 Field Duplicate

Two field duplicates were collected with the sample set, DUP-02 and DUP-03. Acceptable precision (RPD ≤ 30%) was demonstrated between the field duplicates and the original samples, MW-06 and MW-13; respectively, with the following exceptions.

Arsenic was detected at a concentration greater than the PQL in sample MW-06 and not detected above the MDL in field duplicate sample DUP-02, resulting in a noncalculable RPD. Therefore, the arsenic concentration in MW-06 was J qualified as estimated, and the non-detect arsenic result in field duplicate sample DUP-02 was UJ qualified as estimated less than the MDL.

Arsenic and lead were detected at estimated concentrations greater than the MDLs and less than the PQLs in field duplicate sample DUP-03 and not detected above the MDL in sample MW-13, resulting in noncalculable RPDs. Therefore, the arsenic and lead concentrations in sample DUP-03 were J qualified as estimated, and the non-detect arsenic and lead results in field duplicate sample DUP-03 were UJ qualified as estimated less than the MDLs.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
DUP-02	Arsenic	0.0016	U	NC	0.0016	UJ	7
MW-06	Arsenic	0.0034	NA		0.0034	J	7
DUP-03	Arsenic	0.00081	I	NC	0.00081	J	7
MW-13	Arsenic	0.00078	U		0.00078	UJ	7
DUP-03	Lead	0.00013	I	NC	0.00013	J	7
MW-13	Lead	0.000058	U		0.000058	UJ	7

mg/L-milligram per liter
U-not detected at the MDL
NA-not applicable
NC-not calculable
I-laboratory flag indicating the reported value is between the laboratory MDL and the laboratory PQL

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 MERCURY

The samples were analyzed for mercury by US EPA method 7470A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The mercury data reported in this dataset are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

2.2 Holding Time

The holding time for the mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 489950). Mercury was not detected in the method blank above the MDL.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One batch MS/MSD pair was reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank, EB-01, was collected with the sample set. Mercury was not detected in the equipment blank above the MDL.

2.7 Field Blank

Two field blanks, FB-01 and FB-02 were collected with the sample set and reported in laboratory reports 440-187738-1 and 400-187802-1, respectively. Mercury was not detected in the field blanks above the MDL.

2.8 Field Duplicate

Two field duplicates were collected with the sample set, DUP-02 and DUP-03. Acceptable precision (RPD $\leq$ 30%) was demonstrated between the field duplicates and the original samples, MW-06 and MW-13; respectively.

2.9 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

2.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

3.0 WET CHEMISTRY

The samples were analyzed for chloride by SM 4500 Cl-E, fluoride by SM 4500 F C, sulfate by SM 4500 SO4 E and TDS by SM 2540C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

3.1 Overall Assessment

The wet chemistry data reported in this dataset are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this dataset is 100%.

3.2 Holding Times

The holding time for the fluoride, chloride and sulfate analysis of a water sample is 28 days from sample collection to analysis. The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for each analysis and batch (TDS batches 488758, 489058, chloride batch 490456, sulfate batches 490074, 490088, fluoride batch 490609) The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

One sample set specific MS/MSD pair was reported for fluoride using sample MW-10. The fluoride recoveries in the MS/MSD pair were low and outside the laboratory specified acceptance

criteria. In addition, the RPD result for fluoride in the MS/MSD pair was high and outside the laboratory specified acceptance criteria. Therefore, the fluoride concentration in MW-10 was J qualified as estimated.

One sample specific MS/MSD pair was reported for chloride using sample MW-11. The RPD result was within the laboratory specified acceptance criteria. The recoveries of chloride in the MS/MSD pair using sample MW-11 were low and outside the laboratory specified acceptance criteria. Since the concentration of chloride in the parent sample was greater than four times the spike concentration, no qualification was applied to the chloride result, based on technical and professional judgment.

One sample specific MS/MSD pair was reported for sulfate using sample MW-09. The RPD result was within the laboratory specified acceptance criteria. The sulfate recoveries in the MS/MSD pair using sample MW-09 were low and outside the laboratory specified acceptance criteria. Since the concentration of sulfate in the parent sample was greater than four times the spike concentration, no qualification was applied to the sulfate result, based on technical and professional judgment.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-10	Fluoride	0.040	NA	0.040	J	4

mg/L-milligram per liter
V-laboratory flag indicating the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value
NA-not applicable

Batch MS/MSD pairs were also reported for fluoride and sulfate. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria.

The laboratory also analyzed method reporting limit (MRL) standards for chloride and sulfate. The MRL recoveries were within the laboratory specified acceptance criteria

3.6 Laboratory Duplicate

Three batch laboratory duplicates were reported for TDS. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

3.7 Equipment Blank

One equipment blank, EB-01, was collected with the sample set. The wet chemistry parameters were not detected in the equipment blank above the MDLs.

3.8 Field Blank

Two field blanks, FB-01 and FB-02 were collected with the sample set and reported in laboratory reports 440-187738-1 and 400-187802-1, respectively. The wet chemistry parameters were not detected in the field blank above the MDLs.

3.9 Field Duplicate

Two field duplicates were collected with the sample set, DUP-02 and DUP-03. Acceptable precision (RPD ≤ 30%) was demonstrated between the field duplicates and the original samples, MW-06 and MW-13; respectively.

3.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

3.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

400A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	June 23, 2020
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-187737-2**

SITE: Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of eight water samples, two field duplicates and one equipment blank, collected May 6-7, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, St Louis, MO, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Combined Radium 226 + 228 by Calculation

EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data are usable for supporting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- American Nuclear Society Verification and Validation of Radiological Data for Use in Management and Environmental Remediation, ANSI/ANS-41.5-2012, February 15, 2012.

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
400-187737-1	MW-06
400-187737-2	MW-07
400-187737-3	MW-09
400-187737-4	MW-10
400-187737-5	MW-11
400-187737-6	DUP-02

Laboratory ID	Client ID
400-187737-7	EB-01
400-187737-8	MW-08
400-187737-9	MW-13
400-187737-10	MW-14
400-187737-11	DUP-03

No preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and combined radium 226+228 by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The radium-226 and radium-228 data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

1.2 Holding Times

The holding time for the radiochemistry analyses of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for radium-226 (batches 470017 and 470435) and radium-228 (batches 470021 and 470476). The radiochemistry parameters were not detected in the method blanks above the minimum detectable concentrations (MDCs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD pairs were not reported.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs and one LCS/LCS duplicate (LCSD) pair were reported for radium-226 and radium-228. The recovery and replicate error ratio (RER) results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Batch laboratory duplicates were reported for radium-226 and radium-228. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

One equipment blank was collected with the sample set, EB-01. The radiochemistry parameters were not detected in the equipment blank above the MDCs.

1.9 Field Blank

A field blank was not collected with the sample set.

1.10 Field Duplicate

Two field duplicates were collected with the sample set, DUP-02 and DUP-03. Acceptable precision (RER ≤ 3) was demonstrated between the field duplicates and the original samples, MW-03 and MW-06, respectively.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	20 August 2020
To:	Lane Dorman
From:	Matthew Richardson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-187738-1**

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of three aqueous samples, one field blank, and one field duplicate sample, collected 5 May 2020, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020
- Mercury by US EPA Method 7470A
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C
- Chloride by SM 4500 CL-E
- Fluoride by SM 4500 F C
- Sulfate by SM 4500 SO4 E

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and

- US EPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001).

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
400-187738-1	MW-12
400-187738-2	MW-02
400-187738-3	MW-03

Laboratory ID	Client ID
400-187738-4	FB-01
400-187738-5	DUP-01

The chain of custody (COC) indicates the samples were received at 3.8 degrees Celsius (°C) within the criteria of 0-6ºC. No preservation issues were noted by the laboratory.

Incorrect error corrections were observed on the COC, instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020. Mercury was assessed separately, in section 2.0, below

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Equipment Blank
✓ Field Blank
⊗ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The metals data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to

the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

1.2 Holding Time

The holding time for the metals analysis of a preserved water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 488351). Metals were not detected in the method blank above the method detection limits (MDLs) with the following exception.

Beryllium and lead were detected at estimated concentrations greater than the MDLs and less than the practical quantitation limits (PQLs) in the method blank (batch 488351). Since lead was not detected in the associated samples, no qualifications were applied to the lead data, based on technical and professional judgment. However, the estimated beryllium concentrations in samples DUP-01, MW-02, MW-03, and MW-12 were U qualified as not detected at the practical quantitation limits (PQLs).

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
DUP-01	Beryllium	0.00010	I,V	0.00050	U	3
MW-02	Beryllium	0.000057	I,V	0.00050	U	3
MW-03	Beryllium	0.00011	I,V	0.00050	U	3
MW-12	Beryllium	0.000043	I,V	0.00050	U	3

mg/L-milligram per liter
I-laboratory flag indicating the reported value is between the laboratory MDL and the laboratory PQL
V-laboratory flag indicating the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One batch MS/MSD pair was reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

An equipment blank was not collected with the sample set.

1.7 Field Blank

One field blank, FB-01, was collected with the sample set. Metals were not detected in the field blank above the MDLs with the following exceptions.

Calcium was detected at an estimated concentration greater the MDL and less than the PQL in FB-03. Since calcium was detected at concentrations greater than the PQL or not detected above the MDL in the associated samples, no qualifications were applied to the data.

1.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-01. Acceptable precision [relative percent difference (RPD)≤ 30%] was demonstrated between the field duplicate and the original sample, MW-03, with the following exception.

Chromium was detected at an estimated concentration greater than the MDL and less than the PQL in field duplicate sample DUP-01 and detected at a concentration greater than the PQL in sample MW-03, resulting in a noncalculable RPD. Therefore, the chromium concentrations in the field duplicate pair MW-03/DUP-01 were J qualified as estimated.

Sample	Analyte	Laboratory Result (µg/L)	Laboratory Flag	RPD	Validation Result (µg/L)	Validation Qualifier	Reason Code
DUP-01	Chromium	0.00036	I	NC	0.00036	J	7
MW-03	Chromium	0.00064	NA		0.00064	J	7

mg/L-milligram per liter
NA-not applicable
NC-not calculable
I-laboratory flag indicating the reported value is between the laboratory MDL and the laboratory PQL

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 MERCURY

The samples were analyzed for mercury by US EPA method 7470A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The mercury data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

2.2 Holding Time

The holding time for the mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 489950). Mercury was not detected in the method blank above the MDL.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One batch MS/MSD pairs was reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

2.6 Equipment Blank

An equipment blank was not collected with the sample set.

2.7 Field Blank

One field blank, FB-01, was collected with the sample set. Mercury was not detected in the field blank above the MDL.

2.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-01. Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicate and the original sample, MW-03.

2.9 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

2.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

3.0 WET CHEMISTRY

The samples were analyzed for chloride by SM 4500 Cl-E, fluoride by SM 4500 F C, sulfate by SM 4500 SO4 E and TDS by SM 2540C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
⊗ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Equipment Blank
✓ Field Blank
⊗ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

3.1 Overall Assessment

The wet chemistry data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this dataset is 100%.

3.2 Holding Times

The holding time for the fluoride, chloride and sulfate analysis of a water sample is 28 days from sample collection to analysis. The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for each analysis and batch (TDS batches 488550, 488555, chloride batch 490456 sulfate batch 490074, fluoride batch 490745) The wet chemistry parameters were not detected in the method blanks above the MDLs with the following exception.

Fluoride was detected at an estimated concentration greater the MDL and less than the PQL in the method blank (batch 490745). Therefore, the estimated fluoride concentrations in samples MW-02, DUP-01, and MW-03 were U qualified as not detected at the PQL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-02	Fluoride	0.090	I,V	0.10	U	3
DUP-01	Fluoride	0.040	I,V	0.10	U	3
MW-03	Fluoride	0.050	I,V	0.10	U	3

mg/L-milligram per liter
I-laboratory flag indicating the reported value is between the laboratory MDL and the laboratory PQL
V-laboratory flag indicating the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples).

One sample set specific MS/MSD pair was reported for fluoride using sample MW-12. The recoveries were within the laboratory specified acceptance criteria. The RPD result for fluoride in the MS/MSD pair using sample MW-12 was high and outside the laboratory specified acceptance criteria. Therefore, the fluoride concentration in sample MW-12 was J qualified as estimated.

Batch MS/MSD pairs were also reported for chloride and sulfate. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-12	Fluoride	0.15	V	0.15	J	4

mg/L-milligram per liter
V-laboratory flag indicating the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria.

The laboratory also analyzed method reporting limit (MRL) standards for chloride and sulfate. The MRL recoveries were within the laboratory specified acceptance criteria

3.6 Laboratory Duplicate

One sample set specific laboratory duplicate was reported for TDS using sample MW-02. The RPD result was within the laboratory specified acceptance criteria.

One batch laboratory duplicate was also reported for TDS. Since this was batch QC, the result does not affect the samples in this data set and qualifications were not applied to the data.

3.7 Equipment Blank

An equipment blank was not collected with the sample set.

3.8 Field Blank

One field blank, FB-01, was collected with the sample set. The wet chemistry parameters were not detected in the field blank above the MDLs.

3.9 Field Duplicate

One field duplicate was collected with the sample set, DUP-01. Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicate and the original sample, MW-03, with the following exception.

TDS was detected at a concentration greater than the MDL and less than the PQL in sample MW-03 and not detected above the MDL in field duplicate sample DUP-01, resulting in a noncalculable RPD. Therefore, the TDS concentration in sample MW-03 was J qualified as estimated, and the non-detect TDS result in field duplicate sample DUP-01 was UJ qualified as estimated less than the MDL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
DUP-01	Total Dissolved Solids	5.0	U	NC	5.0	UJ	7
MW-03	Total Dissolved Solids	34	NA		34	J	7

mg/L-milligram per liter
U-not detected at the MDL
NA-not applicable

3.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

3.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

400A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	June 23, 2020
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-187738-2**

SITE: Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of three water samples, one field duplicate and one field blank, collected May 5, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, St Louis, MO, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Combined Radium 226 + 228 by Calculation

EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data are usable for supporting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- American Nuclear Society Verification and Validation of Radiological Data for Use in Management and Environmental Remediation, ANSI/ANS-41.5-2012, February 15, 2012.

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
400-187738-1	MW-12
400-187738-2	MW-02
400-187738-3	MW-03

Laboratory ID	Client ID
400-187738-4	FB-01
400-187738-5	DUP-01

No preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and combined radium 226+228 by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The radium-226 and radium-228 data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

1.2 Holding Times

The holding time for the radiochemistry analyses of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for radium-226 (batch 470229) and radium-228 (batch 470230). The radiochemistry parameters were not detected in the method blanks above the minimum detectable concentrations (MDCs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD pairs were reported for radium-226 and radium-228. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for radium-226 and radium-228. The recovery results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Laboratory duplicates were not reported.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

An equipment blank was not collected with the sample set.

1.9 Field Blank

One field blank was collected with the sample set, FB-01. The radiochemistry parameters were not detected in the field blank above the MDCs.

1.10 Field Duplicate

One field duplicate was reported with the sample set, DUP-01. Acceptable precision (RER $\leq$ 3) was demonstrated between the field duplicate and the original sample, MW-03.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	13 August 2020
To:	Lane Dorman
From:	Matthew Richardson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-187802-1**

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of four aqueous samples, one field blank, one equipment blank and one field duplicate sample, collected 8 May 2020, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020
- Mercury by US EPA Method 7470A
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C
- Chloride by SM 4500 CL-E
- Fluoride by SM 4500 F C
- Sulfate by SM 4500 SO4 E

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and

- US EPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001).

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
400-187802-1	MWI-12A
400-187802-2	PZ-11D
400-187802-3	PZ-14
400-187802-4	PZ-13D

Laboratory ID	Client ID
400-187802-5	FB-02
400-187802-6	EB-02
400-187802-7	DUP-04

The chain of custody (COC) indicates the samples were received at 4.6 degrees Celsius (°C) and 5.5°C within the criteria 0-6 °C. No preservation issues were noted by the laboratory.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020. Mercury was assessed separately, in section 2.0, below

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Equipment Blank
⊗ Field Blank
⊗ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The metals data reported in this dataset are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.2 Holding Time

The holding time for the metals analysis of a preserved water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 488544). Metals were not detected in the method blank above the method detection limits (MDLs) with the following exceptions.

Arsenic and selenium were detected at estimated concentrations greater than the MDLs and less than the practical quantitation limits (PQLs) in the method blank (batch 488544). Since arsenic was detected at concentrations greater than the PQL or not detected above the MDL in the associated samples, no qualifications were applied to the data. However, the estimated selenium concentrations in samples PZ-11D and PZ-14 were U qualified as not detected at the PQL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
PZ-11D	Selenium	0.00017	I,V	0.00025	U	3
PZ-14	Selenium	0.00020	I,V	0.00025	U	3

mg/L-milligram per liter
I-laboratory flag indicating the reported value is between the laboratory MDL and the laboratory PQL
V-laboratory flag indicating the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One batch MS/MSD pair was reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank, EB-02, was collected with the sample set. Metals were not detected in the equipment blanks above the MDLs with the following exception.

Boron and calcium were detected at estimated concentrations greater than the MDLs and less than the PQLs in EB-02. Since boron and calcium were detected in the associated samples at concentrations greater than the PQLs of boron and calcium, no qualifications were applied to the data.

1.7 Field Blank

One field blank, FB-02, was collected with the sample set. Metals were not detected in the field blanks above the MDLs with the following exception. Boron was detected above the PQL in the field blank; therefore, the estimated concentration in sample EB-02 was U qualified as not detected at or above the PQL. Since boron was either not detected above the MDL or was detected at concentrations greater than 10 times the concentration of the field blank in the associated samples, no qualifiers were applied to the remaining results based on technical and professional judgment.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
EB-02	Boron	0.030	I	0.050	U	3

mg/L-milligram per liter
I-laboratory flag indicating the reported value is between the laboratory MDL and the laboratory PQL

1.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-04. Acceptable precision [relative percent difference (RPD)≤ 30%] was demonstrated between the field duplicate and the original sample, PZ-13D, with the following exceptions.

Arsenic was detected at a concentration greater than the PQL in sample PZ-13D and not detected above the MDL in field duplicate sample DUP-04, resulting in a noncalculable RPD. Therefore, the arsenic concentration in sample PZ-13D was J qualified as estimated, and the non-detect arsenic result in field duplicate sample DUP-04 was UJ qualified as estimated less than the MDL.

The RPD result for boron in the field duplicate pair DUP-04/PZ-13D was greater than 30%. Therefore, the boron concentrations in the field duplicate pair DUP-04/PZ-13D were J qualified as estimated.

Sample	Analyte	Laboratory Result (µg/L)	Laboratory Flag	RPD	Validation Result (µg/L)	Validation Qualifier	Reason Code
DUP-04	Arsenic	0.00078	U	NC	0.00078	UJ	7
PZ-13D	Arsenic	0.0030	NA		0.0030	J	7
DUP-04	Boron	15	NA	31	15	J	7
PZ-13D	Boron	11	NA		11	J	7

mg/L-milligram per liter
U-not detected at the MDL
NA-not applicable
NC-not calculable

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 MERCURY

The samples were analyzed for mercury by US EPA method 7470A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The mercury data reported in this dataset are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

2.2 Holding Time

The holding time for the mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 489743). Mercury was not detected in the method blank above the MDL.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample specific MS/MSD pair was reported using sample MWI-12A. The recovery and RPD results were within the laboratory specified acceptance limits.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank, EB-02, was collected with the sample set. Mercury was not detected in the equipment blanks above the MDL.

2.7 Field Blank

One field blank, FB-02, was collected with the sample set. Mercury was not detected in the field blanks above the MDL.

2.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-04. Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicate and the original sample, PZ-13D.

2.9 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

2.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

3.0 WET CHEMISTRY

The samples were analyzed for chloride by SM 4500 Cl-E, fluoride by SM 4500 F C, sulfate by SM 4500 SO4 E and TDS by SM 2540C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

3.1 Overall Assessment

The wet chemistry data reported in this dataset are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to

the total number of analytical results requested on samples submitted for these analyses, for this dataset is 100%.

3.2 Holding Times

The holding time for the fluoride, chloride and sulfate analysis of a water sample is 28 days from sample collection to analysis. The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for each analysis and batch (TDS batches 489058, 489377, chloride batches 488780, 490455 sulfate batch 489564, fluoride batch 490609) The wet chemistry parameters were not detected in the method blanks above the MDLs with the following exception.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples).

One sample set specific MS/MSD pair was reported for fluoride using sample MWI-12A. The recovery and RPD results were within the laboratory specified acceptance criteria.

One sample specific MS/MSD pair was reported for sulfate using sample MWI-12A. The RPD result was within the laboratory specified acceptance criteria. The sulfate recoveries in the MS/MSD pair using sample MWI-12A were low and outside the laboratory specified acceptance criteria. Since the concentration of sulfate in the parent sample was greater than four times the spike concentration, no qualification was applied to the sulfate result, based on technical and professional judgment.

Two batch MS/MSD pairs were reported for chloride. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria.

The laboratory also analyzed method reporting limit (MRL) standards for chloride and sulfate. The MRL recoveries were within the laboratory specified acceptance criteria

3.6 Laboratory Duplicate

Four batch laboratory duplicates were also reported for TDS. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

3.7 Equipment Blank

One equipment blank, EB-02, was collected with the sample set. The wet chemistry parameters were not detected in the equipment blank above the MDLs.

3.8 Field Blank

One field blank, FB-02, was collected with the sample set. The wet chemistry parameters were not detected in the field blank above the MDLs.

3.9 Field Duplicate

One field duplicate was collected with the sample set, DUP-04. Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicate and the original sample, PZ-13D.

3.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

3.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Geosyntec consultants

400A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	June 23, 2020
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validations - Level II Data Deliverable – Eurofins TestAmerica Job ID 400-187802-2**

SITE: Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of four water samples, one field duplicate, one equipment blank and one field blank, collected May 7-8, 2019, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, St Louis, MO, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Combined Radium 226 + 228 by Calculation

EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data are usable for supporting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- American Nuclear Society Verification and Validation of Radiological Data for Use in Management and Environmental Remediation, ANSI/ANS-41.5-2012, February 15, 2012.

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
400-187802-1	MWI-12A
400-187802-2	PZ-11D
400-187802-3	PZ-14
400-187802-4	PZ-13D

Laboratory ID	Client ID
400-187802-5	FB-02
400-187802-6	EB-02
400-187802-7	DUP-04

No preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and combined radium 226+228 by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The radium-226 and radium-228 data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

1.2 Holding Times

The holding time for the radiochemistry analyses of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for radium-226 (batch 470435) and radium-228 (batch 470476). The radiochemistry parameters were not detected in the method blanks above the minimum detectable concentrations (MDCs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD pairs were not reported.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCS/LCSD pairs were reported for radium-226 and radium-228. The recovery and replicate error ratio (RER) results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Laboratory duplicates were not reported.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

One equipment blank was collected with the sample set, EB-02. The radiochemistry parameters were not detected in the equipment blank above the MDCs.

1.9 Field Blank

One field blank was collected with the sample set, FB-02. The radiochemistry parameters were not detected in the field blank above the MDCs.

1.10 Field Duplicate

One field duplicate was reported with the sample set, DUP-04. Acceptable precision (RER $\leq$ 3) was demonstrated between the field duplicate and the original sample, PZ-13D.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Product Name: Low-Flow System

Date: 2020-09-29 12:32:03

Project Information:		Pump Information:	
Operator Name	Brett Surles	Pump Model/Type	PP
Company Name	RDH	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant CCR	Tubing Length	28 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach	Pump placement from TOC	21 ft

Well Information:		Pumping Information:	
Well ID	MW-02	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2149758 L
Well Total Depth	26 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	25 in
Depth to Water	3.98 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:10:33	900.02	23.24	5.56	97.04	1.30	6.10	0.27	46.82
Last 5	12:15:33	1200.02	23.19	5.63	100.07	1.21	6.11	0.21	41.77
Last 5	12:20:33	1500.02	23.04	5.68	101.69	1.25	6.11	0.19	37.97
Last 5	12:25:33	1800.02	22.98	5.69	103.90	1.06	6.12	0.16	35.97
Last 5	12:30:33	2100.02	23.12	5.73	105.56	1.19	6.12	0.15	33.13
Variance 0			-0.15	0.05	1.63			-0.02	-3.80
Variance 1			-0.06	0.01	2.21			-0.02	-2.00
Variance 2			0.13	0.04	1.66			-0.01	-2.84

Notes

Sample@1231, DUP -01@ 1245, cloudy 66

Grab Samples

Product Name: Low-Flow System

Date: 2020-09-29 11:31:36

Project Information:		Pump Information:	
Operator Name	Brett Surles	Pump Model/Type	PP
Company Name	RDH	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant CCR	Tubing Length	35 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	MW-03	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	33 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.12 in
Depth to Water	5.48 ft	Total Volume Pumped	16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:09:34	1200.02	22.00	4.95	66.72	8.04	5.60	0.14	86.14
Last 5	11:14:34	1500.02	21.96	4.97	66.87	7.93	5.60	0.13	86.84
Last 5	11:19:34	1800.02	21.95	4.94	66.69	6.12	5.60	0.13	89.09
Last 5	11:24:34	2100.02	21.94	4.97	66.74	5.11	5.60	0.12	88.97
Last 5	11:29:34	2400.02	21.91	4.91	66.78	4.28	5.60	0.12	91.44
Variance 0			-0.01	-0.03	-0.18			-0.00	2.25
Variance 1			-0.00	0.03	0.06			-0.00	-0.12
Variance 2			-0.03	-0.05	0.04			-0.00	2.47

Notes

Sample @1131, Cloudy 65

Grab Samples

Low-Flow Test Report:

Test Date / Time: 9/29/2020 11:35:55 AM
Project: Smith Plant
Operator Name: Philip Evans

Location Name: MW-12 **Well Diameter: 2 in** **Casing Type: PE** **Screen Length: 10 ft** **Top of Screen: 21.7 ft** **Total Depth: 31.7 ft** **Initial Depth to Water: 8.95 ft**	**Pump Type: PP** **Tubing Type: PE** **Pump Intake From TOC: 26.7 ft** **Estimated Total Volume Pumped:** **~~2.625~~ ml** 10.4 L **Flow Cell Volume: 90 ml** 400 **Final Flow Rate: ~~0.1~~ ml/min** **Final Draw Down: 5.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 736137**

Test Notes:
Sample time@ 1210.

Weather Conditions:
Cloudy 75.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 5	
9/29/2020 11:35 AM	00:00	6.07 pH	23.03 °C	1,092.4 µS/cm	0.59 mg/L	3.27 NTU	-25.4 mV	10.74 ft	0.10 ml/min
9/29/2020 11:36 AM	00:56	6.09 pH	23.34 °C	1,077.0 µS/cm	0.33 mg/L	3.27 NTU	-52.5 mV	10.74 ft	0.10 ml/min
9/29/2020 11:37 AM	01:15	6.09 pH	23.46 °C	1,072.3 µS/cm	0.30 mg/L	3.27 NTU	-56.2 mV	10.74 ft	0.10 ml/min
9/29/2020 11:42 AM	06:15	6.09 pH	23.86 °C	1,012.8 µS/cm	0.20 mg/L	1.45 NTU	-78.2 mV	11.95 ft	0.10 ml/min
9/29/2020 11:47 AM	11:15	6.08 pH	23.92 °C	997.75 µS/cm	0.18 mg/L	1.42 NTU	-46.8 mV	12.57 ft	0.10 ml/min
9/29/2020 11:52 AM	16:15	6.08 pH	23.86 °C	997.00 µS/cm	0.16 mg/L	1.37 NTU	-47.1 mV	13.33 ft	0.10 ml/min
9/29/2020 11:57 AM	21:15	6.08 pH	23.81 °C	994.63 µS/cm	0.15 mg/L	1.09 NTU	-47.0 mV	13.97 ft	0.10 ml/min
9/29/2020 12:02 PM	26:15	6.08 pH	23.81 °C	993.01 µS/cm	0.15 mg/L	0.86 NTU	-46.1 mV	14.25 ft	0.10 ml/min

Samples

Sample ID:	Description:
MW-12	Sample time @ 1210.

Test Properties
Test Type = Low-Flow Test
Test Date / Time = 2020-09-29 11:35:55
Time Offset = -05:00:00
Operator Name = Philip Evans
Project = Smith Plant
Initial Depth to Water = 8.95 ft
Flow Cell Volume = 90 ml
Final Draw Down = 5.3 ft
Estimated Total Volume Pumped = 2.625 ml

Pump Properties
Pump Type = PP
Flow Rate = 0.1 ml/min
Final Flow Rate = 0.1 ml/min
Pump Intake From TOC = 26.7 ft

Tubing Properties
Tubing Type = PE

Location Properties
Location Name = MW-12
Location ID = 04c03226-4e0f-48dc-9c70-009add4ec0bf

Well Properties
Well Diameter = 2 in
Casing Type = PE
Screen Length = 10 ft
Total Depth = 31.7 ft
Top of Screen = 21.7 ft

Instrument Properties
Device Model = Aqua TROLL 400
Device SN = 736137

Date Time	Elapsed Time	Depth To Water (ft)	Flow (ml/min)	Turbidity (NTU)	RDO Concentration (mg/L) (738477)	RDO Saturation (%Sat) (738477)	Oxygen
2020-09-29 11:35:55	00:00:00	10.74	0.1	3.27	0.5912679	6.903582	10.1587
2020-09-29 11:36:51	00:00:56	10.74	0.1	3.27	0.3349848	3.934508	5.78650
2020-09-29 11:37:10	00:01:15	10.74	0.1	3.27	0.2980193	3.50931	5.15992
2020-09-29 11:42:10	00:06:15	11.95	0.1	1.45	0.2047397	2.427919	3.56744
2020-09-29 11:47:10	00:11:15	12.57	0.1	1.42	0.175966	2.088746	3.06878
2020-09-29 11:52:10	00:16:15	13.33	0.1	1.37	0.1642929	1.948185	2.86255
2020-09-29 11:57:10	00:21:15	13.97	0.1	1.09	0.1533145	1.816041	2.66866
2020-09-29 12:02:10	00:26:15	14.25	0.1	0.86	0.1471607	1.74319	2.56160

Samples
MW-12: Sample time @ 1210.

Notes
Test Notes: Sample time@ 1210.
Weather Conditions: Cloudy 75.

Product Name: Low-Flow System

Date: 2020-09-30 07:59:55

Project Information:		Pump Information:	
Operator Name	Brett Surles	Pump Model/Type	PP
Company Name	RDH	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant CCR	Tubing Length	42 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	MW-06	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2774638 L
Well Total Depth	40 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	35 in
Depth to Water	13.35 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:38:14	300.02	23.34	5.97	7989.38	0.81	16.34	0.21	84.97
Last 5	07:43:14	600.02	23.55	5.72	8500.76	0.88	16.51	0.19	81.48
Last 5	07:48:14	900.02	23.70	5.63	8864.23	0.75	16.55	0.17	78.96
Last 5	07:53:14	1200.01	23.84	5.59	8990.63	0.69	16.56	0.17	77.43
Last 5	07:58:14	1500.02	23.88	5.57	9123.13	0.59	16.57	0.17	76.33
Variance 0			0.15	-0.10	363.47			-0.01	-2.52
Variance 1			0.14	-0.04	126.40			-0.00	-1.53
Variance 2			0.04	-0.01	132.50			-0.00	-1.10

Notes

Sample@0759, DUP-02@0659, Sunny 61

Grab Samples

Low-Flow Test Report:

Test Date / Time: 9/30/2020 7:35:30 AM
Project: Smith CCR
Operator Name: Philip Evans

Location Name: MW-07 **Well Diameter: 2 in** **Casing Type: PE** **Screen Length: 10 ft** **Top of Screen: 29.3 ft** **Total Depth: 39.3 ft** **Initial Depth to Water: 11.48 ft**	**Pump Type: PP** **Tubing Type: PE** **Pump Intake From TOC: 34.3 ft** **Estimated Total Volume Pumped:** ~~10000~~ ~~10~~ **ml** 40L **Flow Cell Volume: 90 ml** **Final Flow Rate:** ~~**0.1**~~ **ml/min** 400 **Final Draw Down: -10.455 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 736137**

Test Notes:
Sample time@ 0920. Field blank @ 0910.

Weather Conditions:
Sunny 79.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 2	
9/30/2020 7:35 AM	00:00	6.47 pH	19.95 °C	6,723.1 µS/cm	0.56 mg/L	1.14 NTU	-139.3 mV	12.30 in	0.10 ml/min
9/30/2020 7:40 AM	05:00	6.29 pH	22.47 °C	7,297.6 µS/cm	0.23 mg/L	1.31 NTU	-241.7 mV	12.30 in	0.10 ml/min
9/30/2020 7:45 AM	10:00	6.31 pH	22.61 °C	7,518.2 µS/cm	0.18 mg/L	4.50 NTU	-237.2 mV	12.30 in	0.10 ml/min
9/30/2020 7:50 AM	15:00	6.32 pH	22.59 °C	7,525.9 µS/cm	0.16 mg/L	13.40 NTU	-235.5 mV	12.30 in	0.10 ml/min
9/30/2020 7:55 AM	20:00	6.31 pH	22.58 °C	7,538.1 µS/cm	0.15 mg/L	14.10 NTU	-234.4 mV	12.30 in	0.10 ml/min
9/30/2020 8:00 AM	25:00	6.31 pH	22.62 °C	7,518.2 µS/cm	0.14 mg/L	12.60 NTU	-232.5 mV	12.30 in	0.10 ml/min
9/30/2020 8:05 AM	30:00	6.32 pH	22.64 °C	7,515.3 µS/cm	0.13 mg/L	9.56 NTU	-231.7 mV	12.30 in	0.10 ml/min
9/30/2020 8:10 AM	35:00	6.32 pH	22.65 °C	7,536.4 µS/cm	0.12 mg/L	7.31 NTU	-230.6 mV	12.30 in	0.10 ml/min
9/30/2020 8:15 AM	40:00	6.33 pH	22.70 °C	7,518.0 µS/cm	0.12 mg/L	6.02 NTU	-230.1 mV	12.30 in	0.10 ml/min
9/30/2020 8:20 AM	45:00	6.34 pH	22.71 °C	7,516.4 µS/cm	0.11 mg/L	4.01 NTU	-229.1 mV	12.30 in	0.10 ml/min
9/30/2020 8:25 AM	50:00	6.35 pH	22.73 °C	7,536.5 µS/cm	0.12 mg/L	2.83 NTU	-228.3 mV	12.30 in	0.10 ml/min
9/30/2020 8:30 AM	55:00	6.36 pH	22.76 °C	7,540.1 µS/cm	0.11 mg/L	2.45 NTU	-228.1 mV	12.30 in	0.10 ml/min
9/30/2020 8:35 AM	01:00:00	6.37 pH	22.78 °C	7,534.6 µS/cm	0.10 mg/L	2.17 NTU	-227.5 mV	12.30 in	0.10 ml/min

9/30/2020 8:40 AM	01:05:00	6.38 pH	22.79 °C	7,549.1 µS/cm	0.10 mg/L	2.06 NTU	-226.5 mV	12.30 in	0.10 ml/min
9/30/2020 8:45 AM	01:10:00	6.39 pH	22.83 °C	7,576.9 µS/cm	0.10 mg/L	1.97 NTU	-283.5 mV	12.30 in	0.10 ml/min
9/30/2020 8:50 AM	01:15:00	6.39 pH	22.89 °C	7,572.4 µS/cm	0.10 mg/L	1.95 NTU	-226.0 mV	12.30 in	0.10 ml/min
9/30/2020 8:55 AM	01:20:00	6.41 pH	22.87 °C	7,580.8 µS/cm	0.10 mg/L	1.96 NTU	-225.5 mV	12.30 in	0.10 ml/min
9/30/2020 9:00 AM	01:25:00	6.41 pH	22.89 °C	7,594.4 µS/cm	0.12 mg/L	1.92 NTU	-282.7 mV	12.30 in	0.10 ml/min
9/30/2020 9:05 AM	01:30:00	6.42 pH	22.90 °C	7,592.6 µS/cm	0.13 mg/L	1.92 NTU	-224.1 mV	12.30 in	0.10 ml/min
9/30/2020 9:10 AM	01:35:00	6.42 pH	22.92 °C	7,606.0 µS/cm	0.10 mg/L	1.94 NTU	-223.9 mV	12.30 in	0.10 ml/min
9/30/2020 9:15 AM	01:40:00	6.43 pH	22.94 °C	7,546.0 µS/cm	0.12 mg/L	1.92 NTU	-224.0 mV	12.30 in	0.10 ml/min

Samples

Sample ID:	Description:
MW-07	Sample time @ 0920. FB-01 @ 0910.

Test Properties
Test Type = Low-Flow Test
Test Date / Time = 2020-09-30 07:35:30
Time Offset = -05:00:00
Operator Name = Philip Evans
Project = Smith CCR
Initial Depth to Water = 11.48 ft
Flow Cell Volume = 90 ml
Final Draw Down = -10.455 ft
Estimated Total Volume Pumped = 10 ml

Pump Properties
Pump Type = PP
Flow Rate = 0.1 ml/min
Final Flow Rate = 0.1 ml/min
Pump Intake From TOC = 34.3 ft

Tubing Properties
Tubing Type = PE

Location Properties
Location Name = MW-07
Location ID = f8f82818-3139-4493-92da-4859187afe87

Well Properties
Well Diameter = 2 in
Casing Type = PE
Screen Length = 10 ft
Total Depth = 39.3 ft
Top of Screen = 29.3 ft

Instrument Properties
Device Model = Aqua TROLL 400
Device SN = 736137

Date Time	Elapsed Time	Depth To Water (in)	Flow (ml/min)	Turbidity (NTU)	RDO Concentration (mg/L) (738477)	RDO Saturation (%Sat) (738477)	Oxygen
2020-09-30 07:35:30	00:00:00	12.3	0.1	1.14	0.5627137	6.276055	8.85425
2020-09-30 07:40:30	00:05:00	12.3	0.1	1.31	0.225891	2.650415	3.72459
2020-09-30 07:45:30	00:10:00	12.3	0.1	4.5	0.176943	2.083119	2.92670
2020-09-30 07:50:30	00:15:00	12.3	0.1	13.4	0.159134	1.872864	2.63138
2020-09-30 07:55:30	00:20:00	12.3	0.1	14.1	0.1452406	1.709323	2.40162
2020-09-30 08:00:30	00:25:00	12.3	0.1	12.6	0.1368585	1.611791	2.26443
2020-09-30 08:05:30	00:30:00	12.3	0.1	9.56	0.1331583	1.568805	2.20396
2020-09-30 08:10:30	00:35:00	12.3	0.1	7.31	0.1248139	1.470691	2.06612
2020-09-30 08:15:30	00:40:00	12.3	0.1	6.02	0.1222697	1.441994	2.02563
2020-09-30 08:20:30	00:45:00	12.3	0.1	4.01	0.1148132	1.35431	1.90242
2020-09-30 08:25:30	00:50:00	12.3	0.1	2.83	0.1181739	1.39462	1.95898
2020-09-30 08:30:30	00:55:00	12.3	0.1	2.45	0.1079972	1.275221	1.79117
2020-09-30 08:35:30	01:00:00	12.3	0.1	2.17	0.102715	1.213295	1.70413
2020-09-30 08:40:30	01:05:00	12.3	0.1	2.06	0.1040117	1.228939	1.72607
2020-09-30 08:45:30	01:10:00	12.3	0.1	1.97	0.1010234	1.194537	1.67765
2020-09-30 08:50:30	01:15:00	12.3	0.1	1.95	0.09815003	1.161907	1.63165
2020-09-30 08:55:30	01:20:00	12.3	0.1	1.96	0.1009145	1.194248	1.67712
2020-09-30 09:00:30	01:25:00	12.3	0.1	1.92	0.1178763	1.395654	1.95989
2020-09-30 09:05:30	01:30:00	12.3	0.1	1.92	0.129448	1.532899	2.15259
2020-09-30 09:10:30	01:35:00	12.3	0.1	1.94	0.1048063	1.24158	1.74345
2020-09-30 09:15:30	01:40:00	12.3	0.1	1.92	0.1203543	1.425958	2.00229

Samples
MW-07: Sample time @ 0920. FB-01 @ 0910.

Notes
Test Notes: Sample time@ 0920. Field blank @ 0910.
Weather Conditions: Sunny 79.

Product Name: Low-Flow System

Date: 2020-09-30 09:55:32

Project Information:		Pump Information:	
Operator Name	Brett Surles	Pump Model/Type	PP
Company Name	RDH	Tubing Type	PE
Project Name	Smith CCR	Tubing Diameter	.17 in
Site Name	Smith Plant CCR	Tubing Length	26 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach	Pump placement from TOC	19.8 ft

Well Information:		Pumping Information:	
Well ID	PZ-14	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.206049 L
Well Total Depth	24.8 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.72 in
Depth to Water	1.94 ft	Total Volume Pumped	32 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:31:23	3600.02	23.90	6.84	11518.65	1.85	2.16	0.10	-328.72
Last 5	09:36:23	3900.02	23.98	6.83	11574.57	1.34	2.16	0.10	-335.14
Last 5	09:41:23	4200.02	24.10	6.83	11563.10	1.39	2.16	0.10	-340.83
Last 5	09:46:23	4500.02	24.11	6.83	11562.45	1.30	2.16	0.10	-345.53
Last 5	09:51:23	4800.02	24.15	6.82	11568.62	1.43	2.16	0.10	-349.97
Variance 0			0.12	-0.00	-11.47			-0.00	-5.69
Variance 1			0.01	-0.00	-0.65			-0.00	-4.70
Variance 2			0.05	-0.01	6.18			0.00	-4.44

Notes

Sample@0955, DUP-03@0855, Sunny 70

Grab Samples

Low-Flow Test Report:

Test Date / Time: 9/30/2020 10:24:11 AM
Project: Smith Plant
Operator Name: Philip Evans

Location Name: MWI-12A **Well Diameter: 2 in** **Casing Type: PE** **Screen Length: 10 ft** **Top of Screen: 5.5 ft** **Total Depth: 15.5 ft** **Initial Depth to Water: 6.83 ft**	**Pump Type: PP** **Tubing Type: PE** **Pump Intake From TOC: 10.5 ft** **Estimated Total Volume Pumped:** ~~**4.608 ml**~~ 18.4 L **Flow Cell Volume: 90 ml** **Final Flow Rate:** ~~**0.1 ml/min**~~ 400 **Final Draw Down: -6.112 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 736137**

Test Notes:
Sample time @ 1115. EB-01@ 1020. Sunny 84.

Weather Conditions:
Sunny 83. EB-01@ 1020.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 2	
9/30/2020 10:24 AM	00:00	6.24 pH	25.01 °C	1,053.4 µS/cm	0.71 mg/L	28.10 NTU	23.0 mV	8.05 in	0.10 ml/min
9/30/2020 10:29 AM	05:00	6.32 pH	24.92 °C	902.12 µS/cm	0.68 mg/L	10.30 NTU	15.5 mV	8.20 in	0.10 ml/min
9/30/2020 10:31 AM	07:43	6.26 pH	24.99 °C	947.71 µS/cm	0.52 mg/L	10.30 NTU	26.5 mV	8.20 in	0.10 ml/min
9/30/2020 10:35 AM	11:05	6.19 pH	25.00 °C	972.91 µS/cm	0.39 mg/L	9.11 NTU	33.8 mV	8.38 in	0.10 ml/min
9/30/2020 10:40 AM	16:05	6.18 pH	24.83 °C	993.61 µS/cm	0.32 mg/L	4.56 NTU	39.7 mV	8.40 in	0.10 ml/min
9/30/2020 10:45 AM	21:05	6.20 pH	25.05 °C	1,005.5 µS/cm	0.28 mg/L	3.21 NTU	29.0 mV	8.43 in	0.10 ml/min
9/30/2020 10:50 AM	26:05	6.21 pH	24.96 °C	1,005.0 µS/cm	0.28 mg/L	2.24 NTU	22.7 mV	8.46 in	0.10 ml/min
9/30/2020 10:55 AM	31:05	6.23 pH	25.03 °C	1,010.3 µS/cm	0.27 mg/L	2.09 NTU	18.6 mV	8.48 in	0.10 ml/min
9/30/2020 11:00 AM	36:05	6.19 pH	25.24 °C	1,044.8 µS/cm	0.32 mg/L	1.97 NTU	19.4 mV	8.54 in	0.10 ml/min
9/30/2020 11:05 AM	41:05	6.21 pH	25.41 °C	1,047.9 µS/cm	0.40 mg/L	1.88 NTU	18.5 mV	8.58 in	0.10 ml/min
9/30/2020 11:10 AM	46:05	6.21 pH	25.42 °C	1,055.3 µS/cm	0.35 mg/L	1.86 NTU	15.9 mV	8.62 in	0.10 ml/min

Samples

Sample ID:	Description:
MWI-12A	Sample time @ 1115.

Test Properties
Test Type = Low-Flow Test
Test Date / Time = 2020-09-30 10:24:11
Time Offset = -05:00:00
Operator Name = Philip Evans
Project = Smith Plant
Initial Depth to Water = 6.83 ft
Flow Cell Volume = 90 ml
Final Draw Down = -6.112 ft
Estimated Total Volume Pumped = 4.608 ml

Pump Properties
Pump Type = PP
Flow Rate = 0.1 ml/min
Final Flow Rate = 0.1 ml/min
Pump Intake From TOC = 10.5 ft

Tubing Properties
Tubing Type = PE

Location Properties
Location Name = MWI-12A
Location ID = 1cf167c4-a508-45e6-b502-1a8803f2bda6

Well Properties
Well Diameter = 2 in
Casing Type = PE
Screen Length = 10 ft
Total Depth = 15.5 ft
Top of Screen = 5.5 ft

Instrument Properties
Device Model = Aqua TROLL 400
Device SN = 736137

Date Time	Elapsed Time	Depth To Water (in)	Flow (ml/min)	Turbidity (NTU)	RDO Concentration (mg/L) (738477)	RDO Saturation (%Sat) (738477)	Oxygen
2020-09-30 10:24:11	00:00:00	8.05	0.1	28.1	0.7143448	8.673343	12.0486
2020-09-30 10:29:11	00:05:00	8.2	0.1	10.3	0.6783649	8.218359	11.4186
2020-09-30 10:31:54	00:07:43	8.2	0.1	10.3	0.5218161	6.331538	8.79583
2020-09-30 10:35:16	00:11:05	8.38	0.1	9.11	0.3875152	4.703083	6.53345
2020-09-30 10:40:16	00:16:05	8.4	0.1	4.56	0.3240575	3.92028	5.44785
2020-09-30 10:45:16	00:21:05	8.43	0.1	3.21	0.2791652	3.391397	4.71084
2020-09-30 10:50:16	00:26:05	8.46	0.1	2.24	0.2790558	3.384672	4.70228
2020-09-30 10:55:16	00:31:05	8.48	0.1	2.09	0.2666328	3.238146	4.49812
2020-09-30 11:00:16	00:36:05	8.54	0.1	1.97	0.3178766	3.875238	5.38100
2020-09-30 11:05:16	00:41:05	8.58	0.1	1.88	0.4046857	4.949176	6.86991
2020-09-30 11:10:16	00:46:05	8.62	0.1	1.86	0.3499599	4.280718	5.94192

Samples
MWI-12A: Sample time @ 1115.

Notes
Test Notes: Sample time @ 1115. EB-01@ 1020. Sunny 84.
Weather Conditions: Sunny 83. EB-01@ 1020.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-193844-1
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne Whitmire

Authorized for release by:
10/21/2020 12:42:49 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

Table of Contents

Job ID: 400-193844-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-193844-1

Metals
Method 6020: The continuing calibration verification (CCV) associated with batch 400-505969 recovered above the upper control limit for Boron. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: MW-03 (400-193844-2).

Method 6020: The following samples were diluted due to the nature of the sample matrix: MW-06 (400-193844-3), MW-07 (400-193844-4) and DUP-02 (400-193844-7). Elevated reporting limits (RLs) are provided.

Method 6020: The ICV for 400-506691 passed recovery/accuracy criteria which serves the ICV purpose of verifying the calibration standards. The replicate RSD for the elements were outside of the criteria for standards but within the criteria for field samples. Data has therefore been reported and narrated accordingly. (ICV 400-506691/10)

General Chemistry
Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-505957 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-506455 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-02 — Lab Sample ID: 400-193844-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.014		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.040	I	0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	9.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	40		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	14		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.060	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	4.8	I	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.73				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-03 — Lab Sample ID: 400-193844-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.023		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Calcium	2.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.011		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	36		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	16		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.91				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-06 — Lab Sample ID: 400-193844-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00096	I	0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.064		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Beryllium	0.00089	I	0.0025	0.00017	mg/L	5		6020	Total Recoverable
Boron	8.2		0.50	0.18	mg/L	50		6020	Total Recoverable
Calcium	220		2.5	1.3	mg/L	50		6020	Total Recoverable
Lithium	0.010		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	5600		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2400		100	70	mg/L	50		SM 4500 Cl- E	Total/NA
Sulfate	430		100	28	mg/L	20		SM 4500 SO4 E	Total/NA
Field pH	5.57				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-07 — Lab Sample ID: 400-193844-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0015		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.093		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	3.1		0.25	0.090	mg/L	25		6020	Total Recoverable
Calcium	270		1.3	0.63	mg/L	25		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-07 (Continued) — Lab Sample ID: 400-193844-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0034		0.0025	0.0010	mg/L	5		6020	Total Recoverable
Molybdenum	0.0061	I	0.015	0.0045	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	4300		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	1900		80	56	mg/L	40		SM 4500 Cl- E	Total/NA
Sulfate	630		150	42	mg/L	30		SM 4500 SO4 E	Total/NA
Field pH	6.43				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 400-193844-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.014		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.086		0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	41		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.017		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	580		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	200		10	7.0	mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.15		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.3	I	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.08				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 400-193844-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.014		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.043	I	0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	9.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0012	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	46		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	14		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.060	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	4.7	I	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.73				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 400-193844-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0023		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.066		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Beryllium	0.0010	I	0.0025	0.00017	mg/L	5		6020	Total Recoverable
Boron	8.7		0.50	0.18	mg/L	50		6020	Total Recoverable
Calcium	220		2.5	1.3	mg/L	50		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Client Sample ID: DUP-02 (Continued)

Lab Sample ID: 400-193844-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.013		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	4900		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2300		100	70	mg/L	50		SM 4500 Cl- E	Total/NA
Fluoride	0.040	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	430		100	28	mg/L	20		SM 4500 SO4 E	Total/NA
Field pH	5.57				SU	1		Field Sampling	Total/NA

Client Sample ID: FB-01

Lab Sample ID: 400-193844-8

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN
SM 4500 F C	Fluoride	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN
Field Sampling	Field Sampling	EPA	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-193844-1	MW-02	Water	09/29/20 12:31	09/30/20 14:05	
400-193844-2	MW-03	Water	09/29/20 11:31	09/30/20 14:05	
400-193844-3	MW-06	Water	09/30/20 07:59	09/30/20 14:05	
400-193844-4	MW-07	Water	09/30/20 09:20	09/30/20 14:05	
400-193844-5	MW-12	Water	09/29/20 12:10	09/30/20 14:05	
400-193844-6	DUP-01	Water	09/29/20 12:45	09/30/20 14:05	
400-193844-7	DUP-02	Water	09/30/20 06:59	09/30/20 14:05	
400-193844-8	FB-01	Water	09/30/20 09:10	09/30/20 14:05	

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-02

Date Collected: 09/29/20 12:31
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-1

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 18:19	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		10/01/20 11:56	10/13/20 11:55	5
Barium	**0.014**		0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 11:55	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 18:19	5
Boron	**0.040**	**I**	0.050	0.018	mg/L		10/01/20 11:56	10/13/20 14:31	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 18:19	5
Calcium	**9.6**		0.25	0.13	mg/L		10/01/20 11:56	10/07/20 18:19	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 18:19	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 18:19	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 18:19	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 18:19	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 18:19	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 18:19	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 18:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 13:58	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**40**		5.0	5.0	mg/L			10/06/20 15:50	1
Chloride	**14**		2.0	1.4	mg/L			10/02/20 10:14	1
Fluoride	**0.060**	**I**	0.10	0.032	mg/L			10/12/20 10:36	1
Sulfate	**4.8**	**I**	5.0	1.4	mg/L			10/02/20 13:21	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.73**				SU			09/29/20 12:31	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-03

Date Collected: 09/29/20 11:31
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-2

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 18:39	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 18:39	5
Barium	**0.023**		0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 12:19	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 18:39	5
Boron	0.018	U	0.050	0.018	mg/L		10/01/20 11:56	10/07/20 18:39	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 18:39	5
Calcium	**2.6**		0.25	0.13	mg/L		10/01/20 11:56	10/07/20 18:39	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 18:39	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 18:39	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 18:39	5
Lithium	**0.011**		0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 18:39	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 18:39	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 18:39	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 18:39	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 13:59	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**36**		5.0	5.0	mg/L			10/06/20 15:50	1
Chloride	**16**		2.0	1.4	mg/L			10/02/20 10:13	1
Fluoride	0.032	U	0.10	0.032	mg/L			10/12/20 10:40	1
Sulfate	1.4	U	5.0	1.4	mg/L			10/02/20 12:24	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.91**				SU			09/29/20 11:31	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-06

Date Collected: 09/30/20 07:59
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-3

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 18:43	5
Arsenic	**0.00096**	**I**	0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 18:43	5
Barium	**0.064**		0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 12:23	5
Beryllium	**0.00089**	**I**	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 18:43	5
Boron	**8.2**		0.50	0.18	mg/L		10/01/20 11:56	10/13/20 15:16	50
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 18:43	5
Calcium	**220**		2.5	1.3	mg/L		10/01/20 11:56	10/13/20 12:34	50
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 18:43	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 18:43	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 18:43	5
Lithium	**0.010**		0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 18:43	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 18:43	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 18:43	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 18:43	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:01	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5600**		50	50	mg/L			10/07/20 21:27	1
Chloride	**2400**		100	70	mg/L			10/02/20 11:15	50
Fluoride	0.032	U	0.10	0.032	mg/L			10/12/20 10:44	1
Sulfate	**430**		100	28	mg/L			10/02/20 13:08	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.57**				SU			09/30/20 07:59	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-07

Date Collected: 09/30/20 09:20
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-4

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 18:47	5
Arsenic	**0.0015**		0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 18:47	5
Barium	**0.093**		0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 12:38	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 18:47	5
Boron	**3.1**		0.25	0.090	mg/L		10/01/20 11:56	10/13/20 15:24	25
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 18:47	5
Calcium	**270**		1.3	0.63	mg/L		10/01/20 11:56	10/13/20 12:42	25
Chromium	**0.0034**		0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 18:47	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 18:47	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 18:47	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 18:47	5
Molybdenum	**0.0061**	**I**	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 18:47	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 18:47	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 18:47	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:03	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4300**		50	50	mg/L			10/07/20 21:27	1
Chloride	**1900**		80	56	mg/L			10/02/20 11:17	40
Fluoride	0.032	U	0.10	0.032	mg/L			10/12/20 10:59	1
Sulfate	**630**		150	42	mg/L			10/02/20 13:08	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.43**				SU			09/30/20 09:20	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-12

Date Collected: 09/29/20 12:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-5

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 18:58	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		10/01/20 11:56	10/13/20 12:46	5
Barium	**0.014**		0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 12:46	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 18:58	5
Boron	**0.086**		0.050	0.018	mg/L		10/01/20 11:56	10/13/20 15:28	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 18:58	5
Calcium	**41**		0.25	0.13	mg/L		10/01/20 11:56	10/07/20 18:58	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 18:58	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 18:58	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 18:58	5
Lithium	**0.017**		0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 18:58	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 18:58	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 18:58	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 18:58	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:05	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**580**		5.0	5.0	mg/L			10/06/20 15:50	1
Chloride	**200**		10	7.0	mg/L			10/02/20 10:54	5
Fluoride	**0.15**		0.10	0.032	mg/L			10/12/20 11:01	1
Sulfate	**3.3**	**I**	5.0	1.4	mg/L			10/02/20 12:31	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.08**				SU			09/29/20 12:10	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: DUP-01

Date Collected: 09/29/20 12:45
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-6

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 19:02	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 19:02	5
Barium	**0.014**		0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 12:54	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 19:02	5
Boron	**0.043**	**I**	0.050	0.018	mg/L		10/01/20 11:56	10/13/20 15:35	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 19:02	5
Calcium	**9.3**		0.25	0.13	mg/L		10/01/20 11:56	10/07/20 19:02	5
Chromium	**0.0012**	**I**	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 19:02	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 19:02	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 19:02	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 19:02	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 19:02	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 19:02	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 19:02	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:11	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**46**		5.0	5.0	mg/L			10/06/20 15:50	1
Chloride	**14**		2.0	1.4	mg/L			10/02/20 10:16	1
Fluoride	**0.060**	**I**	0.10	0.032	mg/L			10/12/20 11:03	1
Sulfate	**4.7**	**I**	5.0	1.4	mg/L			10/02/20 12:31	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.73**				SU			09/29/20 12:45	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: DUP-02

Date Collected: 09/30/20 06:59
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-7

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 19:06	5
Arsenic	**0.0023**		0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 19:06	5
Barium	**0.066**		0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 13:06	5
Beryllium	**0.0010**	**I**	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 19:06	5
Boron	**8.7**		0.50	0.18	mg/L		10/01/20 11:56	10/13/20 13:09	50
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 19:06	5
Calcium	**220**		2.5	1.3	mg/L		10/01/20 11:56	10/13/20 13:09	50
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 19:06	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 19:06	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 19:06	5
Lithium	**0.013**		0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 19:06	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 19:06	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 19:06	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 19:06	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:13	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4900**		50	50	mg/L			10/07/20 21:27	1
Chloride	**2300**		100	70	mg/L			10/02/20 11:17	50
Fluoride	**0.040**	**I**	0.10	0.032	mg/L			10/12/20 11:08	1
Sulfate	**430**		100	28	mg/L			10/02/20 13:08	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.57**				SU			09/30/20 06:59	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: FB-01

Date Collected: 09/30/20 09:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-8

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 19:10	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 19:10	5
Barium	0.00070	U	0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 13:13	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 19:10	5
Boron	0.018	U	0.050	0.018	mg/L		10/01/20 11:56	10/13/20 13:13	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 19:10	5
Calcium	0.13	U	0.25	0.13	mg/L		10/01/20 11:56	10/07/20 19:10	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 19:10	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 19:10	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 19:10	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 19:10	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 19:10	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 19:10	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 19:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:15	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			10/07/20 21:27	1
Chloride	1.4	U	2.0	1.4	mg/L			10/02/20 10:16	1
Fluoride	0.032	U	0.10	0.032	mg/L			10/12/20 11:10	1
Sulfate	1.4	U	5.0	1.4	mg/L			10/02/20 12:31	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Qualifiers

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Indicates that the compound was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

Glossary

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

Client Sample ID: MW-02

Lab Sample ID: 400-193844-1

Date Collected: 09/29/20 12:31

Matrix: Water

Date Received: 09/30/20 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 18:19	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 11:55	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 14:31	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 13:58	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505780	10/06/20 15:50	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	505436	10/02/20 10:14	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 10:36	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	505508	10/02/20 13:21	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/29/20 12:31	EHS	TAL PEN

Client Sample ID: MW-03

Lab Sample ID: 400-193844-2

Date Collected: 09/29/20 11:31

Matrix: Water

Date Received: 09/30/20 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 18:39	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 12:19	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 13:59	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505780	10/06/20 15:50	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	505436	10/02/20 10:13	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 10:40	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	505508	10/02/20 12:24	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/29/20 11:31	EHS	TAL PEN

Client Sample ID: MW-06

Lab Sample ID: 400-193844-3

Date Collected: 09/30/20 07:59

Matrix: Water

Date Received: 09/30/20 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 18:43	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 12:23	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		50	506691	10/13/20 12:34	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		50	506691	10/13/20 15:16	LDC	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-06
Date Collected: 09/30/20 07:59
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:01	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505957	10/07/20 21:27	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		50	505436	10/02/20 11:15	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 10:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	505508	10/02/20 13:08	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/30/20 07:59	EHS	TAL PEN

Client Sample ID: MW-07
Date Collected: 09/30/20 09:20
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 18:47	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 12:38	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	506691	10/13/20 12:42	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	506691	10/13/20 15:24	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:03	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505957	10/07/20 21:27	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		40	505436	10/02/20 11:17	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 10:59	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	505508	10/02/20 13:08	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/30/20 09:20	EHS	TAL PEN

Client Sample ID: MW-12
Date Collected: 09/29/20 12:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 18:58	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 12:46	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 15:28	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:05	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505780	10/06/20 15:50	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		5	505436	10/02/20 10:54	NT	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: MW-12
Date Collected: 09/29/20 12:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 11:01	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	505508	10/02/20 12:31	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/29/20 12:10	EHS	TAL PEN

Client Sample ID: DUP-01
Date Collected: 09/29/20 12:45
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 19:02	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 12:54	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 15:35	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:11	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505780	10/06/20 15:50	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	505436	10/02/20 10:16	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 11:03	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	505508	10/02/20 12:31	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/29/20 12:45	EHS	TAL PEN

Client Sample ID: DUP-02
Date Collected: 09/30/20 06:59
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 19:06	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 13:06	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		50	506691	10/13/20 13:09	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:13	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505957	10/07/20 21:27	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		50	505436	10/02/20 11:17	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 11:08	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	505508	10/02/20 13:08	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/30/20 06:59	EHS	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Client Sample ID: FB-01

Date Collected: 09/30/20 09:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 19:10	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 13:13	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:15	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505957	10/07/20 21:27	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	505436	10/02/20 10:16	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 11:10	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	505508	10/02/20 12:31	RRC	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 505295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total Recoverable	Water	3005A	
400-193844-2	MW-03	Total Recoverable	Water	3005A	
400-193844-3	MW-06	Total Recoverable	Water	3005A	
400-193844-4	MW-07	Total Recoverable	Water	3005A	
400-193844-5	MW-12	Total Recoverable	Water	3005A	
400-193844-6	DUP-01	Total Recoverable	Water	3005A	
400-193844-7	DUP-02	Total Recoverable	Water	3005A	
400-193844-8	FB-01	Total Recoverable	Water	3005A	
MB 400-505295/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-505295/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
400-193844-1 MS	MW-02	Total Recoverable	Water	3005A	
400-193844-1 MSD	MW-02	Total Recoverable	Water	3005A	

Prep Batch: 505327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	7470A	
400-193844-2	MW-03	Total/NA	Water	7470A	
400-193844-3	MW-06	Total/NA	Water	7470A	
400-193844-4	MW-07	Total/NA	Water	7470A	
400-193844-5	MW-12	Total/NA	Water	7470A	
400-193844-6	DUP-01	Total/NA	Water	7470A	
400-193844-7	DUP-02	Total/NA	Water	7470A	
400-193844-8	FB-01	Total/NA	Water	7470A	
MB 400-505327/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-505327/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-193851-K-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-193851-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 505791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	7470A	505327
400-193844-2	MW-03	Total/NA	Water	7470A	505327
400-193844-3	MW-06	Total/NA	Water	7470A	505327
400-193844-4	MW-07	Total/NA	Water	7470A	505327
400-193844-5	MW-12	Total/NA	Water	7470A	505327
400-193844-6	DUP-01	Total/NA	Water	7470A	505327
400-193844-7	DUP-02	Total/NA	Water	7470A	505327
400-193844-8	FB-01	Total/NA	Water	7470A	505327
MB 400-505327/14-A	Method Blank	Total/NA	Water	7470A	505327
LCS 400-505327/15-A	Lab Control Sample	Total/NA	Water	7470A	505327
400-193851-K-1-B MS	Matrix Spike	Total/NA	Water	7470A	505327
400-193851-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	505327

Analysis Batch: 505969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total Recoverable	Water	6020	505295
400-193844-2	MW-03	Total Recoverable	Water	6020	505295
400-193844-3	MW-06	Total Recoverable	Water	6020	505295
400-193844-4	MW-07	Total Recoverable	Water	6020	505295
400-193844-5	MW-12	Total Recoverable	Water	6020	505295
400-193844-6	DUP-01	Total Recoverable	Water	6020	505295

Metals (Continued)

Analysis Batch: 505969 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-7	DUP-02	Total Recoverable	Water	6020	505295
400-193844-8	FB-01	Total Recoverable	Water	6020	505295
MB 400-505295/1-A ^5	Method Blank	Total Recoverable	Water	6020	505295
LCS 400-505295/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	505295
400-193844-1 MS	MW-02	Total Recoverable	Water	6020	505295
400-193844-1 MSD	MW-02	Total Recoverable	Water	6020	505295

Analysis Batch: 506691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total Recoverable	Water	6020	505295
400-193844-1	MW-02	Total Recoverable	Water	6020	505295
400-193844-2	MW-03	Total Recoverable	Water	6020	505295
400-193844-3	MW-06	Total Recoverable	Water	6020	505295
400-193844-3	MW-06	Total Recoverable	Water	6020	505295
400-193844-3	MW-06	Total Recoverable	Water	6020	505295
400-193844-4	MW-07	Total Recoverable	Water	6020	505295
400-193844-4	MW-07	Total Recoverable	Water	6020	505295
400-193844-4	MW-07	Total Recoverable	Water	6020	505295
400-193844-5	MW-12	Total Recoverable	Water	6020	505295
400-193844-5	MW-12	Total Recoverable	Water	6020	505295
400-193844-6	DUP-01	Total Recoverable	Water	6020	505295
400-193844-6	DUP-01	Total Recoverable	Water	6020	505295
400-193844-7	DUP-02	Total Recoverable	Water	6020	505295
400-193844-7	DUP-02	Total Recoverable	Water	6020	505295
400-193844-8	FB-01	Total Recoverable	Water	6020	505295
MB 400-505295/1-A ^5	Method Blank	Total Recoverable	Water	6020	505295
LCS 400-505295/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	505295
LCS 400-505295/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	505295
400-193844-1 MS	MW-02	Total Recoverable	Water	6020	505295
400-193844-1 MS	MW-02	Total Recoverable	Water	6020	505295
400-193844-1 MSD	MW-02	Total Recoverable	Water	6020	505295
400-193844-1 MSD	MW-02	Total Recoverable	Water	6020	505295

General Chemistry

Analysis Batch: 505436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	SM 4500 Cl- E	
400-193844-2	MW-03	Total/NA	Water	SM 4500 Cl- E	
400-193844-3	MW-06	Total/NA	Water	SM 4500 Cl- E	
400-193844-4	MW-07	Total/NA	Water	SM 4500 Cl- E	
400-193844-5	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-193844-6	DUP-01	Total/NA	Water	SM 4500 Cl- E	
400-193844-7	DUP-02	Total/NA	Water	SM 4500 Cl- E	
400-193844-8	FB-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-505436/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-505436/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-505436/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-193844-2 MS	MW-03	Total/NA	Water	SM 4500 Cl- E	
400-193844-2 MSD	MW-03	Total/NA	Water	SM 4500 Cl- E	

General Chemistry

Analysis Batch: 505508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	SM 4500 SO4 E	
400-193844-2	MW-03	Total/NA	Water	SM 4500 SO4 E	
400-193844-3	MW-06	Total/NA	Water	SM 4500 SO4 E	
400-193844-4	MW-07	Total/NA	Water	SM 4500 SO4 E	
400-193844-5	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-193844-6	DUP-01	Total/NA	Water	SM 4500 SO4 E	
400-193844-7	DUP-02	Total/NA	Water	SM 4500 SO4 E	
400-193844-8	FB-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-505508/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-505508/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-505508/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-193844-2 MS	MW-03	Total/NA	Water	SM 4500 SO4 E	
400-193844-2 MSD	MW-03	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 505780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	SM 2540C	
400-193844-2	MW-03	Total/NA	Water	SM 2540C	
400-193844-5	MW-12	Total/NA	Water	SM 2540C	
400-193844-6	DUP-01	Total/NA	Water	SM 2540C	
MB 400-505780/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-505780/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-193858-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 505957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-3	MW-06	Total/NA	Water	SM 2540C	
400-193844-4	MW-07	Total/NA	Water	SM 2540C	
400-193844-7	DUP-02	Total/NA	Water	SM 2540C	
400-193844-8	FB-01	Total/NA	Water	SM 2540C	
MB 400-505957/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-505957/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-193844-3 DU	MW-06	Total/NA	Water	SM 2540C	

Analysis Batch: 506455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	SM 4500 F C	
400-193844-2	MW-03	Total/NA	Water	SM 4500 F C	
400-193844-3	MW-06	Total/NA	Water	SM 4500 F C	
400-193844-4	MW-07	Total/NA	Water	SM 4500 F C	
400-193844-5	MW-12	Total/NA	Water	SM 4500 F C	
400-193844-6	DUP-01	Total/NA	Water	SM 4500 F C	
400-193844-7	DUP-02	Total/NA	Water	SM 4500 F C	
400-193844-8	FB-01	Total/NA	Water	SM 4500 F C	
MB 400-506455/14	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-506455/11	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-193856-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-193856-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
660-104570-C-6 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
660-104570-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

QC Association Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Field Service / Mobile Lab

Analysis Batch: 506025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	Field Sampling	
400-193844-2	MW-03	Total/NA	Water	Field Sampling	
400-193844-3	MW-06	Total/NA	Water	Field Sampling	
400-193844-4	MW-07	Total/NA	Water	Field Sampling	
400-193844-5	MW-12	Total/NA	Water	Field Sampling	
400-193844-6	DUP-01	Total/NA	Water	Field Sampling	
400-193844-7	DUP-02	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-505295/1-A ^5
Matrix: Water
Analysis Batch: 505969

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 18:12	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 18:12	5
Barium	0.00070	U	0.0025	0.00070	mg/L		10/01/20 11:56	10/07/20 18:12	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 18:12	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 18:12	5
Calcium	0.13	U	0.25	0.13	mg/L		10/01/20 11:56	10/07/20 18:12	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 18:12	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 18:12	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 18:12	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 18:12	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 18:12	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 18:12	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 18:12	5

Lab Sample ID: MB 400-505295/1-A ^5
Matrix: Water
Analysis Batch: 506691

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.018	U	0.050	0.018	mg/L		10/01/20 11:56	10/13/20 14:24	5

Lab Sample ID: LCS 400-505295/2-A ^5
Matrix: Water
Analysis Batch: 505969

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0519		mg/L		104	80 - 120
Arsenic	0.0500	0.0522		mg/L		104	80 - 120
Beryllium	0.0500	0.0522		mg/L		104	80 - 120
Cadmium	0.0500	0.0536		mg/L		107	80 - 120
Calcium	5.00	5.20		mg/L		104	80 - 120
Chromium	0.0500	0.0520		mg/L		104	80 - 120
Cobalt	0.0500	0.0517		mg/L		103	80 - 120
Lead	0.0500	0.0508		mg/L		102	80 - 120
Lithium	0.0500	0.0519		mg/L		104	80 - 120
Molybdenum	0.0500	0.0514		mg/L		103	80 - 120
Selenium	0.0500	0.0519		mg/L		104	80 - 120
Thallium	0.0100	0.00986		mg/L		99	80 - 120

Lab Sample ID: LCS 400-505295/2-A ^5
Matrix: Water
Analysis Batch: 506691

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0521		mg/L		104	80 - 120
Barium	0.0500	0.0506		mg/L		101	80 - 120

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

Lab Sample ID: LCS 400-505295/2-A ^5
Matrix: Water
Analysis Batch: 506691

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron			0.100	0.0995		mg/L		99	80 - 120		

Lab Sample ID: 400-193844-1 MS
Matrix: Water
Analysis Batch: 505969

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	0.0015	U	0.0500	0.0560		mg/L		112	75 - 125		
Arsenic	0.00039	U	0.0500	0.0528		mg/L		106	75 - 125		
Barium	0.013	J3	0.0500	0.0619		mg/L		97	75 - 125		
Beryllium	0.00017	U	0.0500	0.0532		mg/L		106	75 - 125		
Cadmium	0.00028	U	0.0500	0.0519		mg/L		104	75 - 125		
Calcium	9.6		5.00	14.4		mg/L		96	75 - 125		
Chromium	0.0010	U	0.0500	0.0526		mg/L		105	75 - 125		
Cobalt	0.00056	U	0.0500	0.0513		mg/L		103	75 - 125		
Lead	0.00029	U	0.0500	0.0507		mg/L		101	75 - 125		
Lithium	0.0019	U	0.0500	0.0531		mg/L		106	75 - 125		
Molybdenum	0.0045	U	0.0500	0.0518		mg/L		104	75 - 125		
Selenium	0.00082	U	0.0500	0.0399		mg/L		80	75 - 125		
Thallium	0.00012	U	0.0100	0.00975		mg/L		98	75 - 125		

Lab Sample ID: 400-193844-1 MS
Matrix: Water
Analysis Batch: 506691

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	0.00039	U	0.0500	0.0537		mg/L		107	75 - 125		
Barium	0.014		0.0500	0.0635		mg/L		100	75 - 125		

Lab Sample ID: 400-193844-1 MS
Matrix: Water
Analysis Batch: 506691

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron	0.040	I	0.100	0.140		mg/L		99	75 - 125		

Lab Sample ID: 400-193844-1 MSD
Matrix: Water
Analysis Batch: 505969

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.0015	U	0.0500	0.0534		mg/L		107	75 - 125	5	20
Arsenic	0.00039	U	0.0500	0.0493		mg/L		99	75 - 125	7	20
Barium	0.013	J3	0.0500	0.0616		mg/L		97	75 - 125	0	20
Beryllium	0.00017	U	0.0500	0.0533		mg/L		107	75 - 125	0	20
Cadmium	0.00028	U	0.0500	0.0510		mg/L		102	75 - 125	2	20
Calcium	9.6		5.00	14.5		mg/L		98	75 - 125	1	20
Chromium	0.0010	U	0.0500	0.0527		mg/L		105	75 - 125	0	20
Cobalt	0.00056	U	0.0500	0.0509		mg/L		102	75 - 125	1	20

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

Lab Sample ID: 400-193844-1 MSD
Matrix: Water
Analysis Batch: 505969

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.00029	U	0.0500	0.0521		mg/L		104	75 - 125	3	20
Lithium	0.0019	U	0.0500	0.0530		mg/L		106	75 - 125	0	20
Molybdenum	0.0045	U	0.0500	0.0519		mg/L		104	75 - 125	0	20
Selenium	0.00082	U	0.0500	0.0395		mg/L		79	75 - 125	1	20
Thallium	0.00012	U	0.0100	0.00981		mg/L		98	75 - 125	1	20

Lab Sample ID: 400-193844-1 MSD
Matrix: Water
Analysis Batch: 506691

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00039	U	0.0500	0.0532		mg/L		106	75 - 125	1	20
Barium	0.014		0.0500	0.0624		mg/L		97	75 - 125	2	20

Lab Sample ID: 400-193844-1 MSD
Matrix: Water
Analysis Batch: 506691

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.040	I	0.100	0.145		mg/L		104	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-505327/14-A
Matrix: Water
Analysis Batch: 505791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505327

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 13:52	1

Lab Sample ID: LCS 400-505327/15-A
Matrix: Water
Analysis Batch: 505791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505327

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00101	0.00109		mg/L		108	80 - 120		

Lab Sample ID: 400-193851-K-1-B MS
Matrix: Water
Analysis Batch: 505791

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 505327

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.000070	U	0.00201	0.00181		mg/L		90	80 - 120		

Lab Sample ID: 400-193851-K-1-C MSD
Matrix: Water
Analysis Batch: 505791

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 505327

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000070	U	0.00201	0.00184		mg/L		91	80 - 120	2	20

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

Lab Sample ID: MB 400-505780/1
Matrix: Water
Analysis Batch: 505780

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			10/06/20 15:50	1

Lab Sample ID: LCS 400-505780/2
Matrix: Water
Analysis Batch: 505780

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			293	346		mg/L		118	78 - 122		

Lab Sample ID: 400-193858-A-4 DU
Matrix: Water
Analysis Batch: 505780

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	480			484		mg/L				0.8	5

Lab Sample ID: MB 400-505957/1
Matrix: Water
Analysis Batch: 505957

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			10/07/20 21:27	1

Lab Sample ID: LCS 400-505957/2
Matrix: Water
Analysis Batch: 505957

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			293	344		mg/L		117	78 - 122		

Lab Sample ID: 400-193844-3 DU
Matrix: Water
Analysis Batch: 505957

Client Sample ID: MW-06
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	5600			4800	J3	mg/L				16	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-505436/6
Matrix: Water
Analysis Batch: 505436

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	U	2.0	1.4	mg/L			10/02/20 10:13	1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 400-505436/7
Matrix: Water
Analysis Batch: 505436

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.1		mg/L		104	90 - 110

Lab Sample ID: MRL 400-505436/3
Matrix: Water
Analysis Batch: 505436

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.98	I	mg/L		99	50 - 150

Lab Sample ID: 400-193844-2 MS
Matrix: Water
Analysis Batch: 505436

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16		10.0	25.5		mg/L		100	73 - 120

Lab Sample ID: 400-193844-2 MSD
Matrix: Water
Analysis Batch: 505436

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	16		10.0	25.7		mg/L		102	73 - 120	1	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-506455/14
Matrix: Water
Analysis Batch: 506455

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.032	U	0.10	0.032	mg/L			10/12/20 10:01	1

Lab Sample ID: LCS 400-506455/11
Matrix: Water
Analysis Batch: 506455

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	5.13		mg/L		103	90 - 110

Lab Sample ID: 400-193856-B-1 MS
Matrix: Water
Analysis Batch: 506455

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.43		1.00	1.28		mg/L		85	75 - 125

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-193856-B-1 MSD
Matrix: Water
Analysis Batch: 506455

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.43		1.00	1.36	J3	mg/L		93	75 - 125	6	4

Lab Sample ID: 660-104570-C-6 MS
Matrix: Water
Analysis Batch: 506455

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.34		1.00	1.11		mg/L		77	75 - 125

Lab Sample ID: 660-104570-C-6 MSD
Matrix: Water
Analysis Batch: 506455

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.34		1.00	1.11		mg/L		77	75 - 125	0	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-505508/6
Matrix: Water
Analysis Batch: 505508

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.4	U	5.0	1.4	mg/L			10/02/20 12:24	1

Lab Sample ID: LCS 400-505508/7
Matrix: Water
Analysis Batch: 505508

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.7		mg/L		105	90 - 110

Lab Sample ID: MRL 400-505508/3
Matrix: Water
Analysis Batch: 505508

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.47	I	mg/L		89	50 - 150

Lab Sample ID: 400-193844-2 MS
Matrix: Water
Analysis Batch: 505508

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.4	U	10.0	10.6		mg/L		106	77 - 128

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-193844-2 MSD
Matrix: Water
Analysis Batch: 505508

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.4	U	10.0	10.7		mg/L		107	77 - 128	1	5

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Philip Evans / Brett Surles	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-53432-23565.2
Client Contact: Kristi Mitchell	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page ~~2 of 2~~ 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6427(Tel)	PO #: Purchase Order not required			
Email: krmitche@southernco.com	WO #:			
Project Name: CCR Smith Plant	Project #: 40006609			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

400-193844 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride, SM4500_SO4_E - Sulfate, 2540C - Total Dissolved Solids, 4500_F_C - Fluoride	6020 - Sb,As,Ba,B,Be,Ca,Cd,Cr,Co,Pb,Li,Mo,Se,Tl, 7470A - Mercury	FieldSampling - Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N		
[redacted] MW-02	9/29/20	1231	G	Water			X	X	X	X		
[redacted] MW-03	9/29/20	1131		Water			X	X	X	X		
[redacted] MW-06	9/30/20	0759		Water			X	X	X	X		
[redacted] MW-07	9/30/20	0920		Water			X	X	X	X		
[redacted] ~~PZ-14~~				Water								
[redacted] ~~MWI-12A~~				Water								
MW-12	9/29/20	1210		Water			X	X	X	X		
Dup-01	9/29/20	1245		Water			X	X	X	X		
Dup-02	9/30/20	0659		↓			X	X	X	X		
FB-01	9/30/20	0910	↓	↓			X	X	X	X		
~~EB-01~~			G	water								

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	9/30/20 1405	RDH	Kathy R Avery	9.30.20 1405	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		0.1, 0.0 °C IR9

10/21/2020

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-193844-1

Login Number: 193844
List Number: 1
Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	0.1 °C, 0.0 °C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	004586	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-20
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-21
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	12-31-20

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-193844-2
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne Whitmire

Authorized for release by:
11/5/2020 6:04:06 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

Table of Contents

Job ID: 400-193844-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-193844-2

RAD

Method 9315: Radium-226 prep batch 160-484729. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-02 (400-193844-1), MW-03 (400-193844-2), MW-06 (400-193844-3), MW-07 (400-193844-4), MW-12 (400-193844-5), DUP-01 (400-193844-6), DUP-02 (400-193844-7), (LCS 160-484729/1-A), (LCSD 160-484729/2-A) and (MB 160-484729/23-A)

Method 9315: Radium-226 prep batch 160-484723. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FB-01 (400-193844-8), (LCS 160-484723/1-A), (MB 160-484723/24-A), (400-193810-A-6-A), (400-193810-A-6-B MS) and (400-193810-A-6-C MSD)

Method 9320: Radium-228 prep batch 160-484733. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-02 (400-193844-1), MW-03 (400-193844-2), MW-06 (400-193844-3), MW-07 (400-193844-4), MW-12 (400-193844-5), DUP-01 (400-193844-6), DUP-02 (400-193844-7), (LCS 160-484733/1-A), (LCSD 160-484733/2-A) and (MB 160-484733/23-A)

Method 9320: Radium-228 prep batch 160-484724. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FB-01 (400-193844-8), (LCS 160-484724/1-A), (MB 160-484724/24-A), (400-193810-A-6-D), (400-193810-A-6-E MS) and (400-193810-A-6-F MSD)

Method PrecSep_0: Radium 228 Prep Batch 160-484733. The following sample was prepared at a reduced aliquot due to yellow discoloration: MW-07 (400-193844-4).

Method PrecSep_0: Radium 228 Prep Batch 160-484733. Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-02 (400-193844-1), MW-03 (400-193844-2), MW-06 (400-193844-3), MW-07 (400-193844-4), MW-12 (400-193844-5), DUP-01 (400-193844-6) and DUP-02 (400-193844-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-484729. Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-02 (400-193844-1), MW-03 (400-193844-2), MW-06 (400-193844-3), MW-07 (400-193844-4), MW-12 (400-193844-5), DUP-01 (400-193844-6) and DUP-02 (400-193844-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-484729. The following sample was prepared at a reduced aliquot due to yellow discoloration: MW-07 (400-193844-4).

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-2

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

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-193844-1	MW-02	Water	09/29/20 12:31	09/30/20 14:05	
400-193844-2	MW-03	Water	09/29/20 11:31	09/30/20 14:05	
400-193844-3	MW-06	Water	09/30/20 07:59	09/30/20 14:05	
400-193844-4	MW-07	Water	09/30/20 09:20	09/30/20 14:05	
400-193844-5	MW-12	Water	09/29/20 12:10	09/30/20 14:05	
400-193844-6	DUP-01	Water	09/29/20 12:45	09/30/20 14:05	
400-193844-7	DUP-02	Water	09/30/20 06:59	09/30/20 14:05	
400-193844-8	FB-01	Water	09/30/20 09:10	09/30/20 14:05	

Client Sample ID: MW-02

Date Collected: 09/29/20 12:31
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.12		0.296	0.313	1.00	0.220	pCi/L	10/06/20 08:55	10/29/20 14:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.8*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.606		0.312	0.317	1.00	0.462	pCi/L	10/06/20 09:18	10/28/20 12:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.8*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:23*	*1*
Y Carrier	*82.6*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:23*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.73		0.430	0.445	5.00	0.462	pCi/L		11/02/20 21:38	1

Client Sample ID: MW-03
Date Collected: 09/29/20 11:31
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-2
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.22**		0.311	0.329	1.00	0.243	pCi/L	10/06/20 08:55	10/29/20 14:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.4*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.105	U	0.244	0.244	1.00	0.421	pCi/L	10/06/20 09:18	10/28/20 12:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.4*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:23*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:23*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.32**		0.395	0.410	5.00	0.421	pCi/L		11/02/20 21:38	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-2

Client Sample ID: MW-06

Date Collected: 09/30/20 07:59
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	11.7		0.893	1.38	1.00	0.245	pCi/L	10/06/20 08:55	10/29/20 14:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.9*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	14.7		0.921	1.64	1.00	0.495	pCi/L	10/06/20 09:18	10/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.9*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*
Y Carrier	*75.1*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	26.4		1.28	2.14	5.00	0.495	pCi/L		11/02/20 21:38	1

Client Sample ID: MW-07

Date Collected: 09/30/20 09:20
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**24.0**		1.44	2.60	1.00	0.305	pCi/L	10/06/20 08:55	10/29/20 14:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**5.06**		0.635	0.788	1.00	0.545	pCi/L	10/06/20 09:18	10/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*
Y Carrier	*81.1*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**29.1**		1.57	2.72	5.00	0.545	pCi/L		11/02/20 21:38	1

Client Sample ID: MW-12
Date Collected: 09/29/20 12:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-5
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.97		0.375	0.415	1.00	0.211	pCi/L	10/06/20 08:55	10/29/20 18:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 08:55*	*10/29/20 18:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.661		0.325	0.331	1.00	0.471	pCi/L	10/06/20 09:18	10/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*
Y Carrier	*75.5*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.63		0.496	0.531	5.00	0.471	pCi/L		11/02/20 21:38	1

Client Sample ID: DUP-01

Date Collected: 09/29/20 12:45
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-6

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.04		0.278	0.294	1.00	0.204	pCi/L	10/06/20 08:55	10/29/20 18:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.2*		*40 - 110*	*10/06/20 08:55*	*10/29/20 18:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.617		0.328	0.333	1.00	0.488	pCi/L	10/06/20 09:18	10/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.2*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*
Y Carrier	*78.1*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.65		0.430	0.444	5.00	0.488	pCi/L		11/02/20 21:38	1

Client Sample ID: DUP-02
Date Collected: 09/30/20 06:59
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-7
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	10.8		0.859	1.30	1.00	0.285	pCi/L	10/06/20 08:55	10/29/20 18:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 08:55*	*10/29/20 18:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	16.0		0.968	1.76	1.00	0.522	pCi/L	10/06/20 09:18	10/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*
Y Carrier	*80.7*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	26.8		1.29	2.19	5.00	0.522	pCi/L		11/02/20 21:38	1

Client Sample ID: FB-01

Date Collected: 09/30/20 09:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-8

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00830	U	0.130	0.130	1.00	0.272	pCi/L	10/06/20 07:47	10/30/20 09:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.2*		*40 - 110*	*10/06/20 07:47*	*10/30/20 09:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.770**		0.385	0.391	1.00	0.570	pCi/L	10/06/20 08:15	10/29/20 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.2*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:29*	*1*
Y Carrier	*79.6*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:29*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.778**		0.406	0.412	5.00	0.570	pCi/L		11/02/20 21:33	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-2

Client Sample ID: MW-02
Date Collected: 09/29/20 12:31
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:37	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487056	10/28/20 12:23	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: MW-03
Date Collected: 09/29/20 11:31
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:37	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487056	10/28/20 12:23	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: MW-06
Date Collected: 09/30/20 07:59
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:37	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487056	10/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: MW-07
Date Collected: 09/30/20 09:20
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:37	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487056	10/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-2

Client Sample ID: MW-12
Date Collected: 09/29/20 12:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 18:57	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487056	10/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: DUP-01
Date Collected: 09/29/20 12:45
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 18:57	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487056	10/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: DUP-02
Date Collected: 09/30/20 06:59
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 18:57	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487056	10/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: FB-01
Date Collected: 09/30/20 09:10
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193844-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487344	10/30/20 09:57	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:29	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Laboratory References:

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

Rad

Prep Batch: 484723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-8	FB-01	Total/NA	Water	PrecSep-21	
MB 160-484723/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484723/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193810-A-6-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
400-193810-A-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 484724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-8	FB-01	Total/NA	Water	PrecSep_0	
MB 160-484724/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484724/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193810-A-6-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
400-193810-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 484729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	PrecSep-21	
400-193844-2	MW-03	Total/NA	Water	PrecSep-21	
400-193844-3	MW-06	Total/NA	Water	PrecSep-21	
400-193844-4	MW-07	Total/NA	Water	PrecSep-21	
400-193844-5	MW-12	Total/NA	Water	PrecSep-21	
400-193844-6	DUP-01	Total/NA	Water	PrecSep-21	
400-193844-7	DUP-02	Total/NA	Water	PrecSep-21	
MB 160-484729/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484729/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-484729/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 484733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193844-1	MW-02	Total/NA	Water	PrecSep_0	
400-193844-2	MW-03	Total/NA	Water	PrecSep_0	
400-193844-3	MW-06	Total/NA	Water	PrecSep_0	
400-193844-4	MW-07	Total/NA	Water	PrecSep_0	
400-193844-5	MW-12	Total/NA	Water	PrecSep_0	
400-193844-6	DUP-01	Total/NA	Water	PrecSep_0	
400-193844-7	DUP-02	Total/NA	Water	PrecSep_0	
MB 160-484733/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484733/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-484733/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-484723/24-A
Matrix: Water
Analysis Batch: 487612

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484723

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06655	U	0.130	0.130	1.00	0.237	pCi/L	10/06/20 07:47	10/31/20 12:35	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*10/06/20 07:47*	*10/31/20 12:35*	*1*

Lab Sample ID: LCS 160-484723/1-A
Matrix: Water
Analysis Batch: 487344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484723

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	13.08		1.68	1.00	0.372	pCi/L	86	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*74.6*		*40 - 110*

Lab Sample ID: 400-193810-A-6-B MS
Matrix: Water
Analysis Batch: 487612

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 484723

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.309		15.1	13.57		1.58	1.00	0.222	pCi/L	88	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*82.0*		*40 - 110*

Lab Sample ID: 400-193810-A-6-C MSD
Matrix: Water
Analysis Batch: 487612

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 484723

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.309		15.1	12.67		1.51	1.00	0.234	pCi/L	82	75 - 138	0.29	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*79.6*		*40 - 110*

Lab Sample ID: MB 160-484729/23-A
Matrix: Water
Analysis Batch: 487277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484729

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1532	U	0.175	0.175	1.00	0.282	pCi/L	10/06/20 08:55	10/29/20 18:58	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-484729/23-A
Matrix: Water
Analysis Batch: 487277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484729

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110	10/06/20 08:55	10/29/20 18:58	1

Lab Sample ID: LCS 160-484729/1-A
Matrix: Water
Analysis Batch: 487277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484729

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	12.36		1.51	1.00	0.255	pCi/L	82	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110

Lab Sample ID: LCSD 160-484729/2-A
Matrix: Water
Analysis Batch: 487277

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 484729

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			15.1	13.62		1.73	1.00	0.340	pCi/L	90	75 - 125	0.39	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	72.2		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-484724/24-A
Matrix: Water
Analysis Batch: 487301

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484724

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3060	U	0.363	0.365	1.00	0.600	pCi/L	10/06/20 08:15	10/29/20 12:34	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		40 - 110	10/06/20 08:15	10/29/20 12:34	1
Y Carrier	83.7		40 - 110	10/06/20 08:15	10/29/20 12:34	1

Lab Sample ID: LCS 160-484724/1-A
Matrix: Water
Analysis Batch: 487300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484724

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	9.810		1.33	1.00	0.770	pCi/L	96	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-484724/1-A
Matrix: Water
Analysis Batch: 487300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484724

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	74.6		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: 400-193810-A-6-E MS
Matrix: Water
Analysis Batch: 487300

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 484724

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.0104	U	10.3	8.515		1.17	1.00	0.579	pCi/L	83	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	82.0		40 - 110
Y Carrier	78.5		40 - 110

Lab Sample ID: 400-193810-A-6-F MSD
Matrix: Water
Analysis Batch: 487300

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 484724

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.0104	U	10.3	10.68		1.40	1.00	0.731	pCi/L	104	45 - 150	0.84	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	79.6		40 - 110
Y Carrier	76.3		40 - 110

Lab Sample ID: MB 160-484733/23-A
Matrix: Water
Analysis Batch: 487056

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484733

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1455	U	0.339	0.339	1.00	0.584	pCi/L	10/06/20 09:18	10/28/20 12:24	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110	10/06/20 09:18	10/28/20 12:24	1
Y Carrier	80.7		40 - 110	10/06/20 09:18	10/28/20 12:24	1

Lab Sample ID: LCS 160-484733/1-A
Matrix: Water
Analysis Batch: 487055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484733

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	8.916		1.15	1.00	0.593	pCi/L	87	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-484733/1-A
Matrix: Water
Analysis Batch: 487055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484733

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110
Y Carrier	79.6		40 - 110

Lab Sample ID: LCSD 160-484733/2-A
Matrix: Water
Analysis Batch: 487055

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 484733

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			10.3	10.26		1.45	1.00	0.885	pCi/L	100	75 - 125	0.52	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	72.2		40 - 110
Y Carrier	67.7		40 - 110

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Philip Evans / Brett Surles	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-53432-23565.2
Client Contact: Kristi Mitchell	Phone: 850-336-0192	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page ~~2 of 2~~ 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6427(Tel)	PO #: Purchase Order not required			
Email: krmitche@southernco.com	WO #:			
Project Name: CCR Smith Plant	Project #: 40006609			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

400-193844 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride, SM4500_SO4_E - Sulfate, 2540C - Total Dissolved Solids, 4500_F_C - Fluoride	6020 - Sb,As,Ba,B,Be,Ca,Cd,Cr,Co,Pb,Li,Mo,Se,Tl, 7470A - Mercury	FieldSampling - Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N		
[redacted] MW-02	9/29/20	1231	G	Water			X	X	X	X		
[redacted] MW-03	9/29/20	1131		Water			X	X	X	X		
[redacted] MW-06	9/30/20	0759		Water			X	X	X	X		
[redacted] MW-07	9/30/20	0920		Water			X	X	X	X		
[redacted] ~~PZ-14~~				Water								
[redacted] ~~MWI-12A~~				Water								
MW-12	9/29/20	1210		Water			X	X	X	X		
Dup-01	9/29/20	1245		Water			X	X	X	X		
Dup-02	9/30/20	0659		↓			X	X	X	X		
FB-01	9/30/20	0910	↓	↓			X	X	X	X		
~~EB-01~~			G	water								

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	9/30/20 1405	RDH	Kathy R Avery	9.30.20 1405	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		0.1, 0.0 °C IR9

11/5/2020

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-193844-2

Login Number: 193844
List Number: 1
Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	0.1 °C, 0.0 °C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: Gulf Power Company

Job Number: 400-193844-2

Login Number: 193844
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 10/04/20 07:46 AM

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

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193844-2

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Iowa	State	373	12-01-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-193847-1
Laboratory Sample Delivery Group: Delineation Sampling
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne R Whitmire

Authorized for release by:
10/22/2020 5:57:32 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

Table of Contents

Job ID: 400-193847-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-193847-1

Metals
Method 6020: The following samples were diluted due to the nature of the sample matrix: MWI-12A (400-193847-1), PZ-14 (400-193847-2) and DUP-03 (400-193847-3). Elevated reporting limits (RLs) are provided.

Method 6020: The ICV for 400-506691 passed recovery/accuracy criteria which serves the ICV purpose of verifying the calibration standards. The replicate RSD for the elements were outside of the criteria for standards but within the criteria for field samples. Data has therefore been reported and narrated accordingly. (ICV 400-506691/10)

General Chemistry
Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-505957 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-506455 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Client Sample ID: MWI-12A — Lab Sample ID: 400-193847-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0021		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.062		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	4.4		0.25	0.090	mg/L	25		6020	Total Recoverable
Calcium	75		0.25	0.13	mg/L	5		6020	Total Recoverable
Lead	0.00044	I	0.0013	0.00029	mg/L	5		6020	Total Recoverable
Lithium	0.013		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Molybdenum	0.029		0.015	0.0045	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	700		10	10	mg/L	1		SM 2540C	Total/NA
Chloride	190		10	7.0	mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.070	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	150		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA
Field pH	6.21				SU	1		Field Sampling	Total/NA

Client Sample ID: PZ-14 — Lab Sample ID: 400-193847-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.011		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.15		0.0050	0.0014	mg/L	10		6020	Total Recoverable
Boron	13		1.0	0.36	mg/L	100		6020	Total Recoverable
Calcium	690		5.0	2.5	mg/L	100		6020	Total Recoverable
Chromium	0.0011	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	7200		130	130	mg/L	1		SM 2540C	Total/NA
Chloride	2600		120	84	mg/L	60		SM 4500 Cl- E	Total/NA
Fluoride	0.63		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	1500		250	70	mg/L	50		SM 4500 SO4 E	Total/NA
Field pH	6.82				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-03 — Lab Sample ID: 400-193847-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.012		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.16		0.0050	0.0014	mg/L	10		6020	Total Recoverable
Boron	13		1.0	0.36	mg/L	100		6020	Total Recoverable
Calcium	670		5.0	2.5	mg/L	100		6020	Total Recoverable
Chromium	0.0010	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	8100		130	130	mg/L	1		SM 2540C	Total/NA
Chloride	2500		100	70	mg/L	50		SM 4500 Cl- E	Total/NA
Fluoride	0.64		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	1500		250	70	mg/L	50		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Detection Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Client Sample ID: DUP-03 (Continued) — Lab Sample ID: 400-193847-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Field pH	6.82				SU	1		Field Sampling	Total/NA

Client Sample ID: EB-01 — Lab Sample ID: 400-193847-4

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN
SM 4500 F C	Fluoride	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN
Field Sampling	Field Sampling	EPA	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-193847-1	MWI-12A	Water	09/30/20 11:15	09/30/20 14:05	
400-193847-2	PZ-14	Water	09/30/20 09:55	09/30/20 14:05	
400-193847-3	DUP-03	Water	09/30/20 08:55	09/30/20 14:05	
400-193847-4	EB-01	Water	09/30/20 10:20	09/30/20 14:05	

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Client Sample ID: MWI-12A

Date Collected: 09/30/20 11:15
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-1

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 19:14	5
Arsenic	**0.0021**		0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 19:14	5
Barium	**0.062**		0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 13:17	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 19:14	5
Boron	**4.4**		0.25	0.090	mg/L		10/01/20 11:56	10/13/20 13:21	25
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 19:14	5
Calcium	**75**		0.25	0.13	mg/L		10/01/20 11:56	10/07/20 19:14	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 19:14	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 19:14	5
Lead	**0.00044**	**I**	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 19:14	5
Lithium	**0.013**		0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 19:14	5
Molybdenum	**0.029**		0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 19:14	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 19:14	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 19:14	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:16	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**700**		10	10	mg/L			10/07/20 21:27	1
Chloride	**190**		10	7.0	mg/L			10/02/20 10:54	5
Fluoride	**0.070**	**I**	0.10	0.032	mg/L			10/12/20 11:14	1
Sulfate	**150**		25	7.0	mg/L			10/02/20 12:53	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.21**				SU			09/30/20 11:15	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Client Sample ID: PZ-14

Date Collected: 09/30/20 09:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-2

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 19:18	5
Arsenic	**0.011**		0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 19:18	5
Barium	**0.15**		0.0050	0.0014	mg/L		10/01/20 11:56	10/13/20 13:25	10
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 19:18	5
Boron	**13**		1.0	0.36	mg/L		10/01/20 11:56	10/13/20 13:29	100
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 19:18	5
Calcium	**690**		5.0	2.5	mg/L		10/01/20 11:56	10/13/20 13:29	100
Chromium	**0.0011**	**I**	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 19:18	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 19:18	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 19:18	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 19:18	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 19:18	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 19:18	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 19:18	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:18	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**7200**		130	130	mg/L			10/07/20 21:27	1
Chloride	**2600**		120	84	mg/L			10/02/20 11:17	60
Fluoride	**0.63**		0.10	0.032	mg/L			10/12/20 11:16	1
Sulfate	**1500**		250	70	mg/L			10/02/20 13:08	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.82**				SU			09/30/20 09:55	1

Client Sample Results

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Client Sample ID: DUP-03

Date Collected: 09/30/20 08:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-3

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 19:22	5
Arsenic	**0.012**		0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 19:22	5
Barium	**0.16**		0.0050	0.0014	mg/L		10/01/20 11:56	10/13/20 13:33	10
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 19:22	5
Boron	**13**		1.0	0.36	mg/L		10/01/20 11:56	10/13/20 13:37	100
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 19:22	5
Calcium	**670**		5.0	2.5	mg/L		10/01/20 11:56	10/13/20 13:37	100
Chromium	**0.0010**	**I**	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 19:22	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 19:22	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 19:22	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 19:22	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 19:22	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 19:22	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 19:22	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:20	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**8100**		130	130	mg/L			10/07/20 21:27	1
Chloride	**2500**		100	70	mg/L			10/02/20 11:15	50
Fluoride	**0.64**		0.10	0.032	mg/L			10/12/20 11:19	1
Sulfate	**1500**		250	70	mg/L			10/02/20 13:10	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.82**				SU			09/30/20 08:55	1

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Client Sample ID: EB-01

Date Collected: 09/30/20 10:20
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-4

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 19:26	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		10/01/20 11:56	10/13/20 13:48	5
Barium	0.00070	U	0.0025	0.00070	mg/L		10/01/20 11:56	10/13/20 13:48	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 19:26	5
Boron	0.018	U	0.050	0.018	mg/L		10/01/20 11:56	10/13/20 13:48	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 19:26	5
Calcium	0.13	U	0.25	0.13	mg/L		10/01/20 11:56	10/07/20 19:26	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 19:26	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 19:26	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 19:26	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 19:26	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 19:26	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 19:26	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 19:26	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 14:22	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			10/07/20 21:27	1
Chloride	1.4	U	2.0	1.4	mg/L			10/02/20 10:17	1
Fluoride	0.032	U	0.10	0.032	mg/L			10/12/20 11:22	1
Sulfate	1.4	U	5.0	1.4	mg/L			10/02/20 12:31	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Qualifiers

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Indicates that the compound was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

Glossary

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

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Client Sample ID: MWI-12A
Date Collected: 09/30/20 11:15
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 19:14	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 13:17	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	506691	10/13/20 13:21	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:16	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505957	10/07/20 21:27	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		5	505436	10/02/20 10:54	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 11:14	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	505508	10/02/20 12:53	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/30/20 11:15	EHS	TAL PEN

Client Sample ID: PZ-14
Date Collected: 09/30/20 09:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 19:18	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		10	506691	10/13/20 13:25	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		100	506691	10/13/20 13:29	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:18	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505957	10/07/20 21:27	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		60	505436	10/02/20 11:17	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 11:16	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	505508	10/02/20 13:08	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/30/20 09:55	EHS	TAL PEN

Client Sample ID: DUP-03
Date Collected: 09/30/20 08:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 19:22	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		10	506691	10/13/20 13:33	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		100	506691	10/13/20 13:37	LDC	TAL PEN

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Client Sample ID: DUP-03

Date Collected: 09/30/20 08:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:20	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505957	10/07/20 21:27	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		50	505436	10/02/20 11:15	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 11:19	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	505508	10/02/20 13:10	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	506025	09/30/20 08:55	EHS	TAL PEN

Client Sample ID: EB-01

Date Collected: 09/30/20 10:20
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	505969	10/07/20 19:26	LDC	TAL PEN
Total Recoverable	Prep	3005A			505295	10/01/20 11:56	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	506691	10/13/20 13:48	LDC	TAL PEN
Total/NA	Prep	7470A			505327	10/05/20 10:25	NET	TAL PEN
Total/NA	Analysis	7470A		1	505791	10/06/20 14:22	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	505957	10/07/20 21:27	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	505436	10/02/20 10:17	NT	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	506455	10/12/20 11:22	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	505508	10/02/20 12:31	RRC	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 505295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total Recoverable	Water	3005A	
400-193847-2	PZ-14	Total Recoverable	Water	3005A	
400-193847-3	DUP-03	Total Recoverable	Water	3005A	
400-193847-4	EB-01	Total Recoverable	Water	3005A	
MB 400-505295/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-505295/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
400-193844-C-1-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-193844-C-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 505327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	7470A	
400-193847-2	PZ-14	Total/NA	Water	7470A	
400-193847-3	DUP-03	Total/NA	Water	7470A	
400-193847-4	EB-01	Total/NA	Water	7470A	
MB 400-505327/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-505327/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-193851-K-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-193851-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 505791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	7470A	505327
400-193847-2	PZ-14	Total/NA	Water	7470A	505327
400-193847-3	DUP-03	Total/NA	Water	7470A	505327
400-193847-4	EB-01	Total/NA	Water	7470A	505327
MB 400-505327/14-A	Method Blank	Total/NA	Water	7470A	505327
LCS 400-505327/15-A	Lab Control Sample	Total/NA	Water	7470A	505327
400-193851-K-1-B MS	Matrix Spike	Total/NA	Water	7470A	505327
400-193851-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	505327

Analysis Batch: 505969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total Recoverable	Water	6020	505295
400-193847-2	PZ-14	Total Recoverable	Water	6020	505295
400-193847-3	DUP-03	Total Recoverable	Water	6020	505295
400-193847-4	EB-01	Total Recoverable	Water	6020	505295
MB 400-505295/1-A ^5	Method Blank	Total Recoverable	Water	6020	505295
LCS 400-505295/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	505295
400-193844-C-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	505295
400-193844-C-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	505295

Analysis Batch: 506691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total Recoverable	Water	6020	505295
400-193847-1	MWI-12A	Total Recoverable	Water	6020	505295
400-193847-2	PZ-14	Total Recoverable	Water	6020	505295
400-193847-2	PZ-14	Total Recoverable	Water	6020	505295
400-193847-3	DUP-03	Total Recoverable	Water	6020	505295
400-193847-3	DUP-03	Total Recoverable	Water	6020	505295
400-193847-4	EB-01	Total Recoverable	Water	6020	505295

Metals (Continued)

Analysis Batch: 506691 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-505295/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	505295
400-193844-C-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	505295
400-193844-C-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	505295

General Chemistry

Analysis Batch: 505436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	SM 4500 Cl- E	
400-193847-2	PZ-14	Total/NA	Water	SM 4500 Cl- E	
400-193847-3	DUP-03	Total/NA	Water	SM 4500 Cl- E	
400-193847-4	EB-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-505436/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-505436/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-505436/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-193847-4 MS	EB-01	Total/NA	Water	SM 4500 Cl- E	
400-193847-4 MSD	EB-01	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 505508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	SM 4500 SO4 E	
400-193847-2	PZ-14	Total/NA	Water	SM 4500 SO4 E	
400-193847-3	DUP-03	Total/NA	Water	SM 4500 SO4 E	
400-193847-4	EB-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-505508/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-505508/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-505508/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-193847-4 MS	EB-01	Total/NA	Water	SM 4500 SO4 E	
400-193847-4 MSD	EB-01	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 505957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	SM 2540C	
400-193847-2	PZ-14	Total/NA	Water	SM 2540C	
400-193847-3	DUP-03	Total/NA	Water	SM 2540C	
400-193847-4	EB-01	Total/NA	Water	SM 2540C	
MB 400-505957/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-505957/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-193844-B-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 506455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	SM 4500 F C	
400-193847-2	PZ-14	Total/NA	Water	SM 4500 F C	
400-193847-3	DUP-03	Total/NA	Water	SM 4500 F C	
400-193847-4	EB-01	Total/NA	Water	SM 4500 F C	
MB 400-506455/14	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-506455/11	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-193856-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-193856-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

QC Association Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Field Service / Mobile Lab

Analysis Batch: 506025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	Field Sampling	
400-193847-2	PZ-14	Total/NA	Water	Field Sampling	
400-193847-3	DUP-03	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-505295/1-A ^5
Matrix: Water
Analysis Batch: 505969

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		10/01/20 11:56	10/07/20 18:12	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		10/01/20 11:56	10/07/20 18:12	5
Barium	0.00070	U	0.0025	0.00070	mg/L		10/01/20 11:56	10/07/20 18:12	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		10/01/20 11:56	10/07/20 18:12	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		10/01/20 11:56	10/07/20 18:12	5
Calcium	0.13	U	0.25	0.13	mg/L		10/01/20 11:56	10/07/20 18:12	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		10/01/20 11:56	10/07/20 18:12	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		10/01/20 11:56	10/07/20 18:12	5
Lead	0.00029	U	0.0013	0.00029	mg/L		10/01/20 11:56	10/07/20 18:12	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		10/01/20 11:56	10/07/20 18:12	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		10/01/20 11:56	10/07/20 18:12	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		10/01/20 11:56	10/07/20 18:12	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		10/01/20 11:56	10/07/20 18:12	5

Lab Sample ID: LCS 400-505295/2-A ^5
Matrix: Water
Analysis Batch: 505969

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0519		mg/L		104	80 - 120
Arsenic	0.0500	0.0522		mg/L		104	80 - 120
Beryllium	0.0500	0.0522		mg/L		104	80 - 120
Cadmium	0.0500	0.0536		mg/L		107	80 - 120
Calcium	5.00	5.20		mg/L		104	80 - 120
Chromium	0.0500	0.0520		mg/L		104	80 - 120
Cobalt	0.0500	0.0517		mg/L		103	80 - 120
Lead	0.0500	0.0508		mg/L		102	80 - 120
Lithium	0.0500	0.0519		mg/L		104	80 - 120
Molybdenum	0.0500	0.0514		mg/L		103	80 - 120
Selenium	0.0500	0.0519		mg/L		104	80 - 120
Thallium	0.0100	0.00986		mg/L		99	80 - 120

Lab Sample ID: LCS 400-505295/2-A ^5
Matrix: Water
Analysis Batch: 506691

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.0500	0.0506		mg/L		101	80 - 120

Lab Sample ID: 400-193844-C-1-B MS ^5
Matrix: Water
Analysis Batch: 505969

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0015	U	0.0500	0.0560		mg/L		112	75 - 125
Arsenic	0.00039	U	0.0500	0.0528		mg/L		106	75 - 125
Barium	0.013	J3	0.0500	0.0619		mg/L		97	75 - 125
Beryllium	0.00017	U	0.0500	0.0532		mg/L		106	75 - 125
Cadmium	0.00028	U	0.0500	0.0519		mg/L		104	75 - 125

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

Lab Sample ID: 400-193844-C-1-B MS ^5
Matrix: Water
Analysis Batch: 505969

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	9.6		5.00	14.4		mg/L		96	75 - 125
Chromium	0.0010	U	0.0500	0.0526		mg/L		105	75 - 125
Cobalt	0.00056	U	0.0500	0.0513		mg/L		103	75 - 125
Lead	0.00029	U	0.0500	0.0507		mg/L		101	75 - 125
Lithium	0.0019	U	0.0500	0.0531		mg/L		106	75 - 125
Molybdenum	0.0045	U	0.0500	0.0518		mg/L		104	75 - 125
Selenium	0.00082	U	0.0500	0.0399		mg/L		80	75 - 125
Thallium	0.00012	U	0.0100	0.00975		mg/L		98	75 - 125

Lab Sample ID: 400-193844-C-1-B MS ^5
Matrix: Water
Analysis Batch: 506691

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00039	U	0.0500	0.0537		mg/L		107	75 - 125
Barium	0.014		0.0500	0.0635		mg/L		100	75 - 125

Lab Sample ID: 400-193844-C-1-C MSD ^5
Matrix: Water
Analysis Batch: 505969

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.0015	U	0.0500	0.0534		mg/L		107	75 - 125	5	20
Arsenic	0.00039	U	0.0500	0.0493		mg/L		99	75 - 125	7	20
Barium	0.013	J3	0.0500	0.0616		mg/L		97	75 - 125	0	20
Beryllium	0.00017	U	0.0500	0.0533		mg/L		107	75 - 125	0	20
Cadmium	0.00028	U	0.0500	0.0510		mg/L		102	75 - 125	2	20
Calcium	9.6		5.00	14.5		mg/L		98	75 - 125	1	20
Chromium	0.0010	U	0.0500	0.0527		mg/L		105	75 - 125	0	20
Cobalt	0.00056	U	0.0500	0.0509		mg/L		102	75 - 125	1	20
Lead	0.00029	U	0.0500	0.0521		mg/L		104	75 - 125	3	20
Lithium	0.0019	U	0.0500	0.0530		mg/L		106	75 - 125	0	20
Molybdenum	0.0045	U	0.0500	0.0519		mg/L		104	75 - 125	0	20
Selenium	0.00082	U	0.0500	0.0395		mg/L		79	75 - 125	1	20
Thallium	0.00012	U	0.0100	0.00981		mg/L		98	75 - 125	1	20

Lab Sample ID: 400-193844-C-1-C MSD ^5
Matrix: Water
Analysis Batch: 506691

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 505295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00039	U	0.0500	0.0532		mg/L		106	75 - 125	1	20
Barium	0.014		0.0500	0.0624		mg/L		97	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-505327/14-A
Matrix: Water
Analysis Batch: 505791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505327

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		10/05/20 10:25	10/06/20 13:52	1

Lab Sample ID: LCS 400-505327/15-A
Matrix: Water
Analysis Batch: 505791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505327

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00101	0.00109		mg/L		108	80 - 120		

Lab Sample ID: 400-193851-K-1-B MS
Matrix: Water
Analysis Batch: 505791

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 505327

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.000070	U	0.00201	0.00181		mg/L		90	80 - 120		

Lab Sample ID: 400-193851-K-1-C MSD
Matrix: Water
Analysis Batch: 505791

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 505327

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000070	U	0.00201	0.00184		mg/L		91	80 - 120	2	20

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

Lab Sample ID: MB 400-505957/1
Matrix: Water
Analysis Batch: 505957

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			10/07/20 21:27	1

Lab Sample ID: LCS 400-505957/2
Matrix: Water
Analysis Batch: 505957

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			293	344		mg/L		117	78 - 122		

Lab Sample ID: 400-193844-B-3 DU
Matrix: Water
Analysis Batch: 505957

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	5600			4800	J3	mg/L				16	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-505436/6
Matrix: Water
Analysis Batch: 505436

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	U	2.0	1.4	mg/L			10/02/20 10:13	1

Lab Sample ID: LCS 400-505436/7
Matrix: Water
Analysis Batch: 505436

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.1		mg/L		104	90 - 110

Lab Sample ID: MRL 400-505436/3
Matrix: Water
Analysis Batch: 505436

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.98	I	mg/L		99	50 - 150

Lab Sample ID: 400-193847-4 MS
Matrix: Water
Analysis Batch: 505436

Client Sample ID: EB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.4	U	10.0	11.7		mg/L		117	73 - 120

Lab Sample ID: 400-193847-4 MSD
Matrix: Water
Analysis Batch: 505436

Client Sample ID: EB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.4	U	10.0	11.4		mg/L		114	73 - 120	3	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-506455/14
Matrix: Water
Analysis Batch: 506455

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.032	U	0.10	0.032	mg/L			10/12/20 10:01	1

Lab Sample ID: LCS 400-506455/11
Matrix: Water
Analysis Batch: 506455

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	5.13		mg/L		103	90 - 110

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-193856-B-1 MS
Matrix: Water
Analysis Batch: 506455

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.43		1.00	1.28		mg/L		85	75 - 125

Lab Sample ID: 400-193856-B-1 MSD
Matrix: Water
Analysis Batch: 506455

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.43		1.00	1.36	J3	mg/L		93	75 - 125	6	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-505508/6
Matrix: Water
Analysis Batch: 505508

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.4	U	5.0	1.4	mg/L			10/02/20 12:24	1

Lab Sample ID: LCS 400-505508/7
Matrix: Water
Analysis Batch: 505508

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.7		mg/L		105	90 - 110

Lab Sample ID: MRL 400-505508/3
Matrix: Water
Analysis Batch: 505508

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.47	I	mg/L		89	50 - 150

Lab Sample ID: 400-193847-4 MS
Matrix: Water
Analysis Batch: 505508

Client Sample ID: EB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.4	U	10.0	10.1		mg/L		101	77 - 128

Lab Sample ID: 400-193847-4 MSD
Matrix: Water
Analysis Batch: 505508

Client Sample ID: EB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.4	U	10.0	10.2		mg/L		102	77 - 128	1	5

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Brett Sparkes	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-96541-31203.1
Client Contact: Barry Evans	Phone: 850 380 3458	E-Mail: Cheyenne.Whitmire@Eurofinset.com		Page: Page 1 of 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6427(Tel)	PO #: 2000339513			
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117			
Project Name: CCR Smith Plant Delineation Sampling Event Desc: CCR Smith I	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

400-193847 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	6020, 7470A	2540C - Total Dissolved Solids	4500_F_C - Fluoride	SM4500_SO4_E - Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	D	N	N	N		
MWI-12A	9/30/20	1115	G	Water			X	X	X	X	X	X	X		
PZ-14	9/30/20	0955	G	Water											
~~MW-11 HORIZONTAL~~ DUP-03	9/30/20	0855	G	Water											
~~MW-13 HORIZONTAL~~ EB-01	9/30/20	1020	G	Water			X	X	X	X	X	X	X		
				Water											
				Water											

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time: 9/30/20 1405	Company ROM	Received by: Kathy R Avery	Date/Time: 9.30.20 1405	Company GTA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.7°C IR9

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-193847-1
SDG Number: Delineation Sampling

Login Number: 193847
List Number: 1
Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	0.7 °C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-1
SDG: Delineation Sampling

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	004586	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-20
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-21
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	12-31-20

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-193847-2
Laboratory Sample Delivery Group: Delineation Sampling
Client Project/Site: CCR Smith Plant

For:
Gulf Power Company
BIN 731
One Energy Place
Pensacola, Florida 32520

Attn: Barry Evans

Cheyenne R Whitmire

Authorized for release by:
11/5/2020 6:04:32 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

Table of Contents

Job ID: 400-193847-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-193847-2

RAD

Method 9315: Radium-226 prep batch 160-484723. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MWI-12A (400-193847-1), PZ-14 (400-193847-2), DUP-03 (400-193847-3), EB-01 (400-193847-4), (LCS 160-484723/1-A), (MB 160-484723/24-A), (400-193810-A-6-A), (400-193810-A-6-B MS) and (400-193810-A-6-C MSD)

Method 9320: Radium-228 prep batch 160-484724. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MWI-12A (400-193847-1), PZ-14 (400-193847-2), DUP-03 (400-193847-3), EB-01 (400-193847-4), (LCS 160-484724/1-A), (MB 160-484724/24-A), (400-193810-A-6-D), (400-193810-A-6-E MS) and (400-193810-A-6-F MSD)

Method PrecSep_0: Radium 228 Prep Batch 160-484724. Samples 400-193810-2 and 400-193810-35 were prepared at a further reduced aliquot due to gray discoloration and a cloudy appearance. Sample 400-193847-1 was prepared at a reduced aliquot due to yellow discoloration.

Method PrecSep-21: Radium 226 Prep Batch 160-484723. Samples 400-193810-2 and 400-139810-35 were prepared at a reduced aliquot due to gray discoloration and a cloudy appearance. Sample 400-193847-2 was prepared at a reduced aliquot due to yellow discoloration.

Method Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-2
SDG: Delineation Sampling

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

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-2
SDG: Delineation Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-193847-1	MWI-12A	Water	09/30/20 11:15	09/30/20 14:05	
400-193847-2	PZ-14	Water	09/30/20 09:55	09/30/20 14:05	
400-193847-3	DUP-03	Water	09/30/20 08:55	09/30/20 14:05	
400-193847-4	EB-01	Water	09/30/20 10:20	09/30/20 14:05	

Client Sample ID: MWI-12A

Date Collected: 09/30/20 11:15
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	8.73		1.09	1.34	1.00	0.417	pCi/L	10/06/20 07:47	10/30/20 09:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*59.5*		*40 - 110*	*10/06/20 07:47*	*10/30/20 09:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.80		0.685	0.705	1.00	0.964	pCi/L	10/06/20 08:15	10/29/20 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*59.5*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:29*	*1*
Y Carrier	*78.1*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:29*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	10.5		1.29	1.51	5.00	0.964	pCi/L		11/02/20 21:33	1

Client Sample ID: PZ-14

Date Collected: 09/30/20 09:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	12.2		1.06	1.53	1.00	0.318	pCi/L	10/06/20 07:47	10/30/20 09:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*67.5*		*40 - 110*	*10/06/20 07:47*	*10/30/20 09:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	11.9		0.935	1.44	1.00	0.595	pCi/L	10/06/20 08:15	10/29/20 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*67.5*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:29*	*1*
Y Carrier	*78.9*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:29*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	24.1		1.41	2.10	5.00	0.595	pCi/L		11/02/20 21:33	1

Client Sample ID: DUP-03

Date Collected: 09/30/20 08:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	12.1		1.10	1.55	1.00	0.359	pCi/L	10/06/20 07:47	10/30/20 09:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*60.4*		*40 - 110*	*10/06/20 07:47*	*10/30/20 09:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	12.0		1.03	1.51	1.00	0.707	pCi/L	10/06/20 08:15	10/29/20 12:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*60.4*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:30*	*1*
Y Carrier	*77.4*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:30*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	24.1		1.51	2.16	5.00	0.707	pCi/L		11/02/20 21:33	1

Client Sample ID: EB-01

Date Collected: 09/30/20 10:20
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0469	U	0.113	0.113	1.00	0.266	pCi/L	10/06/20 07:47	10/30/20 09:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.1*		*40 - 110*	*10/06/20 07:47*	*10/30/20 09:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.258	U	0.275	0.276	1.00	0.449	pCi/L	10/06/20 08:15	10/29/20 12:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.1*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:30*	*1*
Y Carrier	*79.3*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:30*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.212	U	0.297	0.298	5.00	0.449	pCi/L		11/02/20 21:33	1

Definitions/Glossary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-2
SDG: Delineation Sampling

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Lab Chronicle

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-2
SDG: Delineation Sampling

Client Sample ID: MWI-12A
Date Collected: 09/30/20 11:15
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487344	10/30/20 09:58	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:29	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: PZ-14
Date Collected: 09/30/20 09:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487344	10/30/20 09:58	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:29	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: DUP-03
Date Collected: 09/30/20 08:55
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487344	10/30/20 09:58	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:30	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: EB-01
Date Collected: 09/30/20 10:20
Date Received: 09/30/20 14:05

Lab Sample ID: 400-193847-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487344	10/30/20 09:58	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:30	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Laboratory References:

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

Rad

Prep Batch: 484723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	PrecSep-21	
400-193847-2	PZ-14	Total/NA	Water	PrecSep-21	
400-193847-3	DUP-03	Total/NA	Water	PrecSep-21	
400-193847-4	EB-01	Total/NA	Water	PrecSep-21	
MB 160-484723/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484723/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193810-A-6-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
400-193810-A-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 484724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193847-1	MWI-12A	Total/NA	Water	PrecSep_0	
400-193847-2	PZ-14	Total/NA	Water	PrecSep_0	
400-193847-3	DUP-03	Total/NA	Water	PrecSep_0	
400-193847-4	EB-01	Total/NA	Water	PrecSep_0	
MB 160-484724/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484724/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193810-A-6-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
400-193810-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-484723/24-A
Matrix: Water
Analysis Batch: 487612

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484723

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06655	U	0.130	0.130	1.00	0.237	pCi/L	10/06/20 07:47	10/31/20 12:35	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*10/06/20 07:47*	*10/31/20 12:35*	*1*

Lab Sample ID: LCS 160-484723/1-A
Matrix: Water
Analysis Batch: 487344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484723

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	13.08		1.68	1.00	0.372	pCi/L	86	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*74.6*		*40 - 110*

Lab Sample ID: 400-193810-A-6-B MS
Matrix: Water
Analysis Batch: 487612

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 484723

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.309		15.1	13.57		1.58	1.00	0.222	pCi/L	88	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*82.0*		*40 - 110*

Lab Sample ID: 400-193810-A-6-C MSD
Matrix: Water
Analysis Batch: 487612

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 484723

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.309		15.1	12.67		1.51	1.00	0.234	pCi/L	82	75 - 138	0.29	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*79.6*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-484724/24-A
Matrix: Water
Analysis Batch: 487301

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484724

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3060	U	0.363	0.365	1.00	0.600	pCi/L	10/06/20 08:15	10/29/20 12:34	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		40 - 110	10/06/20 08:15	10/29/20 12:34	1
Y Carrier	83.7		40 - 110	10/06/20 08:15	10/29/20 12:34	1

Lab Sample ID: LCS 160-484724/1-A
Matrix: Water
Analysis Batch: 487300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484724

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	9.810		1.33	1.00	0.770	pCi/L	96	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	74.6		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: 400-193810-A-6-E MS
Matrix: Water
Analysis Batch: 487300

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 484724

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.0104	U	10.3	8.515		1.17	1.00	0.579	pCi/L	83	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	82.0		40 - 110
Y Carrier	78.5		40 - 110

Lab Sample ID: 400-193810-A-6-F MSD
Matrix: Water
Analysis Batch: 487300

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 484724

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.0104	U	10.3	10.68		1.40	1.00	0.731	pCi/L	104	45 - 150	0.84	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	79.6		40 - 110
Y Carrier	76.3		40 - 110

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Brett Sparkes	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-96541-31203.1
Client Contact: Barry Evans	Phone: 850 380 3458	E-Mail: Cheyenne.Whitmire@Eurofinset.com		Page: Page 1 of 1
Company: Gulf Power Company				Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520				
Phone: 850-444-6427(Tel)	PO #: 2000339513			
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117			
Project Name: CCR Smith Plant Delineation Sampling Event Desc: CCR Smith I	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

400-193847 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	6020, 7470A	2540C - Total Dissolved Solids	4500_F_C - Fluoride	SM4500_SO4_E - Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	D	N	N	N		
MWI-12A	9/30/20	1115	G	Water			X	X	X	X	X	X	X		
PZ-14	9/30/20	0955	G	Water											
~~MW-11 HORIZONTAL~~ DUP-03	9/30/20	0855	G	Water											
~~MW-13 HORIZONTAL~~ EB-01	9/30/20	1020	G	Water			X	X	X	X	X	X	X		
				Water											
				Water											

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/30/20 1405	ROM	Kathy R Avery	9.30.20 1405	GTA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.7°C IR9

Ver: 01/16/2019

11/5/2020

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-193847-2
SDG Number: Delineation Sampling

Login Number: 193847
List Number: 1
Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola

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.	N/A	
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	0.7 °C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: Gulf Power Company

Job Number: 400-193847-2
SDG Number: Delineation Sampling

Login Number: 193847
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 10/04/20 07:40 AM

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

Accreditation/Certification Summary

Client: Gulf Power Company
Project/Site: CCR Smith Plant

Job ID: 400-193847-2
SDG: Delineation Sampling

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Iowa	State	373	12-01-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	17 November 2020
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Eurofins TestAmerica Job IDs 400-193844-1 and 400-193847-1**

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of seven aqueous samples, three field duplicates, one field blank and one equipment blank, collected 29-30 September 2020, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, Pensacola, Florida, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020
- Mercury by US EPA Method 7470A
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C
- Chloride by SM 4500 CL-E
- Fluoride by SM 4500 F C
- Sulfate by SM 4500 SO4 E

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and

- US EPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001).

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
400-193844-1	MW-02
400-193844-2	MW-03
400-193844-3	MW-06
400-193844-4	MW-07
400-193844-5	MW-12
400-193844-6	DUP-01

Laboratory ID	Client ID
400-193844-7	DUP-02
400-193844-8	FB-01
400-193847-1	MWI-12A
400-193847-2	PZ-14
400-193847-3	DUP-03
400-193847-4	EB-01

The chain of custody (COC) indicates the samples were received at 0.0 degrees Celsius (°C), 0.1°C and 0.7°C within the criteria 0-6ºC. No preservation issues were noted by the laboratory.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020. Mercury was assessed separately, in section 2.0, below

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

1.1.1 Completeness

The metals data reported in this sample set are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of

valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

1.1.2 Analysis Anomaly

The laboratory noted the boron recovery in a bracketing continuing calibration verification (CCV) in batch 505969 was high and outside the method specified acceptance criteria. Since boron was not detected in the associated sample, no qualifications were applied to the data.

The laboratory noted the percent relative standard deviation (%RSD) for the elements in the initial calibration verification (ICV) in batch 506691 were outside the criteria for standards but within the criteria for field samples. Since the ICV recoveries were within the method specified acceptance criteria and based on professional and technical judgment, no qualifications were applied to the data.

1.2 Holding Time

The holding time for the metals analysis of a preserved water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 505295). Metals were not detected in the method blank above the method detection limits (MDLs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported using sample MW-02. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank, EB-01, was collected with the sample set. Metals were not detected in the equipment blank above the MDLs.

1.7 Field Blank

One field blank, FB-01, was collected with the sample set. Metals were not detected in the field blank above the MDLs.

1.8 Field Duplicate

Three field duplicates were collected with the sample set, DUP-01, DUP-02 and DUP-03. Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicates and the original samples, MW-02, MW-06 and PZ-14, and respectively.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed.

1.10 Electronic Data Deliverables (EDDs) Review

The results and sample IDs in the EDDs were reviewed against the information provided by the associated level II reports at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II reports and the EDDs.

2.0 MERCURY

The samples were analyzed for mercury by US EPA method 7470A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Blank

- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The mercury data reported in this sample set are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

2.2 Holding Time

The holding time for the mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 505327). Mercury was not detected in the method blank above the MDL.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One batch MS/MSD pair was reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank, EB-01, was collected with the sample set. Mercury was not detected in the equipment blank above the MDL.

2.7 Field Blank

One field blank, FB-01, was collected with the sample set. Mercury was not detected in the field blank above the MDL.

2.8 Field Duplicate

Three field duplicates were collected with the sample set, DUP-01, DUP-02 and DUP-03. Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicates and the original samples, MW-02, MW-06 and PZ-14, and respectively.

2.9 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

2.10 Electronic Data Deliverables Review

The results and sample IDs in the EDDs were reviewed against the information provided by the associated level II reports at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II reports and the EDDs.

3.0 WET CHEMISTRY

The samples were analyzed for chloride by SM 4500 Cl-E, fluoride by SM 4500 F C, sulfate by SM 4500 SO4 E and TDS by SM 2540C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ⊗ Laboratory Duplicate
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

3.1 Overall Assessment

The wet chemistry data reported in this sample set are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this dataset is 100%.

3.2 Holding Times

The holding time for the fluoride, chloride and sulfate analysis of a water sample is 28 days from sample collection to analysis. The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for each analysis and batch TDS (batches 505780 and 505957), chloride (batch 505436), sulfate (batch 505508) and fluoride batch 506455) The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples).

Sample set specific MS/MSD pairs were reported for chloride using samples MW-03 and EB-01 and sulfate using sample EB-01. The recovery and RPD results were within the laboratory specified acceptance criteria.

Two batch MS/MSD pairs were reported for chloride and two batch MS/MSD pairs were reported for fluoride. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria.

The laboratory also analyzed method reporting limit (MRL) standards for chloride and sulfate. The MRL recoveries were within the laboratory specified acceptance criteria

3.6 Laboratory Duplicate

One sample set specific laboratory duplicate was reported for TDS using sample, MW-06. The RPD was high and outside of the laboratory specified acceptance criteria. Therefore, the TDS concentration in sample MW-06 was J qualified as estimated.

One batch laboratory duplicate was reported for TDS. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
MW-06	TDS	5600	NA	5600	J	12

mg/L-milligrams per liter
NA-not applicable
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

3.7 Equipment Blank

One equipment blank, EB-01, was collected with the sample set. The wet chemistry parameters were not detected in the equipment blank above the MDLs.

3.8 Field Blank

One field blank, FB-01, was collected with the sample set. The wet chemistry parameters were not detected in the field blank above the MDLs.

3.9 Field Duplicate

Three field duplicates were collected with the sample set, DUP-01, DUP-02 and DUP-03. Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicates and the original samples, MW-02, MW-06 and PZ-14, and respectively.

3.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

3.11 Electronic Data Deliverables Review

The results and sample IDs in the EDDs were reviewed against the information provided by the associated level II reports at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II reports and the EDDs.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Extraction or analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits or RPD outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

Geosyntec consultants

400A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	17 November 2020
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Eurofins TestAmerica Job IDs 400-193844-2 and 400-193847-2**

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of seven aqueous samples, three field duplicates, one field blank and one equipment blank, collected 29-30 September 2020, as part of the Plant Smith sampling event.

The samples were analyzed at Eurofins TestAmerica, St Louis, MO, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
  Combined Radium 226 + 228 by Calculation

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- American Nuclear Society Verification and Validation of Radiological Data for Use in Management and Environmental Remediation, ANSI/ANS-41.5-2012, February 15, 2012.

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
400-193844-1	MW-02
400-193844-2	MW-03
400-193844-3	MW-06
400-193844-4	MW-07
400-193844-5	MW-12
400-193844-6	DUP-01

Laboratory ID	Client ID
400-193844-7	DUP-02
400-193844-8	FB-01
400-193847-1	MWI-12A
400-193847-2	PZ-14
400-193847-3	DUP-03
400-193847-4	EB-01

No preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and combined radium 226+228 by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Tracers and Carriers
✓ Equipment Blank
⊗ Field Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The radium-226 and radium-228 data reported in this sample set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

1.2 Holding Times

The holding time for the radiochemistry analyses of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for radium-226 (batches 484723 and 484729) and radium-228 (batches 484724 and 484733). The radiochemistry parameters were not detected in the method blanks above the minimum detectable concentrations (MDCs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD pairs were reported for radium-226 and radium-228. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCS/LCS duplicate (LCSD) pairs were reported for radium-226 and one LCS and one LCS/LCSD pair were reported for radium-228. The recovery and replicate error ratio (RER) results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Laboratory duplicates were not reported.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

One equipment blank was collected with the sample set, EB-01. The radiochemistry parameters were not detected in the equipment blank above the MDCs.

1.9 Field Blank

One field blank was collected with the sample set, FB-01.

Radium-226 was not detected in FB-01 above the MDC; however, radium-228 (0.770 pCi/L) was detected in FB-01 at a concentration greater than the MDC. Therefore, the radium-226 concentrations in the associated samples greater than the MDCs and less than the field blank concentration were U qualified as not detected at the reported concentration and the radium-226 concentrations in the associated samples greater than the field blank concentration and less than ten times the field blank concentration were J+ qualified as estimated with high biases. In addition, based on professional and technical judgment, the combined radium 226 + 228 concentrations in DUP-01, MW-02 and MW-12 were J+ qualified as estimated with high biases.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
DUP-01	Radium-228	0.617	NA	0.617	U	3
DUP-01	Combined Radium 226 + 228	1.65	NA	1.65	J+	3
MW-02	Radium-228	0.606	NA	0.606	U	3
MW-02	Combined Radium 226 + 228	1.73	NA	1.73	J+	3
MW-07	Radium-228	5.06	NA	5.06	J+	3
MW-12	Radium-228	0.661	NA	0.661	U	3
MW-12	Combined Radium 226 + 228	2.63	NA	2.63	J+	3

pCi/L-picocuries per liter
NA-not applicable

1.10 Field Duplicate

Two field duplicates were collected with the sample set, DUP-02 and DUP-03. Acceptable precision (RER ≤ 3) was demonstrated between the field duplicates and the original samples, MW-03 and MW-06, respectively.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 Electronic Data Deliverables (EDDs) Review

The results and sample IDs in the EDDs were reviewed against the information provided by the associated level II reports at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II reports and the EDDs.

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Extraction or analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits or RPD outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

APPENDIX B

Statistical Analyses – November 2019
Semi-Annual Monitoring

WINTER 2019

GROUNDWATER STATISTICAL ANALYSIS

FOR GULF POWER'S

PLANT SMITH

Prepared by:

Groundwater Stats Consulting LLC

TABLE OF CONTENTS

GROUNDWATER STATS CONSULTING

March 17, 2020

Geosyntec Consultants
Attn: Mr. Benjamin K. Amos, Ph.D., P.E.
1255 Roberts Boulevard, Suite 200
Kennesaw, GA 30144

Re: Plant Smith – November 2019 Statistical Analysis

Dear Mr. Amos,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of the groundwater data for 2019 at Gulf Power Company's Plant Smith. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

Sampling began at Plant Smith for the CCR program in 2016 at each of the groundwater monitoring wells. The monitoring well network, as provided by Geosyntec Consultants, consists of the following:

- **Upgradient wells:** MW-2, MW-3, MW-12
- **Downgradient wells:** MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-13, MW-14.

Data were provided electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to Groundwater Stats Consulting. The background update at this site was submitted with the October 2019 report and is discussed below.

The CCR program consists of the following constituents:

- **Appendix III** (Detection Monitoring) **-** boron, calcium, chloride, fluoride, pH, sulfate, and TDS;
- **Appendix IV** (Assessment Monitoring) **–** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium.

Note that no samples were collected during the November 2019 sampling event for the following Appendix IV constituents: antimony, cadmium, cobalt, mercury, selenium, and thallium. While all Appendix IV constituents are plotted on the time series graphs and box plots, confidence intervals are provided (at all wells) only for those parameters for which at least one downgradient well had detections.

Time series and box plots are provided for the above Appendix III and IV constituents at all wells. The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

Proposed background data at all wells were initially evaluated, and reports submitted, during the October 2017 screening for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended.

Summary of Statistical Methods:

Based on the earlier evaluation described above, the following methods were selected:

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

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% for each semi-annual sample event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan.

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

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

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In the intrawell case, data for all wells and constituents may re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, earlier data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the deselected data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. A summary of the findings of the original background screening conducted in October 2017 as well as the background update conducted in October 2019 is provided below.

Historical Summary Background Screening – October 2017

Outlier and Trend Testing

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified,

flagged in the computer database with "o" and deselected prior to construction of statistical limits. The results of those findings were submitted with the October 2017 report.

No suspected outliers were observed in any of the data sets, with the exception of TDS in upgradient well MW-12. Tukey's box plot method was used to screen this and resulted in a value of 4200 mg/L being flagged. Any values identified as outliers are plotted in a lighter font on the time series graph. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

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

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

The results of the trend analyses were provided with the 2017 screening report and showed one statistically significant decreasing trend for total dissolved solids in well MW-11. This trend was relatively low in magnitude when compared to average concentrations; therefore, no adjustments were necessary.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare

compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified variation among upgradient wells at Plant Smith for the following Appendix III parameters: boron, calcium, chloride, pH, and TDS, suggesting consideration of intrawell methods for these parameters. These constituents were further evaluated as described below for the appropriateness of intrawell testing to accommodate the groundwater quality. No statistically significant variation was noted for fluoride or sulfate, making these parameters eligible for interwell methods. A summary table of the ANOVA results was included with the screening report.

Appendix III – Intrawell Method Eligibility Screening

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

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

Either parametric or nonparametric tolerance limits are calculated based on the data characteristics that are described below for prediction limits. Parametric tolerance limits (for normal or transformed-normally distributed data) were constructed with a target of 99% confidence and 95% coverage using pooled upgradient well data for each of the Appendix III parameters recommended for intrawell analyses. For non-normal data, nonparametric tolerance limits are used. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples.

As more data are collected, the background population is better represented, and the confidence and coverage levels increase.

Confidence intervals were constructed on downgradient wells for each of the Appendix III parameters exhibiting spatial variation, using the tolerance limits discussed above, to determine intrawell eligibility. Either parametric or nonparametric confidence intervals were constructed as appropriate. When the entire confidence interval is above the background limit for a given parameter, interwell methods are initially recommended as the statistical method. Note that this screening identifies whether confidence intervals are above a background limit but does not identify the reason for this occurrence. Therefore, only the wells/parameters with confidence intervals which did not exceed background limits are eligible for intrawell prediction limits.

Confidence intervals for the above Appendix III parameters were found to be within their respective background limit for pH in all downgradient wells. The confidence intervals for boron, calcium, chloride, and TDS were above the background standard which precludes using intrawell methods without further evaluation. The results of the upper tolerance limits calculations and confidence interval comparisons were presented in the background screening report.

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

Summary of Background Update – Conducted in October 2019

Historical data were evaluated for updating with newer data through March 2019 through the use of time series graphs to identify potential outliers when necessary, as well as with the Mann Whitney test for equality of medians. Intrawell prediction limits are used to evaluate pH due to natural spatial variation for this parameter.

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend, as well as for outliers over the entire record. Interwell prediction limits are used to evaluate boron, calcium, chloride, fluoride, sulfate, and TDS.

Prior to constructing prediction limits, proposed background data through May 2019 were reviewed to identify any newly suspected outliers at all wells for pH for intrawell testing and all Appendix IV parameters, and at upgradient wells for boron, calcium, chloride, fluoride, sulfate, and TDS for interwell testing. Visual screening is used to identify potential outliers using time series graphs. When necessary, Tukey's outlier test is used to formally test suspected outliers. No new outliers were identified for pH in any of the wells or for all other Appendix III parameters in upgradient wells. However, the value of 45,500 for TDS in well MW-14 was flagged, even though it is in a downgradient well, since it appears to be off by an order of magnitude--along with the TDS outlier in well MW-12 from the previous screening. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of flagged values follows this letter.

For pH, which required intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through October 2017 to newer compliance samples through March 2019 at each of the wells to evaluate whether the groups are statistically similar at the 99% confidence level. If no statistically significant difference is found, background data may be updated with compliance data. No statistically significant differences were found between the two groups for pH; therefore, all background data sets were updated.

When the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data, but will be reconsidered in the future.

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant trends are identified in upgradient wells, the earlier portion of data is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. No statistically significant increasing trends were noted in upgradient wells with the exception of fluoride in MW-12; however, the magnitude of the trend was moderate relative to

average concentrations, and truncation of the background would not affect the nonparametric prediction limit. Therefore, no adjustment of the record was required.

Evaluation of Appendix III Parameters – November 2019 Sample Event

Prediction Limits

All available data through March 2019 for pH at each well were used to construct intrawell prediction limits based on a 1-of-2 resample plan, and the November 2019 sample from the same well is compared to its respective background. Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all available data from upgradient wells through November 2019 for boron, calcium, chloride, fluoride, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of an additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary.

For intrawell prediction limits, an exceedance was noted only for pH in downgradient well MW-14. For interwell prediction limits, exceedances were noted for calcium, chloride, sulfate, and TDS in all downgradient wells. Summaries of both intrawell and interwell prediction limits and exceedances, along with complete results may be found following this letter in the Prediction Limits section.

The Sen's Slope/Mann Kendall trend test was used to determine whether a statistically significant trend exists over the entire period of record for both the intrawell and interwell exceedances noted above. Upgradient wells are included in the trend testing to determine whether similar patterns exist upgradient of the facility. No statistically significant trends were noted for pH. Several statistically significant trends were noted for interwell parameters. Particularly, decreasing trends were noted for calcium in downgradient wells MW-10, MW-13, MW-6, MW-8, and MW-9; and chloride in downgradient well MW-10, MW-14, MW-6, and MW-9. Increasing trends were noted for chloride in upgradient well MW-3 and sulfate in downgradient well MW-7. Summaries of the trend tests follow this report.

Evaluation of Appendix IV Parameters

Either parametric or nonparametric tolerance limits, depending on the distribution of the background data, were used to calculate background limits from pooled upgradient well data for Appendix IV parameters, with a target of 95% confidence and 95% coverage for parametric limits, to determine the Alternate Contaminant Level (ACL). The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. These limits were compared to the Maximum Contaminant Levels (MCLs) and CCR rule-specified levels to determine the highest limit for use as the Groundwater Protection Standard (GWPS) in the Confidence Interval comparisons.

Confidence intervals were then constructed on downgradient wells for each of the Appendix IV constituents that had at least one detection in a downgradient well and were compared to the highest limit of either the MCL, rule-specified level, or ACL discussed above. A list of Appendix IV well/constituent pairs with 100% nondetects follows this letter. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. Exceedances were noted for arsenic in downgradient well MW-11, combined radium in all downgradient wells, and lithium in downgradient well MW-13.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Smith. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew T. Collins
Groundwater Analyst

Kristina L. Rayner
Groundwater Statistician

Outlier Summary

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/16/2020, 1:16 PM

	MW-12 Total Dissolved Solids (mg/L)	MW-14 Total Dissolved Solids (mg/L)
6/27/2016	4200 (o)	
3/11/2019		45500 (oD)

100% Nondetects

Date: 3/13/2020 4:05 PM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Antimony (mg/L)

MW-10, MW-12, MW-13, MW-14, MW-2, MW-3, MW-6, MW-7, MW-8, MW-9

Arsenic (mg/L)

MW-12, MW-2

Beryllium (mg/L)

MW-12, MW-13, MW-14, MW-2, MW-3

Cadmium (mg/L)

MW-10, MW-11, MW-12, MW-13, MW-14, MW-2, MW-3, MW-6, MW-7, MW-8, MW-9

Chromium (mg/L)

MW-6, MW-8, MW-9

Cobalt (mg/L)

MW-10, MW-12, MW-13, MW-14, MW-2, MW-3, MW-6, MW-7, MW-8, MW-9

Fluoride (mg/L)

MW-8

Lead (mg/L)

MW-12, MW-13, MW-14, MW-2, MW-6, MW-7, MW-8, MW-9

Mercury (mg/L)

MW-11, MW-12, MW-13, MW-14, MW-2, MW-6, MW-7, MW-8, MW-9

Molybdenum (mg/L)

MW-12, MW-3, MW-8

Selenium (mg/L)

MW-12

Thallium (mg/L)

MW-10, MW-11, MW-12, MW-13, MW-14, MW-2, MW-3, MW-6, MW-7, MW-8, MW-9

Interwell Prediction Limit Summary Table - Appendix III - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 8:29 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-10	49	n/a	11/18/2019	460	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-11	49	n/a	11/18/2019	220	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-13	49	n/a	11/19/2019	660	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-14	49	n/a	11/19/2019	230	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-6	49	n/a	11/18/2019	240	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-7	49	n/a	11/19/2019	360	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-8	49	n/a	11/19/2019	530	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-9	49	n/a	11/19/2019	270	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-10	230	n/a	11/18/2019	2400	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-11	230	n/a	11/18/2019	3200	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-13	230	n/a	11/19/2019	4600	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-14	230	n/a	11/19/2019	1800	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-6	230	n/a	11/18/2019	3000	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-7	230	n/a	11/19/2019	3400	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-8	230	n/a	11/19/2019	3300	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-9	230	n/a	11/19/2019	2200	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-10	7.473	n/a	11/18/2019	660	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-11	7.473	n/a	11/18/2019	340	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-13	7.473	n/a	11/19/2019	670	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-14	7.473	n/a	11/19/2019	65	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-6	7.473	n/a	11/18/2019	350	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-7	7.473	n/a	11/19/2019	650	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-8	7.473	n/a	11/19/2019	720	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-9	7.473	n/a	11/19/2019	1100	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-10	560	n/a	11/18/2019	6300	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	560	n/a	11/18/2019	6900	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-13	560	n/a	11/19/2019	8500	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-14	560	n/a	11/19/2019	4200	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-6	560	n/a	11/18/2019	6000	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-7	560	n/a	11/19/2019	8200	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-8	560	n/a	11/19/2019	9800	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-9	560	n/a	11/19/2019	5300	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2

Interwell Prediction Limit Summary Table - Appendix III - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 8:29 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-10	0.33	n/a	11/18/2019	11	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-11	0.33	n/a	11/18/2019	4.7	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-13	0.33	n/a	11/19/2019	16	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-14	0.33	n/a	11/19/2019	14	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-6	0.33	n/a	11/18/2019	9	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-7	0.33	n/a	11/19/2019	4.3	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-8	0.33	n/a	11/19/2019	14	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-9	0.33	n/a	11/19/2019	11	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**MW-10**	**49**	**n/a**	**11/18/2019**	**460**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-11**	**49**	**n/a**	**11/18/2019**	**220**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-13**	**49**	**n/a**	**11/19/2019**	**660**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-14**	**49**	**n/a**	**11/19/2019**	**230**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**11/18/2019**	**240**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**11/19/2019**	**360**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-8**	**49**	**n/a**	**11/19/2019**	**530**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-9**	**49**	**n/a**	**11/19/2019**	**270**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-10**	**230**	**n/a**	**11/18/2019**	**2400**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-11**	**230**	**n/a**	**11/18/2019**	**3200**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-13**	**230**	**n/a**	**11/19/2019**	**4600**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-14**	**230**	**n/a**	**11/19/2019**	**1800**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**11/18/2019**	**3000**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**11/19/2019**	**3400**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-8**	**230**	**n/a**	**11/19/2019**	**3300**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-9**	**230**	**n/a**	**11/19/2019**	**2200**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	MW-10	0.28	n/a	11/18/2019	0.04	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-11	0.28	n/a	11/18/2019	0.1ND	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-13	0.28	n/a	11/19/2019	0.04	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.28	n/a	11/19/2019	0.1	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-6	0.28	n/a	11/18/2019	0.05	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-7	0.28	n/a	11/19/2019	0.1ND	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-8	0.28	n/a	11/19/2019	0.1ND	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-9	0.28	n/a	11/19/2019	0.04	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**MW-10**	**7.473**	**n/a**	**11/18/2019**	**660**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-11**	**7.473**	**n/a**	**11/18/2019**	**340**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-13**	**7.473**	**n/a**	**11/19/2019**	**670**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-14**	**7.473**	**n/a**	**11/19/2019**	**65**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-6**	**7.473**	**n/a**	**11/18/2019**	**350**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**7.473**	**n/a**	**11/19/2019**	**650**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-8**	**7.473**	**n/a**	**11/19/2019**	**720**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-9**	**7.473**	**n/a**	**11/19/2019**	**1100**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-10**	**560**	**n/a**	**11/18/2019**	**6300**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-11**	**560**	**n/a**	**11/18/2019**	**6900**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-13**	**560**	**n/a**	**11/19/2019**	**8500**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-14**	**560**	**n/a**	**11/19/2019**	**4200**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**560**	**n/a**	**11/18/2019**	**6000**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**560**	**n/a**	**11/19/2019**	**8200**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-8**	**560**	**n/a**	**11/19/2019**	**9800**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-9**	**560**	**n/a**	**11/19/2019**	**5300**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**

Intrawell Prediction Limit Summary Table - Appendix III - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 8:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	**MW-14**	**6.92**	**6.62**	**11/19/2019**	**7.03**	**Yes**	**12**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.02155**	**NP Intra (normality) 1 of 2**

Intrawell Prediction Limit Summary Table - Appendix III - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 8:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-10	5.446	5.026	11/18/2019	5.28	No	12	5.236	0.08372	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-11	6.916	6.023	11/18/2019	6.41	No	12	6.469	0.1777	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-12	6.26	5.841	11/18/2019	6.14	No	12	6.051	0.08339	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-13	7.467	6.618	11/19/2019	6.92	No	12	7.043	0.169	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	**MW-14**	**6.92**	**6.62**	**11/19/2019**	**7.03**	**Yes**	**12**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.02155**	**NP Intra (normality) 1 of 2**
pH (SU)	MW-2	7.639	5.067	11/18/2019	6.59	No	12	6.353	0.512	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-3	5.26	4.657	11/18/2019	4.82	No	12	4.958	0.1201	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-6	5.958	4.374	11/18/2019	5.49	No	12	5.166	0.3153	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-7	6.472	5.939	11/19/2019	6.26	No	12	6.206	0.1061	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-8	5.477	3.221	11/19/2019	4.55	No	12	20.19	3.906	0	None	x^2	0.0004701	Param Intra 1 of 2
pH (SU)	MW-9	7.317	4.082	11/19/2019	6.58	No	12	5.699	0.6438	0	None	No	0.0004701	Param Intra 1 of 2

Intrawell Trend Tests Summary Table - PL Exceedances - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 7:44 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH (SU)	MW-12 (bg)	0.03611	27	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-14	0.09781	48	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-2 (bg)	-0.02624	-6	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-3 (bg)	-0.05683	-39	-48	No	14	0	n/a	n/a	0.01	NP

Interwell Trend Tests Summary Table - PL Exceedances - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 11:27 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	**MW-10**	**-51.73**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-13**	**-79.68**	**-78**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-47.17**	**-55**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-8**	**-38.42**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-9**	**-63.42**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-10**	**-188.5**	**-70**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-14**	**-212.7**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.79**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-262**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-9**	**-244**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-7**	**105.5**	**73**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Interwell Trend Tests Summary Table - PL Exceedances - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 11:27 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	**MW-10**	**-51.73**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-11	0	-1	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-12 (bg)	1.067	23	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-13**	**-79.68**	**-78**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-14	0	-11	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-0.4759	-3	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	0	29	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-6**	**-47.17**	**-55**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	44.56	41	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-8**	**-38.42**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-9**	**-63.42**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-10**	**-188.5**	**-70**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-11	0	-10	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	3.643	19	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-13	0	7	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-14**	**-212.7**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-2 (bg)	-0.9986	-32	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.79**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-262**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	288.5	27	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-8	-103	-27	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-9**	**-244**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-10	-28.52	-15	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-11	-14.03	-25	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-25	-53	No	15	60	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-13	-118.3	-31	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-14	-7.101	-7	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.5276	-47	-53	No	15	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	53	No	15	86.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-6	-36.87	-37	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-7**	**105.5**	**73**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-8	-4.171	-4	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-9	-60.1	-23	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-10	-212.7	-39	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-11	-186.7	-11	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	18.11	21	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-13	-219	-25	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-14	-208.8	-35	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-8.515	-13	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	-0.8343	-6	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-6	-428.2	-37	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-7	376.3	18	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-8	0	-3	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-9	-427.3	-40	-53	No	15	0	n/a	n/a	0.01	NP

PLANT SMITH GWPS				
Constituent Name	**MCL**	**Rule-Specified**	**Background**	**GWPS**
Antimony, Total (mg/L)	0.006		0.0025	0.006
Arsenic, Total (mg/L)	0.01		0.0013	0.01
Barium, Total (mg/L)	2		0.028	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.012	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0025	0.006
Combined Radium, Total (pCi/L)	5		3.777	5
Fluoride, Total (mg/L)	4		0.28	4
Lead, Total (mg/L)	0.015		0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.025	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.015	0.1
Selenium, Total (mg/L)	0.05		0.0013	0.05
Thallium, Total (mg/L)	0.002		0.0005	0.002

MCL = Maximum Contaminant Level

GWPS = Groundwater Protection Standard

Confidence Intervals - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/16/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**MW-11**	**0.02722**	**0.01678**	**0.01**	**Yes**	**14**	**0.022**	**0.007369**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-10**	**25.01**	**19.11**	**5**	**Yes**	**14**	**22.06**	**4.168**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-11**	**36.02**	**26.02**	**5**	**Yes**	**14**	**31.02**	**7.061**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-13**	**16.3**	**11.37**	**5**	**Yes**	**14**	**13.83**	**3.476**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-14**	**8.925**	**5.424**	**5**	**Yes**	**14**	**7.174**	**2.472**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**32.59**	**24.12**	**5**	**Yes**	**14**	**28.36**	**5.976**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**46.3**	**21.6**	**5**	**Yes**	**14**	**31.12**	**11.5**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Combined Radium 226 + 228 (pCi/L)	**MW-8**	**41.42**	**33.61**	**5**	**Yes**	**14**	**37.51**	**5.51**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-9**	**26.64**	**14.74**	**5**	**Yes**	**14**	**20.69**	**8.399**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**MW-13**	**0.2239**	**0.1763**	**0.04**	**Yes**	**14**	**0.2014**	**0.03634**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/16/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MW-11	0.0025	0.0015	0.006	No	10	0.00212	0.0005051	60	None	No	0.011	NP (normality)
Arsenic (mg/L)	MW-10	0.003424	0.00204	0.01	No	14	0.002732	0.0009774	7.143	None	No	0.01	Param.
Arsenic (mg/L)	**MW-11**	**0.02722**	**0.01678**	**0.01**	**Yes**	**14**	**0.022**	**0.007369**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	MW-13	0.002027	0.000665	0.01	No	14	0.001639	0.00178	14.29	None	ln(x)	0.01	Param.
Arsenic (mg/L)	MW-14	0.005435	0.002893	0.01	No	14	0.004164	0.001794	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-6	0.001402	0.0006989	0.01	No	14	0.001055	0.0006764	28.57	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	MW-7	0.002238	0.001074	0.01	No	14	0.001646	0.001149	21.43	Kaplan-Meier	x^(1/3)	0.01	Param.
Arsenic (mg/L)	MW-8	0.002	0.00065	0.01	No	14	0.001601	0.001279	21.43	None	No	0.01	NP (normality)
Arsenic (mg/L)	MW-9	0.003749	0.002129	0.01	No	14	0.002939	0.001144	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-10	0.1171	0.1007	2	No	14	0.1089	0.01158	0	None	No	0.01	Param.
Barium (mg/L)	MW-11	0.1439	0.09101	2	No	14	0.1175	0.03734	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-13	0.1339	0.09091	2	No	14	0.1124	0.03037	0	None	No	0.01	Param.
Barium (mg/L)	MW-14	0.05816	0.04906	2	No	14	0.05361	0.006422	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.07139	0.05768	2	No	14	0.06454	0.009676	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.14	0.055	2	No	14	0.08389	0.04007	7.143	None	No	0.01	NP (normality)
Barium (mg/L)	MW-8	0.07097	0.05639	2	No	14	0.06368	0.01029	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-9	0.1012	0.07427	2	No	14	0.08775	0.01904	7.143	None	No	0.01	Param.
Beryllium (mg/L)	MW-10	0.00061	0.00033	0.004	No	13	0.0007523	0.0007841	15.38	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-11	0.0025	0.00078	0.004	No	13	0.00177	0.0008506	46.15	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-6	0.001824	0.0009865	0.004	No	13	0.001405	0.0005633	7.692	None	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	13	0.002325	0.0006324	92.31	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-8	0.0016	0.0011	0.004	No	13	0.0014	0.0003697	7.692	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-9	0.0025	0.00043	0.004	No	13	0.001793	0.000945	61.54	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-10	0.003	0.0015	0.1	No	14	0.002464	0.0003079	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-11	0.0048	0.0025	0.1	No	14	0.008286	0.01727	14.29	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-13	0.0025	0.0024	0.1	No	14	0.002493	0.00002673	92.86	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-14	0.0025	0.0017	0.1	No	14	0.00235	0.0003937	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.0025	0.0012	0.1	No	14	0.002071	0.0007248	42.86	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-11	0.0025	0.00046	0.006	No	12	0.00233	0.0005889	91.67	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-10**	**25.01**	**19.11**	**5**	**Yes**	**14**	**22.06**	**4.168**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-11**	**36.02**	**26.02**	**5**	**Yes**	**14**	**31.02**	**7.061**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-13**	**16.3**	**11.37**	**5**	**Yes**	**14**	**13.83**	**3.476**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-14**	**8.925**	**5.424**	**5**	**Yes**	**14**	**7.174**	**2.472**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**32.59**	**24.12**	**5**	**Yes**	**14**	**28.36**	**5.976**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**46.3**	**21.6**	**5**	**Yes**	**14**	**31.12**	**11.5**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Combined Radium 226 + 228 (pCi/L)	**MW-8**	**41.42**	**33.61**	**5**	**Yes**	**14**	**37.51**	**5.51**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-9**	**26.64**	**14.74**	**5**	**Yes**	**14**	**20.69**	**8.399**	**0**	**None**	**No**	**0.01**	**Param.**
Fluoride (mg/L)	MW-10	0.1	0.04	4	No	15	0.074	0.02923	53.33	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-11	0.1	0.05	4	No	15	0.08933	0.02219	80	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-13	0.1	0.04	4	No	15	0.06733	0.05244	6.667	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-14	0.08408	0.05032	4	No	15	0.0672	0.02491	6.667	None	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	15	0.05967	0.02349	20	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.04	4	No	15	0.08447	0.02671	73.33	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-9	0.1	0.04	4	No	15	0.0598	0.02684	26.67	None	No	0.01	NP (normality)
Lead (mg/L)	MW-10	0.0093	0.0013	0.015	No	12	0.001967	0.002309	91.67	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-11	0.0013	0.0013	0.015	No	12	0.0013	1.0e-12	91.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-10	0.05	0.0049	0.04	No	14	0.01519	0.01888	21.43	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-11	0.05	0.0044	0.04	No	14	0.03136	0.02247	57.14	None	No	0.01	NP (normality)
Lithium (mg/L)	**MW-13**	**0.2239**	**0.1763**	**0.04**	**Yes**	**14**	**0.2014**	**0.03634**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Lithium (mg/L)	MW-14	0.05	0.0026	0.04	No	14	0.03971	0.02045	78.57	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.0264	0.01228	0.04	No	14	0.01991	0.01088	7.143	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	MW-7	0.05	0.002	0.04	No	14	0.03306	0.0236	64.29	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-8	0.05	0.0075	0.04	No	14	0.01761	0.01768	21.43	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-9	0.01366	0.003046	0.04	No	14	0.01191	0.01652	14.29	None	ln(x)	0.01	Param.
Mercury (mg/L)	MW-10	0.0002	0.0002	0.002	No	10	0.0001889	0.0000351	90	None	No	0.011	NP (NDs)

Confidence Intervals - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/16/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	MW-10	0.015	0.0018	0.1	No	14	0.007798	0.006521	42.86	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-11	0.01596	0.009636	0.1	No	14	0.0128	0.004466	7.143	None	No	0.01	Param.
Molybdenum (mg/L)	MW-13	0.02872	0.01311	0.1	No	14	0.02091	0.01102	7.143	None	No	0.01	Param.
Molybdenum (mg/L)	MW-14	0.01824	0.01381	0.1	No	14	0.01602	0.003129	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.015	0.0011	0.1	No	14	0.01401	0.003715	92.86	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.015	0.005	0.1	No	14	0.009157	0.004689	35.71	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-9	0.015	0.0023	0.1	No	14	0.01066	0.006117	64.29	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-10	0.0013	0.00041	0.05	No	12	0.001138	0.0003791	83.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-11	0.0013	0.00051	0.05	No	12	0.0009925	0.0003829	58.33	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-13	0.0013	0.00044	0.05	No	12	0.001113	0.000364	75	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-14	0.0013	0.00041	0.05	No	12	0.001138	0.0003812	83.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-6	0.0013	0.00027	0.05	No	12	0.001041	0.0004505	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-7	0.0013	0.00028	0.05	No	12	0.00099	0.0004661	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-8	0.0013	0.00032	0.05	No	12	0.001053	0.0004011	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-9	0.0013	0.00035	0.05	No	12	0.00114	0.0003737	83.33	None	No	0.01	NP (NDs)

Prediction Limits - Interwell

Interwell Prediction Limit Summary Table - Appendix III - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 8:29 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	MW-10	49	n/a	11/18/2019	460	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-11	49	n/a	11/18/2019	220	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-13	49	n/a	11/19/2019	660	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-14	49	n/a	11/19/2019	230	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-6	49	n/a	11/18/2019	240	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-7	49	n/a	11/19/2019	360	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-8	49	n/a	11/19/2019	530	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-9	49	n/a	11/19/2019	270	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-10	230	n/a	11/18/2019	2400	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-11	230	n/a	11/18/2019	3200	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-13	230	n/a	11/19/2019	4600	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-14	230	n/a	11/19/2019	1800	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-6	230	n/a	11/18/2019	3000	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-7	230	n/a	11/19/2019	3400	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-8	230	n/a	11/19/2019	3300	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-9	230	n/a	11/19/2019	2200	Yes	45	n/a	n/a	0	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-10	7.473	n/a	11/18/2019	660	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-11	7.473	n/a	11/18/2019	340	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-13	7.473	n/a	11/19/2019	670	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-14	7.473	n/a	11/19/2019	65	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-6	7.473	n/a	11/18/2019	350	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-7	7.473	n/a	11/19/2019	650	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-8	7.473	n/a	11/19/2019	720	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-9	7.473	n/a	11/19/2019	1100	Yes	45	n/a	n/a	60	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-10	560	n/a	11/18/2019	6300	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	560	n/a	11/18/2019	6900	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-13	560	n/a	11/19/2019	8500	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-14	560	n/a	11/19/2019	4200	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-6	560	n/a	11/18/2019	6000	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-7	560	n/a	11/19/2019	8200	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-8	560	n/a	11/19/2019	9800	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-9	560	n/a	11/19/2019	5300	Yes	44	n/a	n/a	0	n/a	n/a	0.0009645	NP Inter (normality) 1 of 2

Interwell Prediction Limit Summary Table - Appendix III - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 8:29 AM

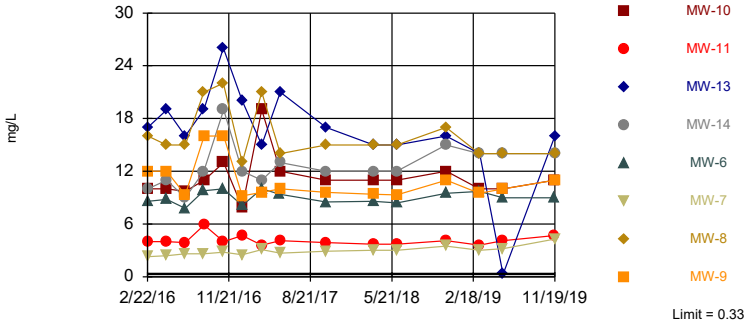
Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-10	0.33	n/a	11/18/2019	11	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-11	0.33	n/a	11/18/2019	4.7	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-13	0.33	n/a	11/19/2019	16	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-14	0.33	n/a	11/19/2019	14	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-6	0.33	n/a	11/18/2019	9	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-7	0.33	n/a	11/19/2019	4.3	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-8	0.33	n/a	11/19/2019	14	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-9	0.33	n/a	11/19/2019	11	No	45	n/a	n/a	51.11	n/a	n/a	0.0009262	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**MW-10**	**49**	**n/a**	**11/18/2019**	**460**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-11**	**49**	**n/a**	**11/18/2019**	**220**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-13**	**49**	**n/a**	**11/19/2019**	**660**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-14**	**49**	**n/a**	**11/19/2019**	**230**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**11/18/2019**	**240**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**11/19/2019**	**360**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-8**	**49**	**n/a**	**11/19/2019**	**530**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-9**	**49**	**n/a**	**11/19/2019**	**270**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-10**	**230**	**n/a**	**11/18/2019**	**2400**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-11**	**230**	**n/a**	**11/18/2019**	**3200**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-13**	**230**	**n/a**	**11/19/2019**	**4600**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-14**	**230**	**n/a**	**11/19/2019**	**1800**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**11/18/2019**	**3000**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**11/19/2019**	**3400**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-8**	**230**	**n/a**	**11/19/2019**	**3300**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-9**	**230**	**n/a**	**11/19/2019**	**2200**	**Yes**	**45**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009262**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	MW-10	0.28	n/a	11/18/2019	0.04	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-11	0.28	n/a	11/18/2019	0.1ND	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-13	0.28	n/a	11/19/2019	0.04	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.28	n/a	11/19/2019	0.1	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-6	0.28	n/a	11/18/2019	0.05	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-7	0.28	n/a	11/19/2019	0.1ND	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-8	0.28	n/a	11/19/2019	0.1ND	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-9	0.28	n/a	11/19/2019	0.04	No	45	n/a	n/a	20	n/a	n/a	0.0009262	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**MW-10**	**7.473**	**n/a**	**11/18/2019**	**660**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-11**	**7.473**	**n/a**	**11/18/2019**	**340**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-13**	**7.473**	**n/a**	**11/19/2019**	**670**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-14**	**7.473**	**n/a**	**11/19/2019**	**65**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-6**	**7.473**	**n/a**	**11/18/2019**	**350**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**7.473**	**n/a**	**11/19/2019**	**650**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-8**	**7.473**	**n/a**	**11/19/2019**	**720**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-9**	**7.473**	**n/a**	**11/19/2019**	**1100**	**Yes**	**45**	**n/a**	**n/a**	**60**	**n/a**	**n/a**	**0.0009262**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-10**	**560**	**n/a**	**11/18/2019**	**6300**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-11**	**560**	**n/a**	**11/18/2019**	**6900**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-13**	**560**	**n/a**	**11/19/2019**	**8500**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-14**	**560**	**n/a**	**11/19/2019**	**4200**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**560**	**n/a**	**11/18/2019**	**6000**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**560**	**n/a**	**11/19/2019**	**8200**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-8**	**560**	**n/a**	**11/19/2019**	**9800**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-9**	**560**	**n/a**	**11/19/2019**	**5300**	**Yes**	**44**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009645**	**NP Inter (normality) 1 of 2**

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 51.11% NDs. Annual per-constituent alpha = 0.01472. Individual comparison alpha = 0.0009262 (1 of 2). Comparing 8 points to limit.

Constituent: Boron Analysis Run 3/6/2020 8:28 AM View: Interwell

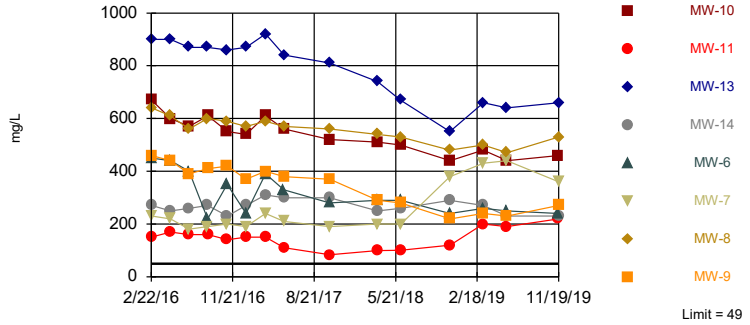
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Exceeds Limit: MW-10, MW-11, MW-13, MW-14, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. Annual per-constituent alpha = 0.01472. Individual comparison alpha = 0.0009262 (1 of 2). Comparing 8 points to limit.

Constituent: Calcium Analysis Run 3/6/2020 8:28 AM View: Interwell

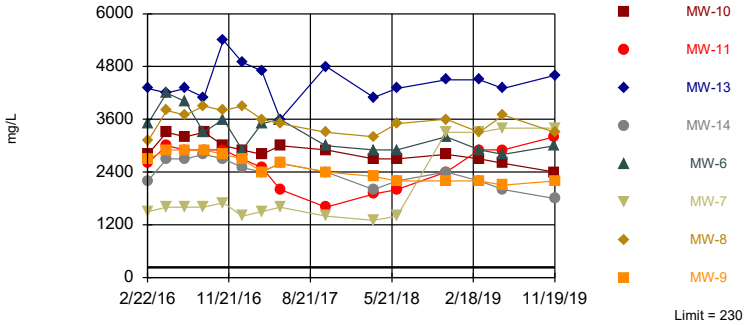
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Exceeds Limit: MW-10, MW-11, MW-13, MW-14, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. Annual per-constituent alpha = 0.01472. Individual comparison alpha = 0.0009262 (1 of 2). Comparing 8 points to limit.

Constituent: Chloride Analysis Run 3/6/2020 8:28 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

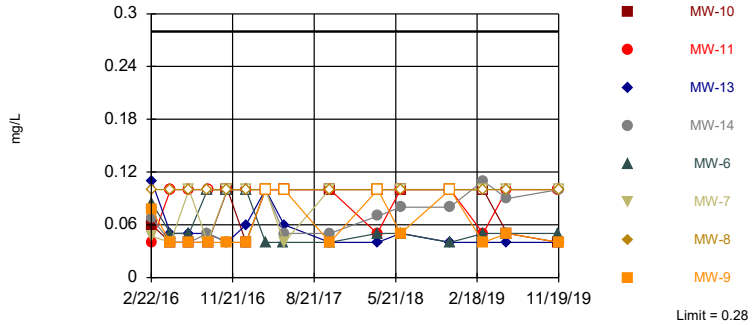
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. 20% NDs. Annual per-constituent alpha = 0.01472. Individual comparison alpha = 0.0009262 (1 of 2). Comparing 8 points to limit.

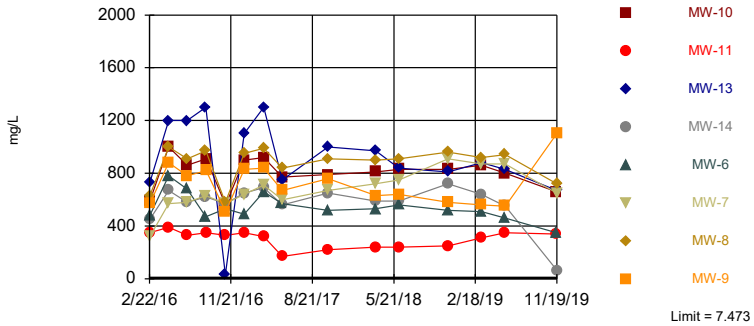
Constituent: Fluoride Analysis Run 3/6/2020 8:28 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Exceeds Limit: MW-10, MW-11, MW-13, MW-14, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 60% NDs. Annual per-constituent alpha = 0.01472. Individual comparison alpha = 0.0009262 (1 of 2). Comparing 8 points to limit.

Constituent: Sulfate Analysis Run 3/6/2020 8:28 AM View: Interwell

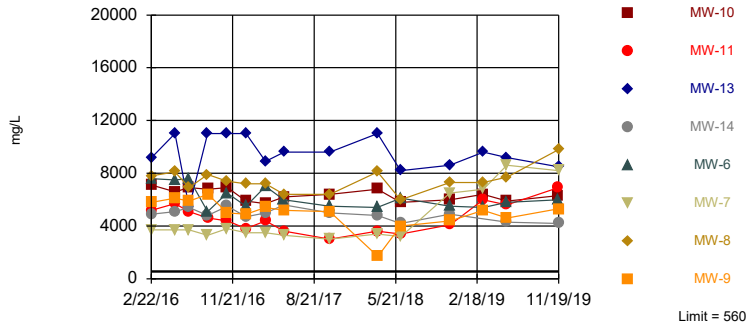
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Exceeds Limit: MW-10, MW-11, MW-13, MW-14, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. Annual per-constituent alpha = 0.01532. Individual comparison alpha = 0.0009645 (1 of 2). Comparing 8 points to limit.

Constituent: Total Dissolved Solids Analysis Run 3/6/2020 8:28 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limits - Intrawell

Intrawell Prediction Limit Summary Table - Appendix III - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 8:21 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	**MW-14**	**6.92**	**6.62**	**11/19/2019**	**7.03**	**Yes**	**12**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.02155**	**NP Intra (normality) 1 of 2**

Intrawell Prediction Limit Summary Table - Appendix III - All Results

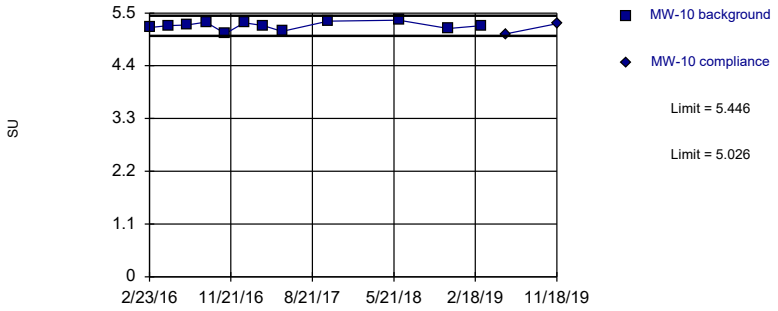
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 8:21 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-10	5.446	5.026	11/18/2019	5.28	No	12	5.236	0.08372	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-11	6.916	6.023	11/18/2019	6.41	No	12	6.469	0.1777	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-12	6.26	5.841	11/18/2019	6.14	No	12	6.051	0.08339	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-13	7.467	6.618	11/19/2019	6.92	No	12	7.043	0.169	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	**MW-14**	**6.92**	**6.62**	**11/19/2019**	**7.03**	**Yes**	**12**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.02155**	**NP Intra (normality) 1 of 2**
pH (SU)	MW-2	7.639	5.067	11/18/2019	6.59	No	12	6.353	0.512	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-3	5.26	4.657	11/18/2019	4.82	No	12	4.958	0.1201	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-6	5.958	4.374	11/18/2019	5.49	No	12	5.166	0.3153	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-7	6.472	5.939	11/19/2019	6.26	No	12	6.206	0.1061	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-8	5.477	3.221	11/19/2019	4.55	No	12	20.19	3.906	0	None	x^2	0.0004701	Param Intra 1 of 2
pH (SU)	MW-9	7.317	4.082	11/19/2019	6.58	No	12	5.699	0.6438	0	None	No	0.0004701	Param Intra 1 of 2

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.236, Std. Dev.=0.08372, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9486, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell

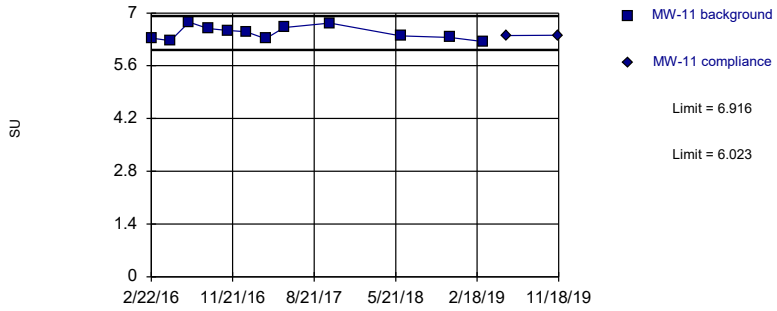
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.469, Std. Dev.=0.1777, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9283, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell

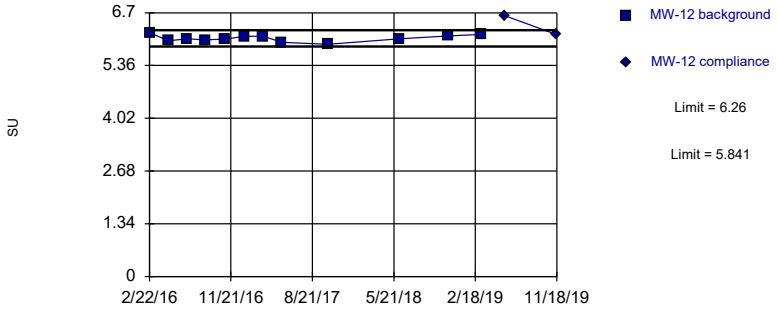
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.051, Std. Dev.=0.08339, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9827, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell

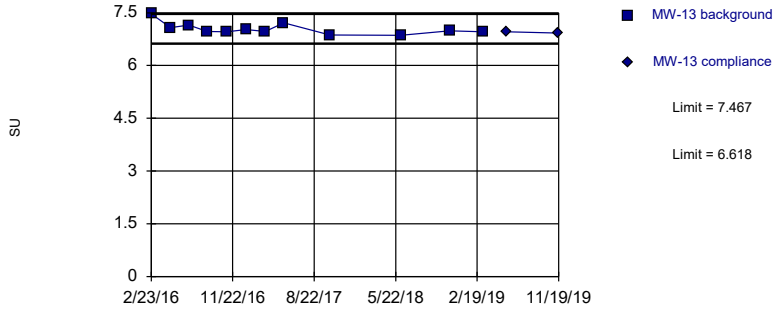
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.043, Std. Dev.=0.169, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8469, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-10
2/23/2016	5.2 (B01)	
4/26/2016	5.24 (B02)	
6/28/2016	5.25 (B03)	
8/30/2016	5.31 (B04)	
11/3/2016	5.07 (B05)	
1/5/2017	5.3 (B06)	
3/11/2017	5.24 (B07)	
5/12/2017	5.12 (B08)	
10/13/2017	5.33	
6/7/2018	5.35	
11/20/2018	5.18	
3/11/2019	5.24	
5/30/2019		5.06
11/18/2019		5.28

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-11	MW-11
2/22/2016	6.33 (B01)	
4/26/2016	6.27 (B02)	
6/28/2016	6.76 (B03)	
8/30/2016	6.59 (B04)	
11/3/2016	6.54 (B05)	
1/5/2017	6.5 (B06)	
3/11/2017	6.32 (B07)	
5/12/2017	6.61 (B08)	
10/13/2017	6.73	
6/7/2018	6.39	
11/20/2018	6.35	
3/11/2019	6.24	
5/29/2019		6.4
11/18/2019		6.41

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12	MW-12
2/22/2016	6.19 (B01)	
4/26/2016	5.99 (B02)	
6/27/2016	6.04 (B03)	
8/29/2016	6.01 (B04)	
11/1/2016	6.03 (B05)	
1/4/2017	6.1 (B06)	
3/10/2017	6.1 (B07)	
5/11/2017	5.95 (B08)	
10/12/2017	5.9	
6/6/2018	6.04	
11/19/2018	6.11	
3/11/2019	6.15	
5/28/2019		6.62
11/18/2019		6.14

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

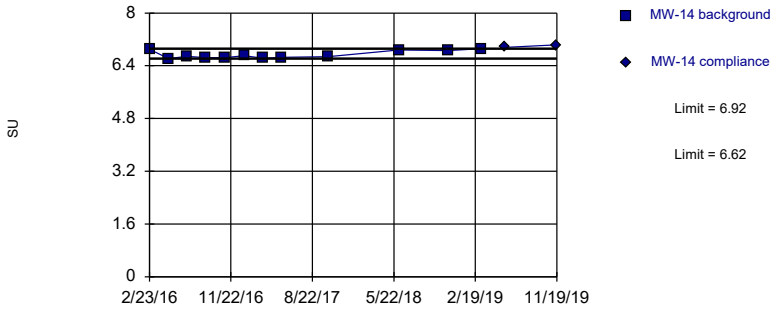
Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-13	MW-13
2/23/2016	7.47 (B01)	
4/27/2016	7.08 (B02)	
6/28/2016	7.15 (B03)	
8/29/2016	6.97 (B04)	
11/2/2016	6.96 (B05)	
1/5/2017	7.02 (B06)	
3/11/2017	6.97 (B07)	
5/12/2017	7.21 (B08)	
10/13/2017	6.87	
6/7/2018	6.86	
11/19/2018	6.99	
3/12/2019	6.96	
5/29/2019		6.96
11/19/2019		6.92

Exceeds 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).

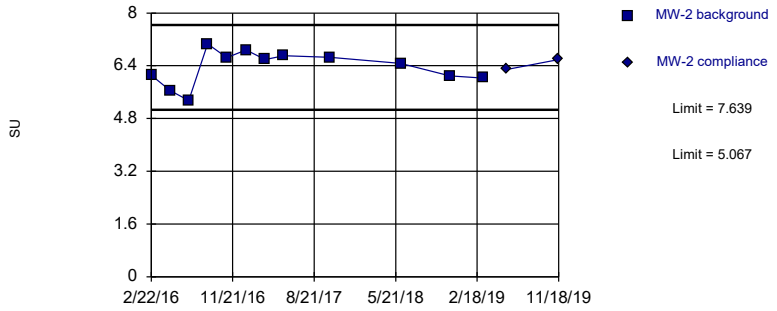
Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.353, Std. Dev.=0.512, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.94, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

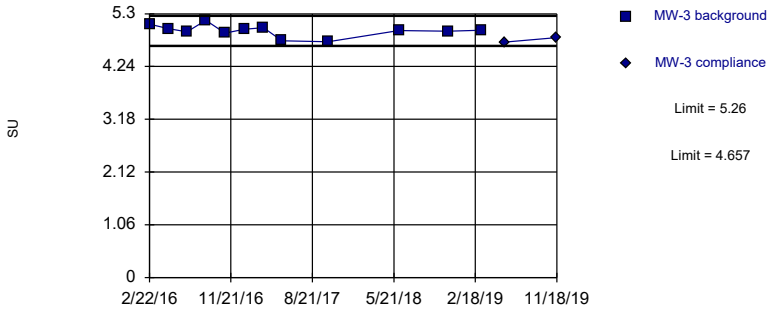
Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.958, Std. Dev.=0.1201, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9322, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

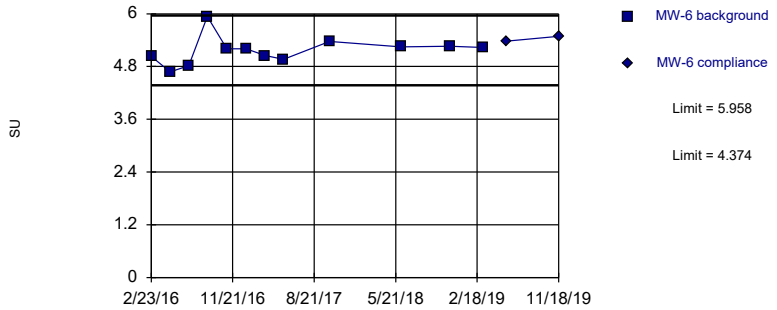
Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.166, Std. Dev.=0.3153, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9049, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-14	MW-14
2/23/2016	6.9 (B01)	
4/27/2016	6.62 (B02)	
6/28/2016	6.69 (B03)	
8/29/2016	6.65 (B04)	
11/2/2016	6.65 (B05)	
1/5/2017	6.7 (B06)	
3/11/2017	6.63 (B07)	
5/12/2017	6.66 (B08)	
10/13/2017	6.68	
6/7/2018	6.88	
11/19/2018	6.86	
3/11/2019	6.92	
5/30/2019		6.96
11/19/2019		7.03

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-2	MW-2
2/22/2016	6.11 (B01)	
4/25/2016	5.65 (B02)	
6/27/2016	5.35 (B03)	
8/29/2016	7.06 (B04)	
11/1/2016	6.65 (B05)	
1/4/2017	6.88 (B06)	
3/10/2017	6.59 (B07)	
5/11/2017	6.7 (B08)	
10/12/2017	6.66	
6/6/2018	6.47	
11/19/2018	6.09	
3/11/2019	6.03	
5/28/2019		6.29
11/18/2019		6.59

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3	MW-3
2/22/2016	5.09 (B01)	
4/25/2016	5 (B02)	
6/27/2016	4.94 (B03)	
8/29/2016	5.17 (B04)	
11/1/2016	4.91 (B05)	
1/4/2017	4.99 (B06)	
3/10/2017	5.02 (B07)	
5/11/2017	4.76 (B08)	
10/12/2017	4.74	
6/6/2018	4.96	
11/19/2018	4.95	
3/11/2019	4.97	
5/28/2019		4.73
11/18/2019		4.82

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

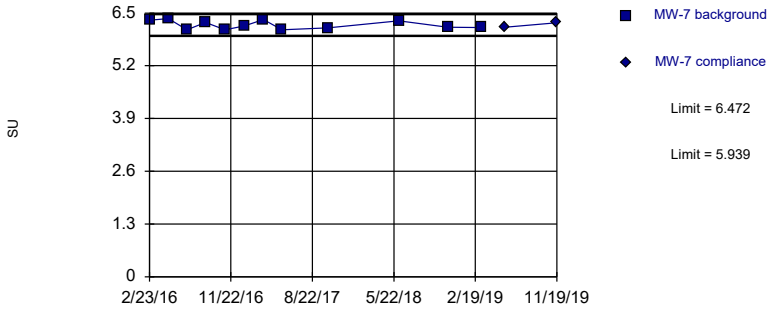
Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-6	MW-6
2/23/2016	5.03 (B01)	
4/26/2016	4.68 (B02)	
6/28/2016	4.82 (B03)	
8/29/2016	5.94 (B04)	
11/2/2016	5.2 (B05)	
1/5/2017	5.2 (B06)	
3/11/2017	5.05 (B07)	
5/11/2017	4.96 (B08)	
10/12/2017	5.37	
6/8/2018	5.25	
11/19/2018	5.26	
3/12/2019	5.23	
5/29/2019		5.38
11/18/2019		5.49

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.206, Std. Dev.=0.1061, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8598, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell

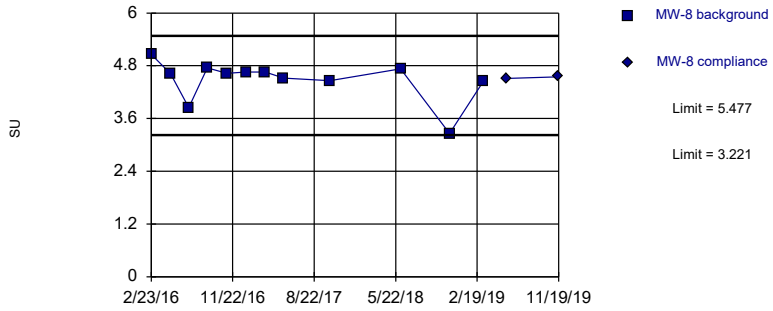
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=20.19, Std. Dev.=3.906, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8305, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell

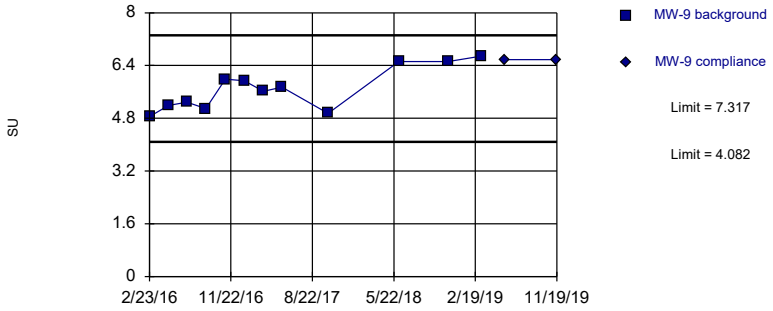
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.699, Std. Dev.=0.6438, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9266, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 3/6/2020 8:19 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-7	MW-7
2/23/2016	6.32 (B01)	
4/26/2016	6.36 (B02)	
6/28/2016	6.09 (B03)	
8/29/2016	6.27 (B04)	
11/2/2016	6.09 (B05)	
1/5/2017	6.18 (B06)	
3/11/2017	6.34 (B07)	
5/12/2017	6.09 (B08)	
10/12/2017	6.13	
6/8/2018	6.31	
11/19/2018	6.15	
3/12/2019	6.14	
5/29/2019		6.15
11/19/2019		6.26

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-8	MW-8
2/23/2016	5.06 (B01)	
4/27/2016	4.62 (B02)	
6/28/2016	3.85 (B03)	
8/29/2016	4.75 (B04)	
11/2/2016	4.63 (B05)	
1/5/2017	4.66 (B06)	
3/11/2017	4.66 (B07)	
5/12/2017	4.52 (B08)	
10/13/2017	4.46	
6/7/2018	4.73	
11/19/2018	3.26	
3/11/2019	4.44	
5/30/2019		4.51
11/19/2019		4.55

Prediction Limit

Constituent: pH (SU) Analysis Run 3/6/2020 8:21 AM View: Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-9	MW-9
2/23/2016	4.85 (B01)	
4/27/2016	5.19 (B02)	
6/28/2016	5.29 (B03)	
8/30/2016	5.09 (B04)	
11/3/2016	5.99 (B05)	
1/5/2017	5.94 (B06)	
3/11/2017	5.62 (B07)	
5/12/2017	5.74 (B08)	
10/13/2017	4.95	
6/7/2018	6.52	
11/20/2018	6.52	
3/11/2019	6.69	
5/30/2019		6.58
11/19/2019		6.58

Trend Tests - Prediction Limit Exceedances

Interwell Trend Tests Summary Table - PL Exceedances - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 11:27 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	**MW-10**	**-51.73**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-13**	**-79.68**	**-78**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-47.17**	**-55**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-8**	**-38.42**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-9**	**-63.42**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-10**	**-188.5**	**-70**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-14**	**-212.7**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.79**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-262**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-9**	**-244**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-7**	**105.5**	**73**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

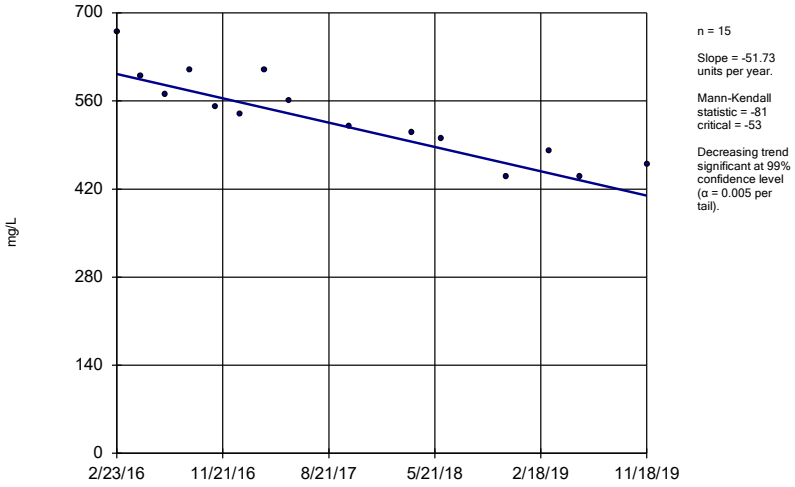
Interwell Trend Tests Summary Table - PL Exceedances - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 11:27 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	**MW-10**	**-51.73**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-11	0	-1	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-12 (bg)	1.067	23	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-13**	**-79.68**	**-78**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-14	0	-11	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-0.4759	-3	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	0	29	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-6**	**-47.17**	**-55**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	44.56	41	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-8**	**-38.42**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-9**	**-63.42**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-10**	**-188.5**	**-70**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-11	0	-10	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	3.643	19	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-13	0	7	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-14**	**-212.7**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-2 (bg)	-0.9986	-32	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.79**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-262**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	288.5	27	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-8	-103	-27	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-9**	**-244**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-10	-28.52	-15	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-11	-14.03	-25	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-25	-53	No	15	60	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-13	-118.3	-31	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-14	-7.101	-7	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.5276	-47	-53	No	15	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	53	No	15	86.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-6	-36.87	-37	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-7**	**105.5**	**73**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-8	-4.171	-4	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-9	-60.1	-23	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-10	-212.7	-39	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-11	-186.7	-11	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	18.11	21	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-13	-219	-25	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-14	-208.8	-35	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-8.515	-13	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	-0.8343	-6	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-6	-428.2	-37	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-7	376.3	18	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-8	0	-3	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-9	-427.3	-40	-53	No	15	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

MW-10



n = 15

Slope = -51.73 units per year.

Mann-Kendall statistic = -81 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

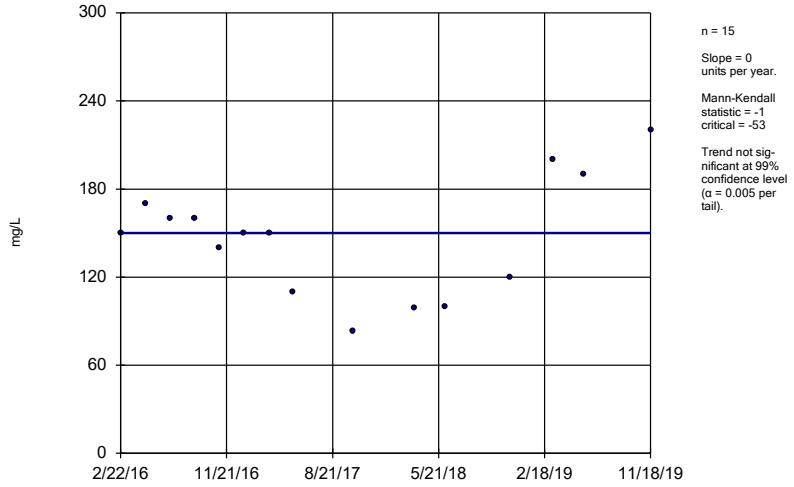
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-11



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -1 critical = -53

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

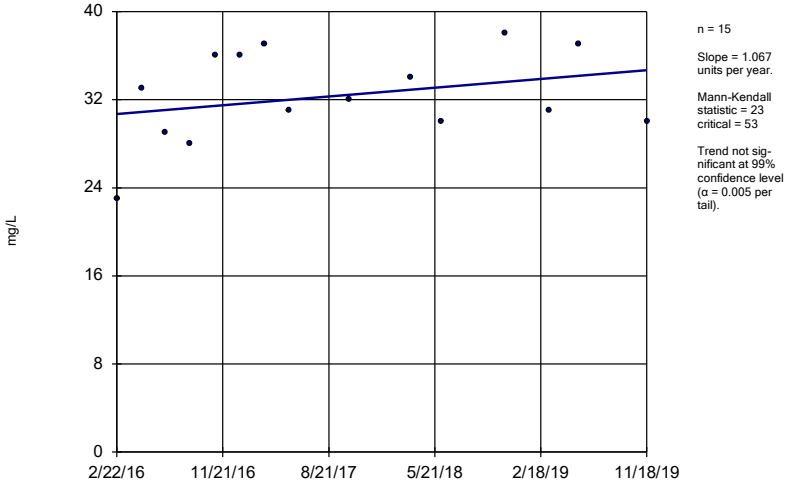
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 15

Slope = 1.067 units per year.

Mann-Kendall statistic = 23 critical = 53

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

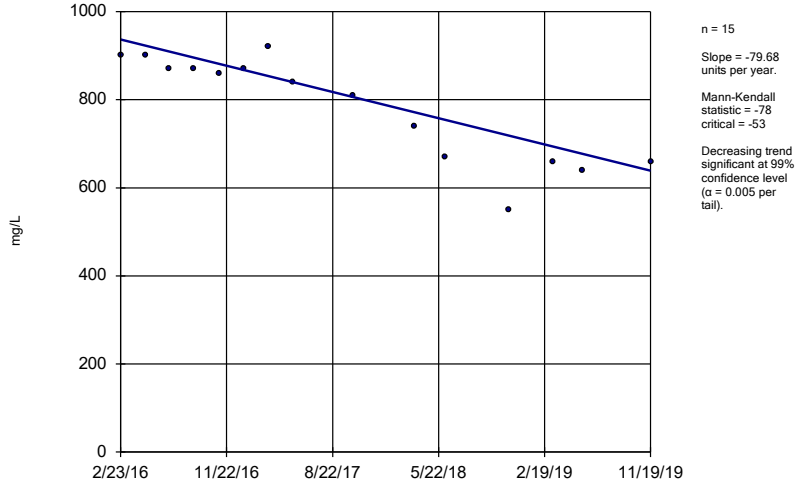
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-13



n = 15

Slope = -79.68 units per year.

Mann-Kendall statistic = -78 critical = -53

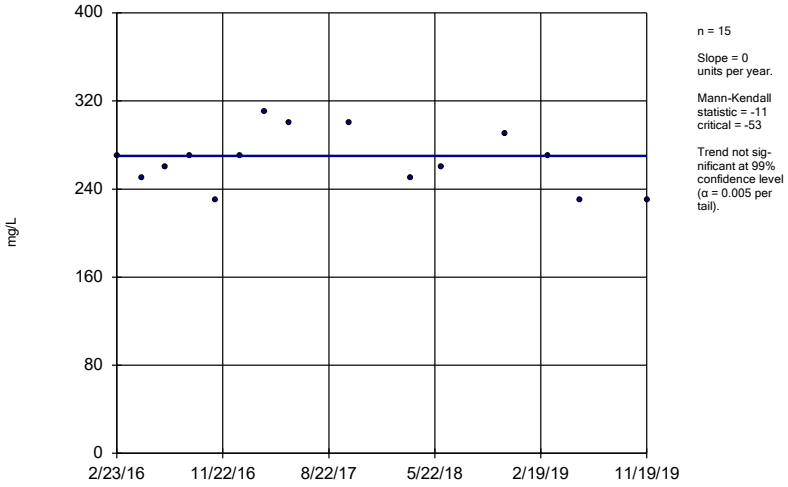
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-14



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -11 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

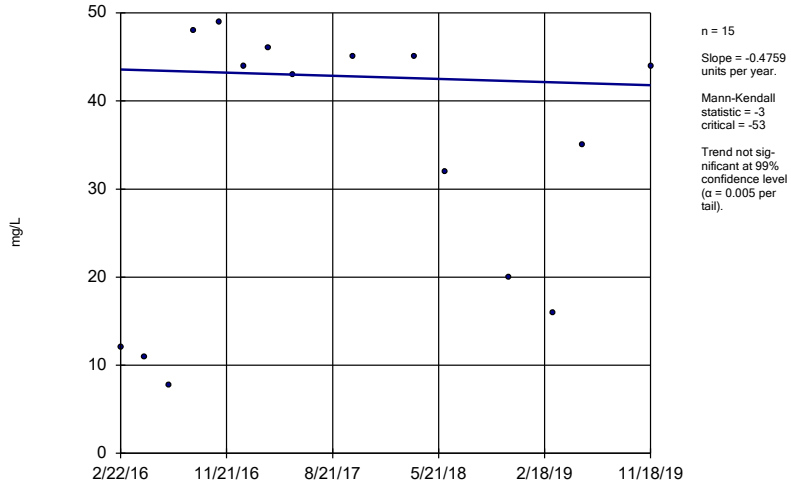
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 15

Slope = -0.4759 units per year.

Mann-Kendall statistic = -3 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

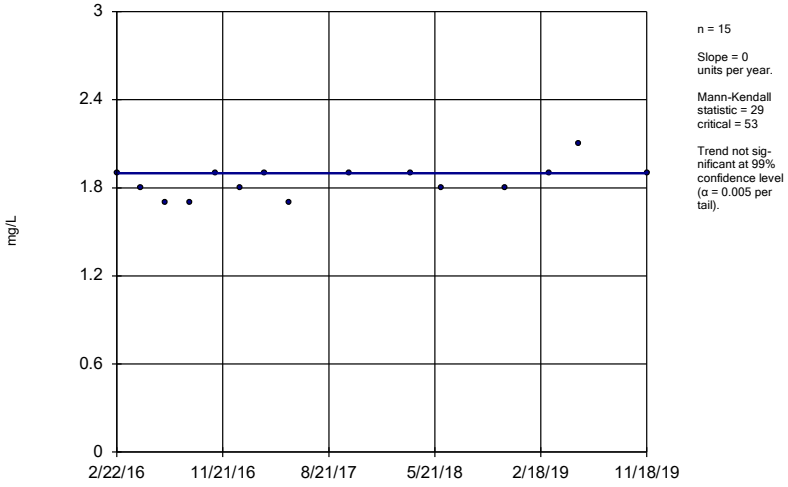
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 29 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

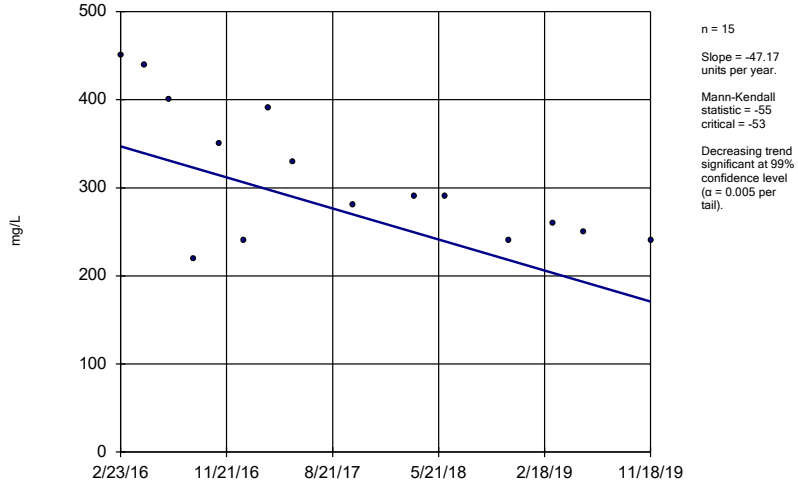
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 15

Slope = -47.17 units per year.

Mann-Kendall statistic = -55 critical = -53

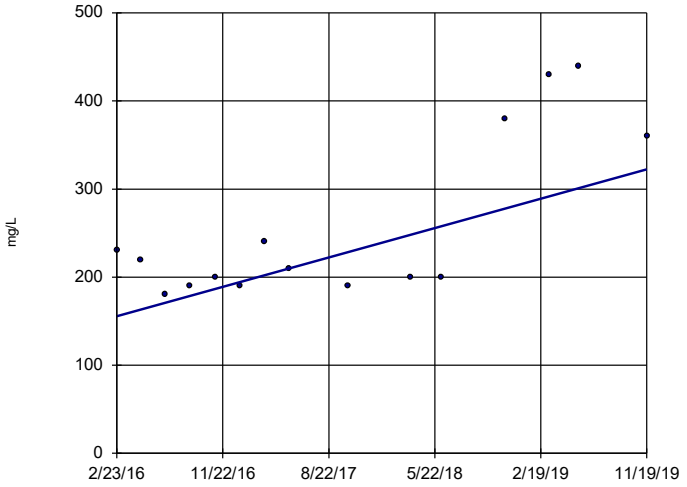
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-7



n = 15

Slope = 44.56 units per year.

Mann-Kendall statistic = 41 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

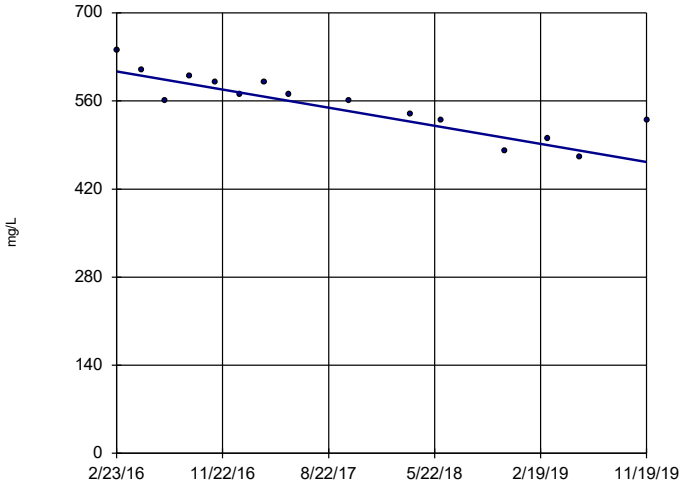
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-8



n = 15

Slope = -38.42 units per year.

Mann-Kendall statistic = -81 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

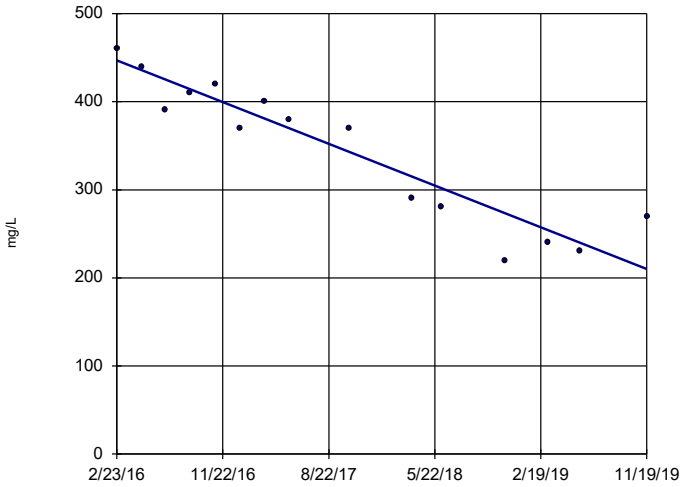
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-9



n = 15

Slope = -63.42 units per year.

Mann-Kendall statistic = -82 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

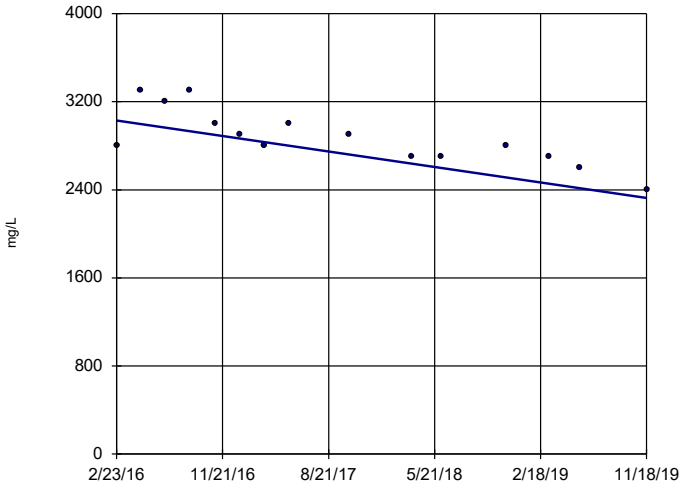
Constituent: Calcium Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-10



n = 15

Slope = -188.5 units per year.

Mann-Kendall statistic = -70 critical = -53

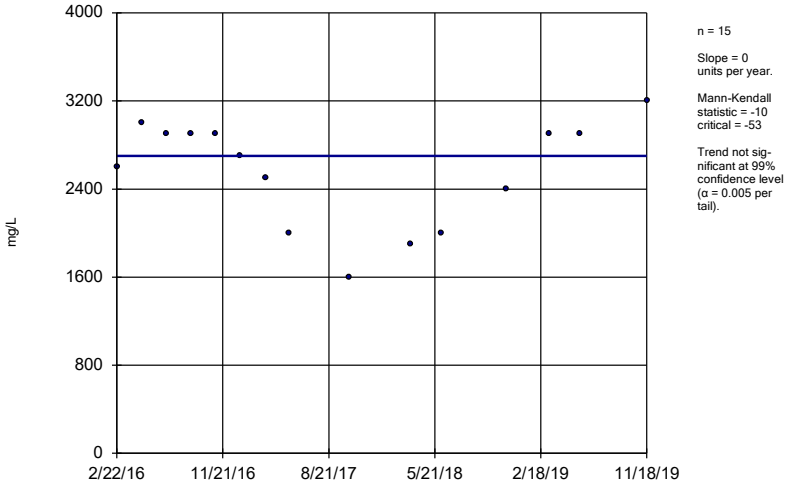
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-11



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -10 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

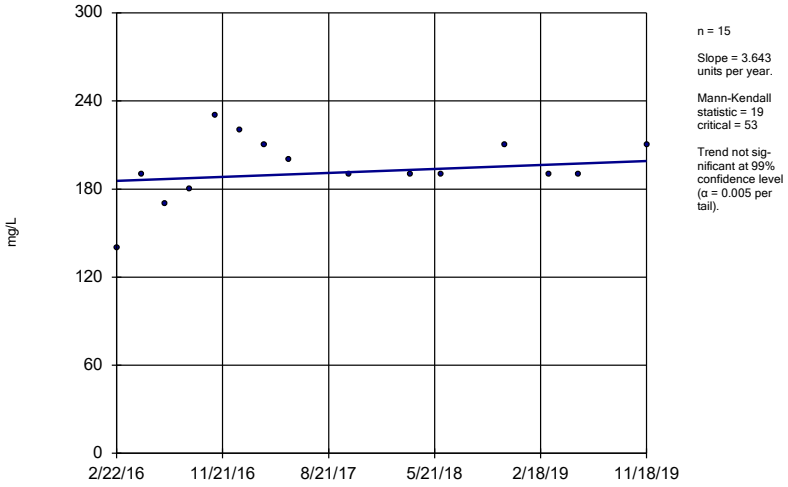
Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 15

Slope = 3.643 units per year.

Mann-Kendall statistic = 19 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

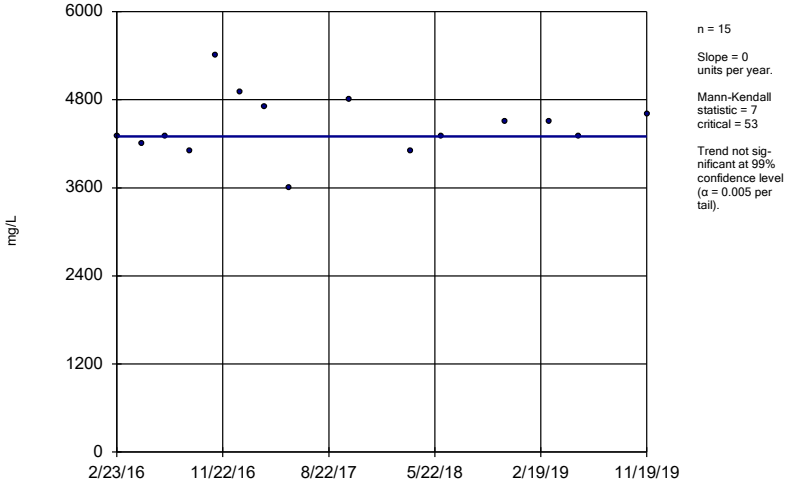
Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-13



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 7 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

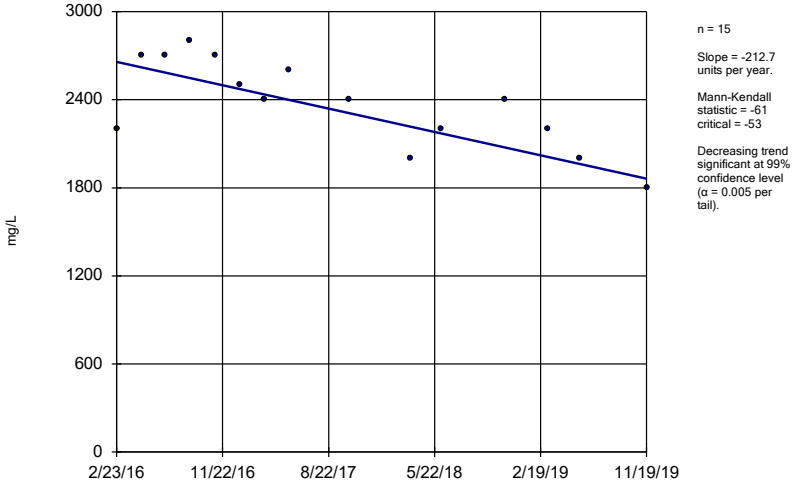
Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 15

Slope = -212.7 units per year.

Mann-Kendall statistic = -61 critical = -53

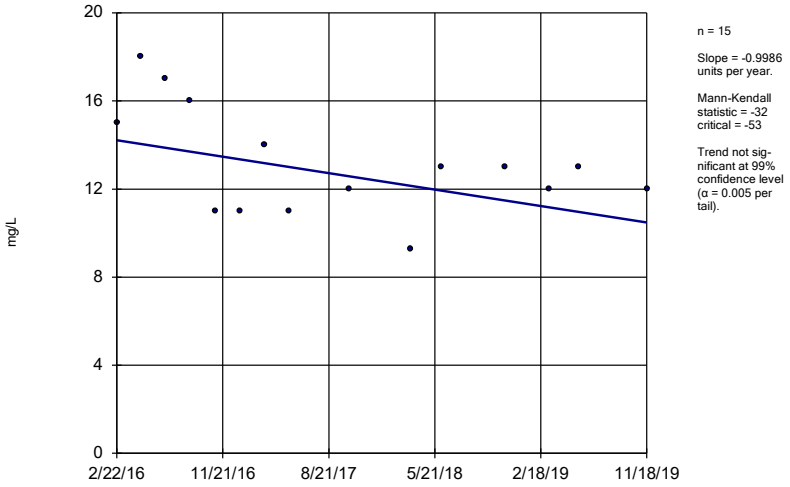
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-2 (bg)



n = 15

Slope = -0.9986 units per year.

Mann-Kendall statistic = -32 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

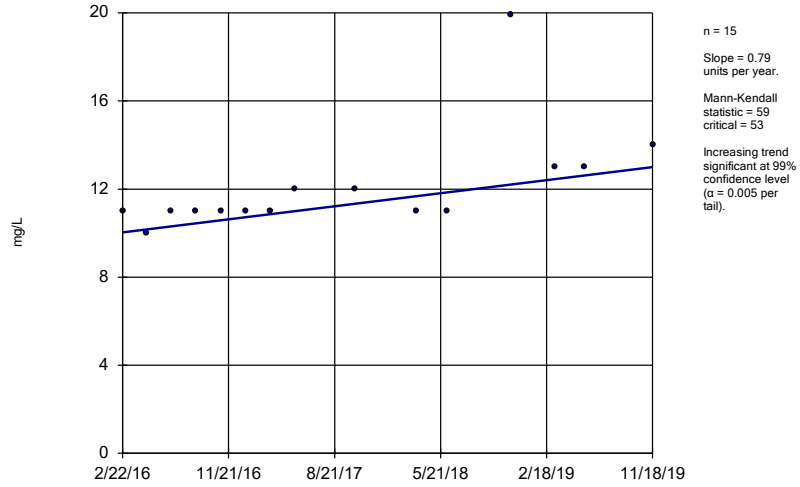
Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 15

Slope = 0.79 units per year.

Mann-Kendall statistic = 59 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

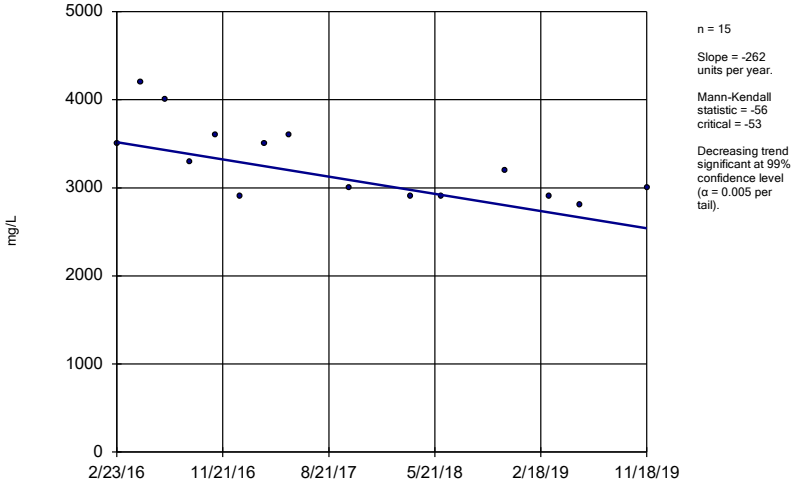
Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 15

Slope = -262 units per year.

Mann-Kendall statistic = -56 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

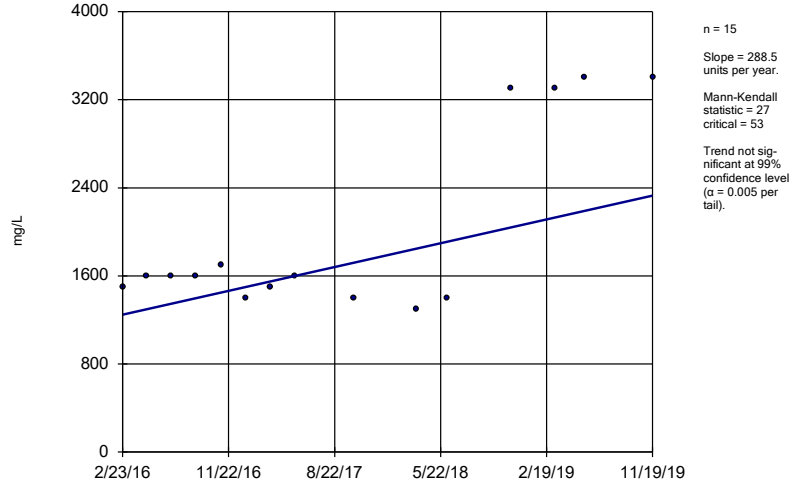
Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 15

Slope = 288.5 units per year.

Mann-Kendall statistic = 27 critical = 53

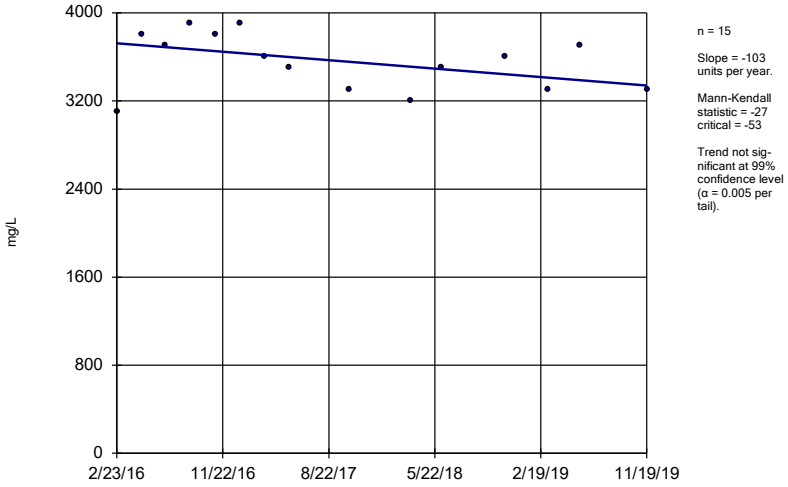
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-8



n = 15

Slope = -103 units per year.

Mann-Kendall statistic = -27 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

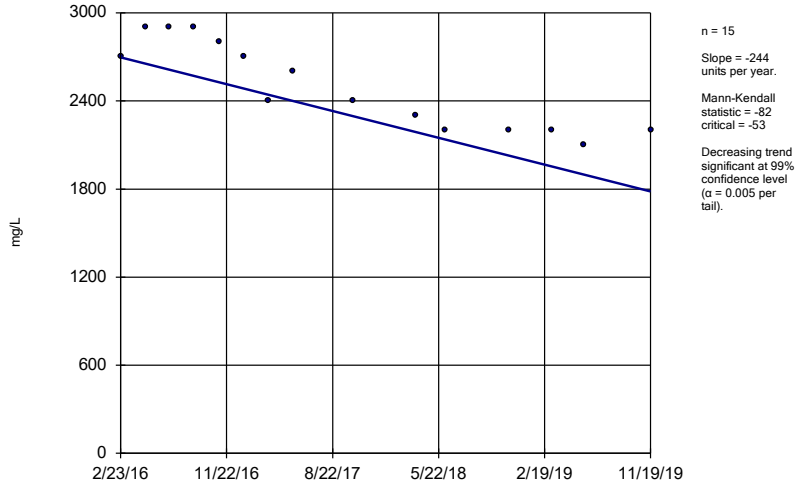
Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-9



n = 15

Slope = -244 units per year.

Mann-Kendall statistic = -82 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

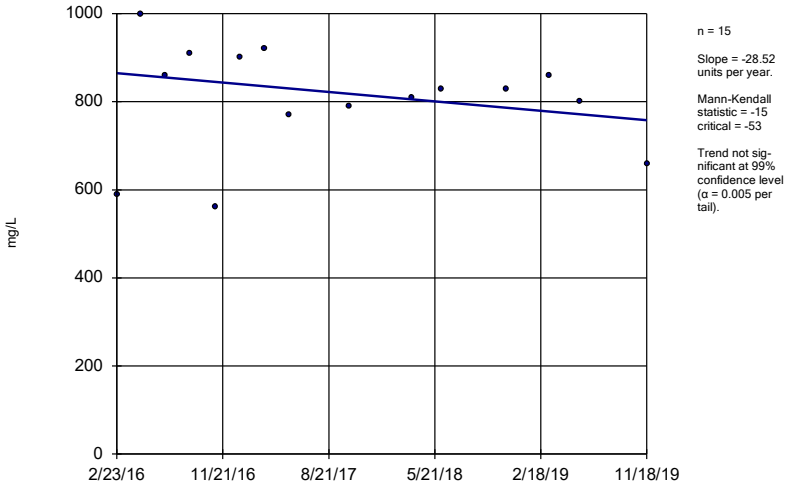
Constituent: Chloride Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-10



n = 15

Slope = -28.52 units per year.

Mann-Kendall statistic = -15 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

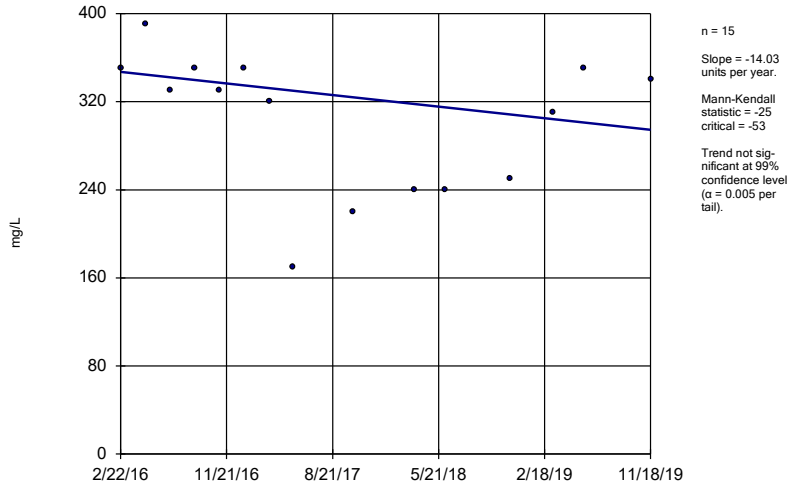
Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-11



n = 15

Slope = -14.03 units per year.

Mann-Kendall statistic = -25 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

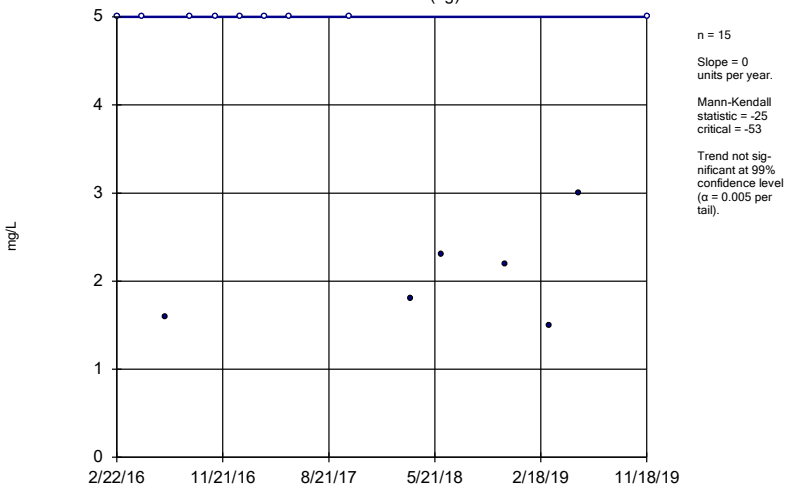
Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-12 (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -25
critical = -53

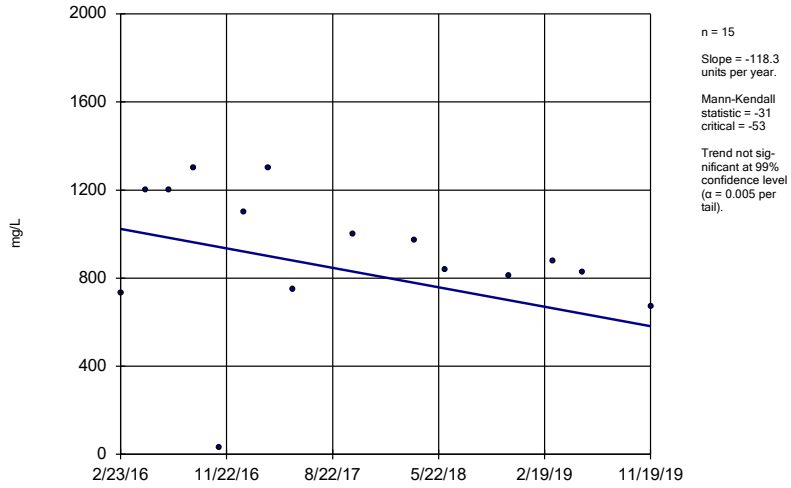
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-13



n = 15

Slope = -118.3 units per year.

Mann-Kendall statistic = -31
critical = -53

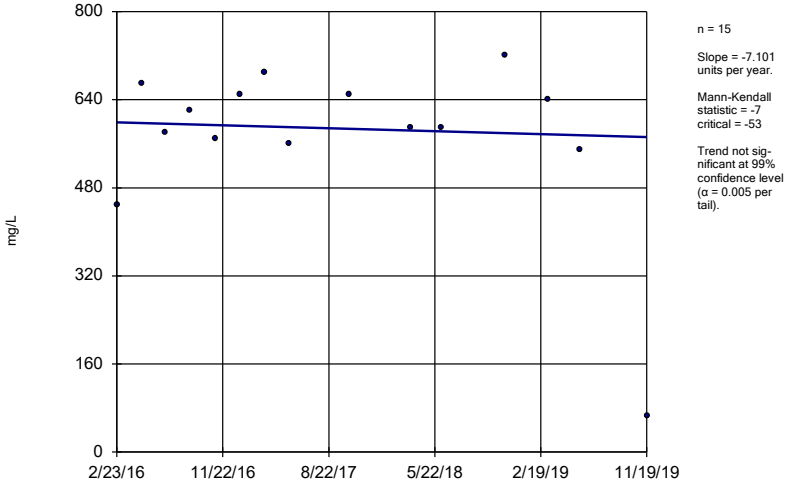
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 15

Slope = -7.101 units per year.

Mann-Kendall statistic = -7
critical = -53

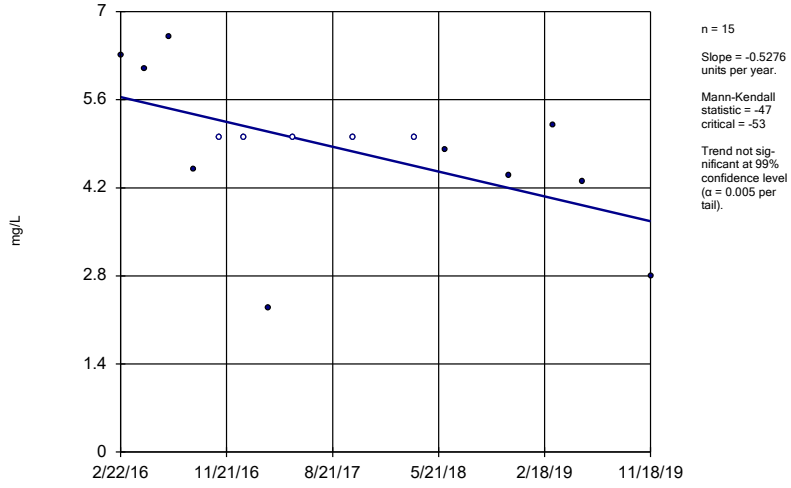
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 15

Slope = -0.5276 units per year.

Mann-Kendall statistic = -47
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

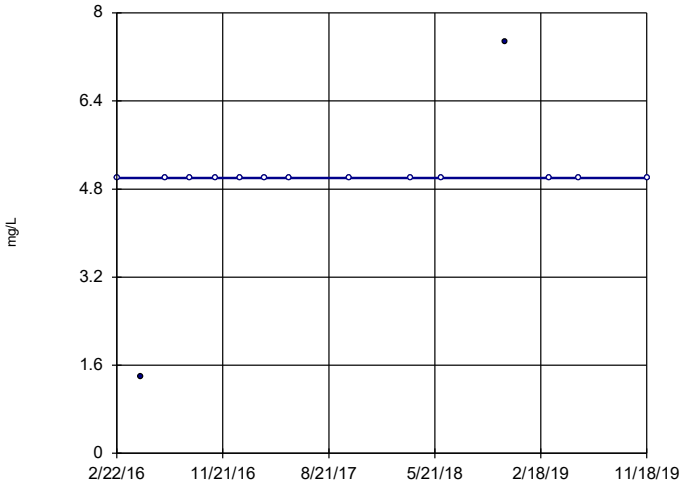
Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 19
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

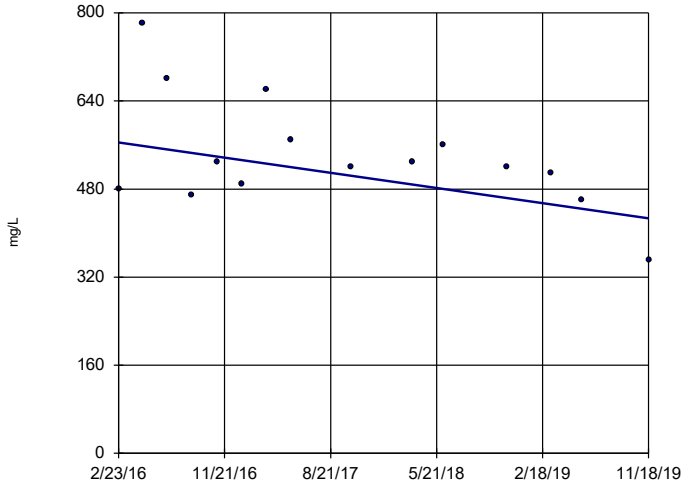
Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 15

Slope = -36.87 units per year.

Mann-Kendall statistic = -37
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

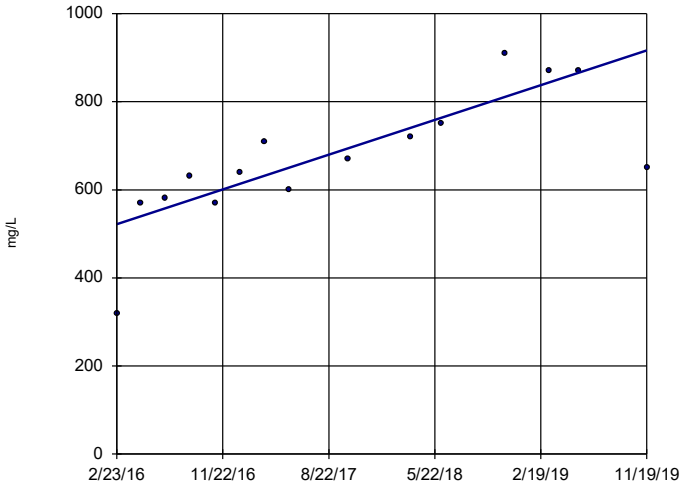
Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 15

Slope = 105.5 units per year.

Mann-Kendall statistic = 73
critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

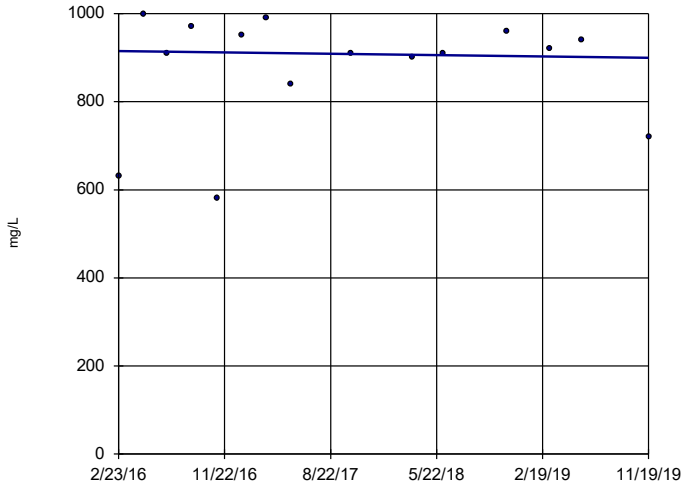
Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-8



n = 15

Slope = -4.171 units per year.

Mann-Kendall statistic = -4
critical = -53

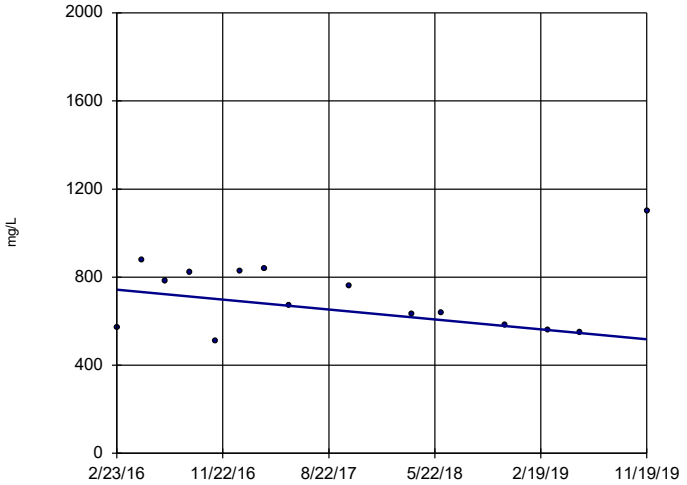
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-9



n = 15

Slope = -60.1 units per year.

Mann-Kendall statistic = -23 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

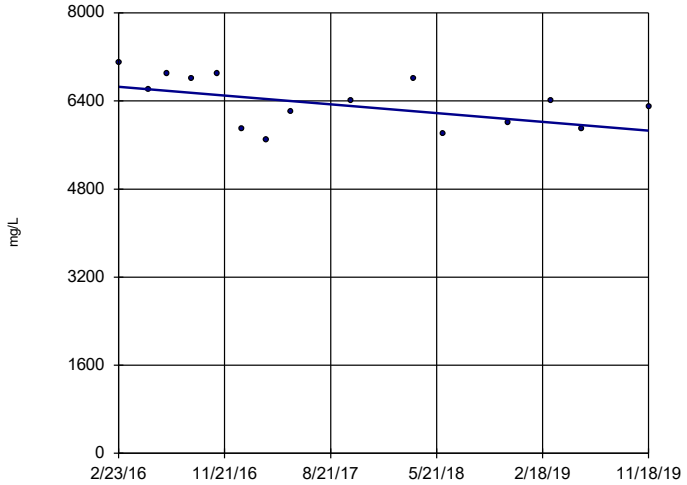
Constituent: Sulfate Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-10



n = 15

Slope = -212.7 units per year.

Mann-Kendall statistic = -39 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

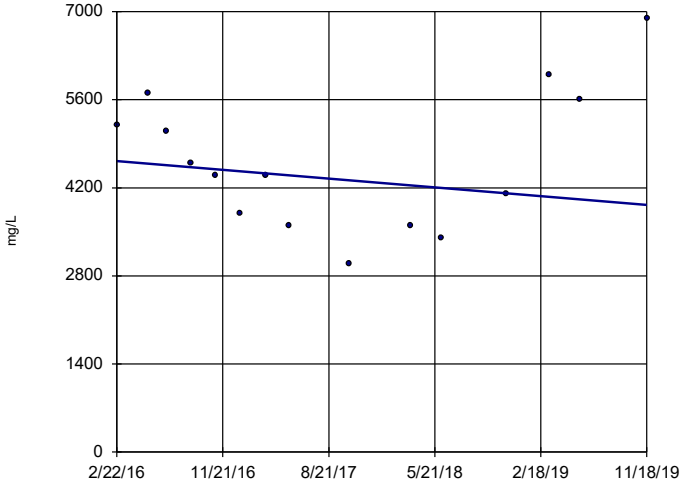
Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-11



n = 15

Slope = -186.7 units per year.

Mann-Kendall statistic = -11 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

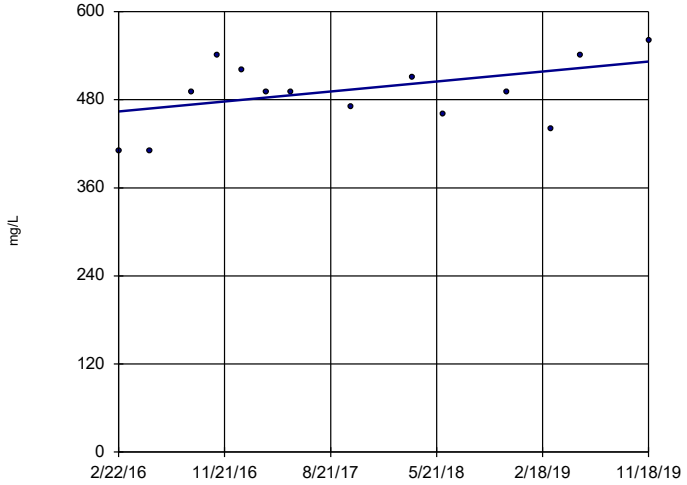
Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 14

Slope = 18.11 units per year.

Mann-Kendall statistic = 21 critical = 48

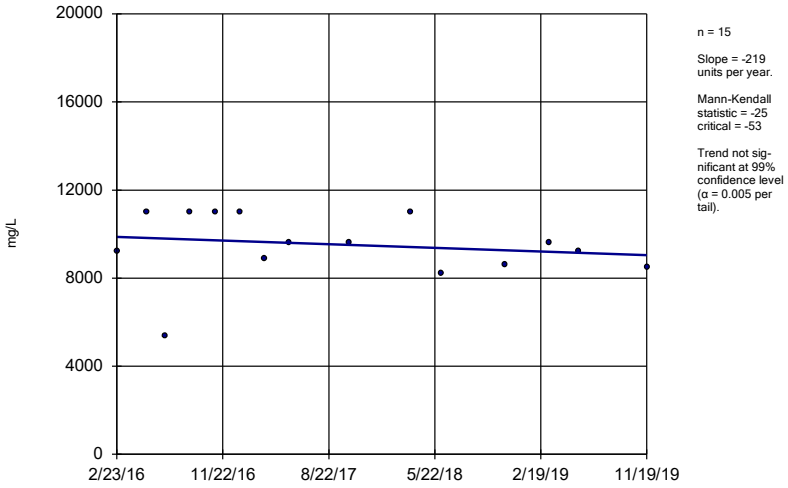
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-13



n = 15

Slope = -219 units per year.

Mann-Kendall statistic = -25 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

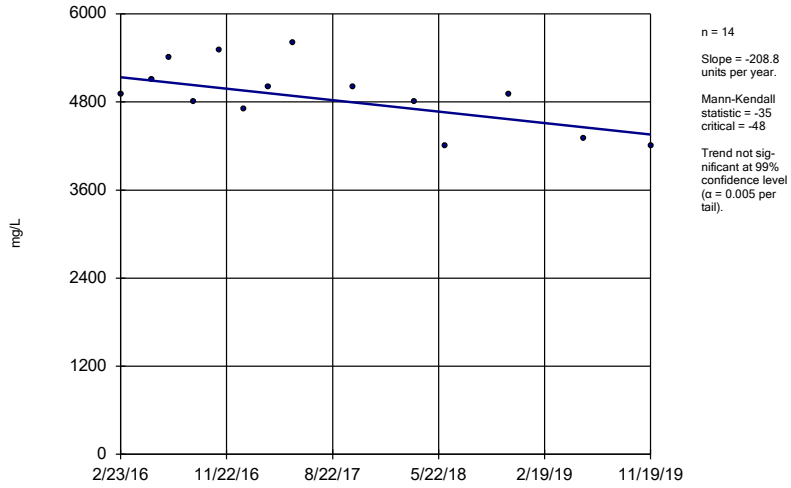
Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 14

Slope = -208.8 units per year.

Mann-Kendall statistic = -35 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

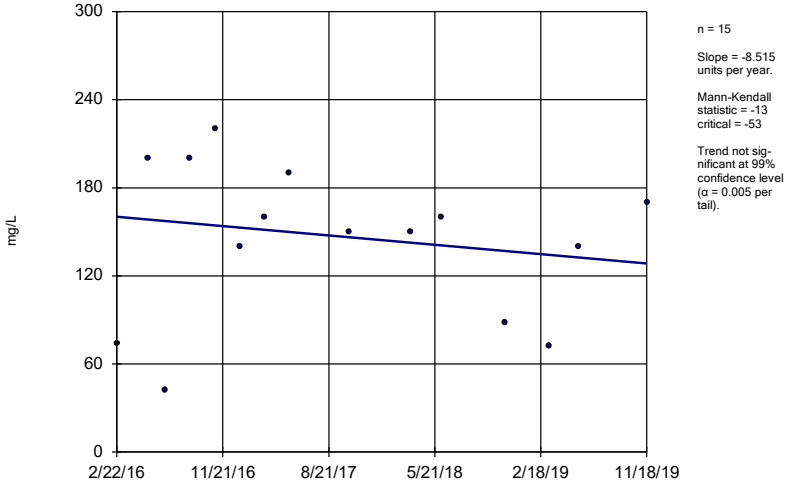
Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 15

Slope = -8.515 units per year.

Mann-Kendall statistic = -13 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

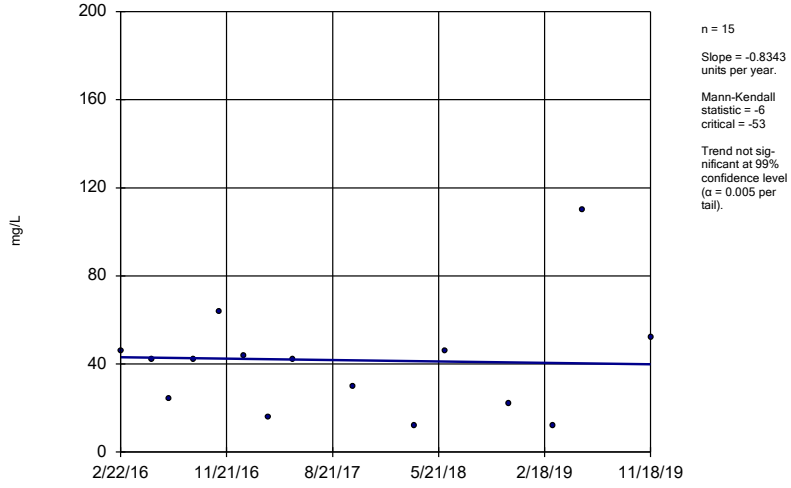
Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 15

Slope = -0.8343 units per year.

Mann-Kendall statistic = -6 critical = -53

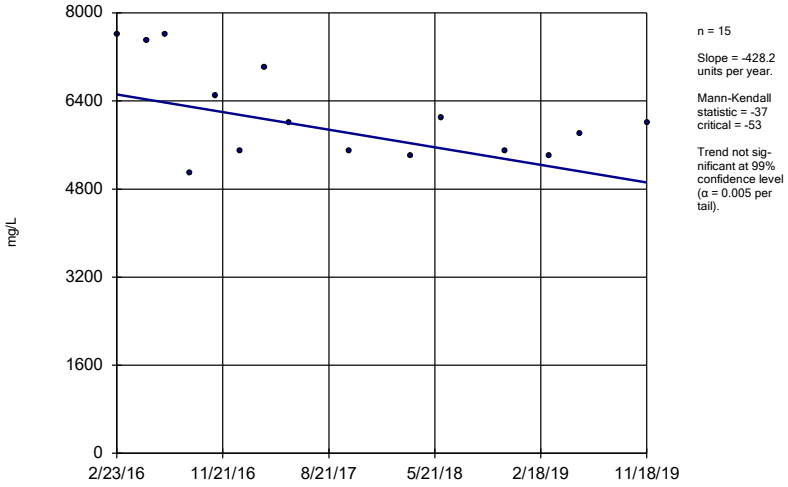
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-6



n = 15

Slope = -428.2 units per year.

Mann-Kendall statistic = -37 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

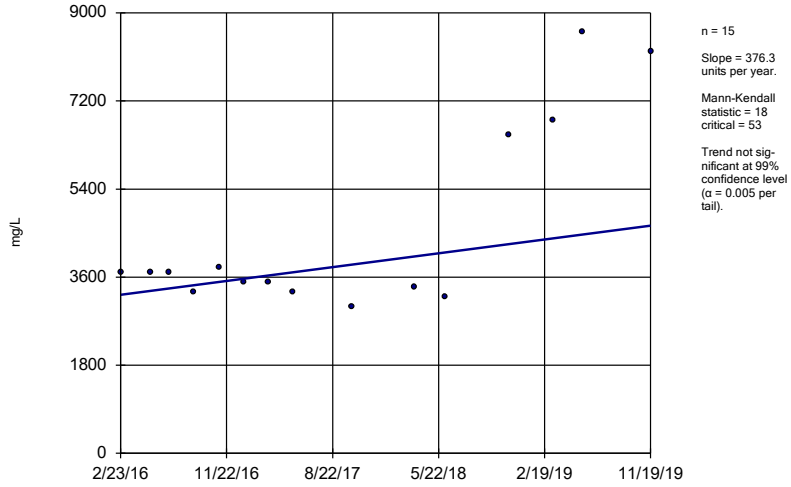
Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:23 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 15

Slope = 376.3 units per year.

Mann-Kendall statistic = 18 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

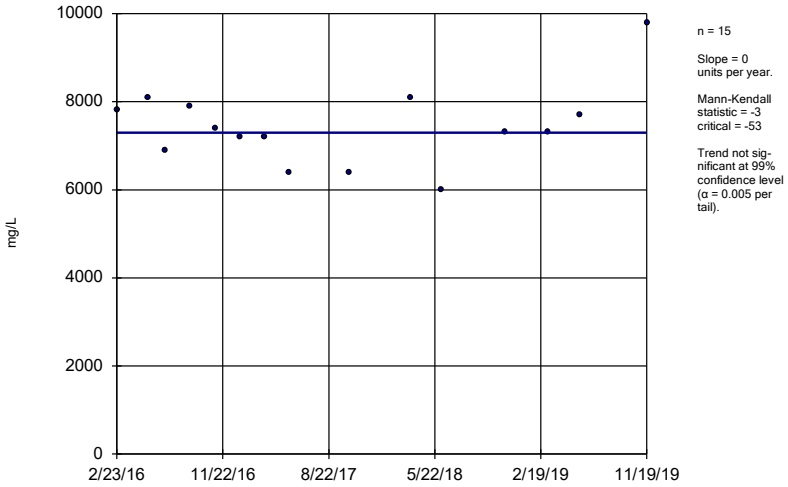
Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:24 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-8



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -3 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

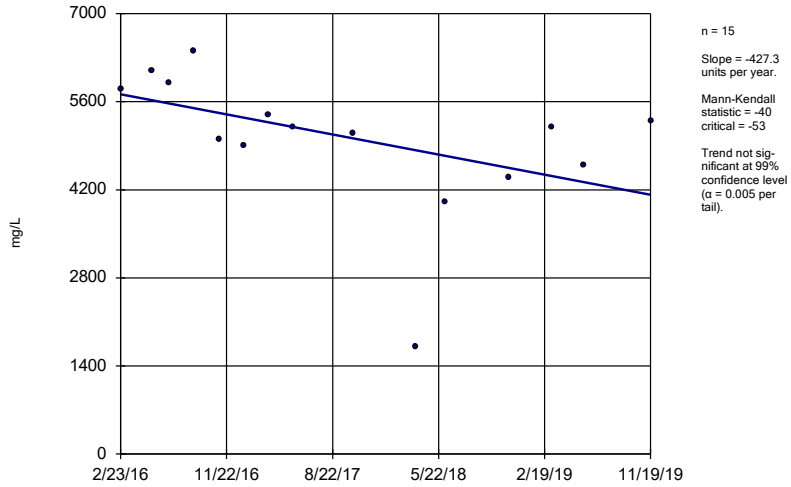
Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:24 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-9



n = 15

Slope = -427.3 units per year.

Mann-Kendall statistic = -40 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/6/2020 11:24 AM View: Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

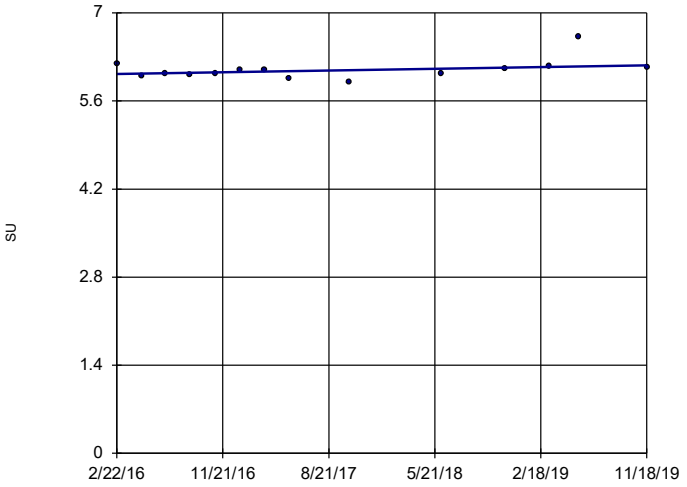
Intrawell Trend Tests Summary Table - PL Exceedances - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/6/2020, 7:44 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH (SU)	MW-12 (bg)	0.03611	27	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-14	0.09781	48	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-2 (bg)	-0.02624	-6	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-3 (bg)	-0.05683	-39	-48	No	14	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

MW-12 (bg)



n = 14

Slope = 0.03611 units per year.

Mann-Kendall statistic = 27
critical = 48

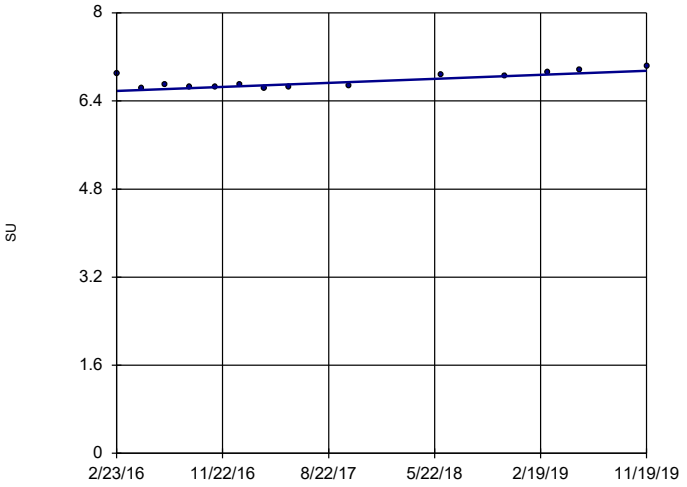
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 3/6/2020 7:43 AM View: Intrawell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 14

Slope = 0.09781 units per year.

Mann-Kendall statistic = 48
critical = 48

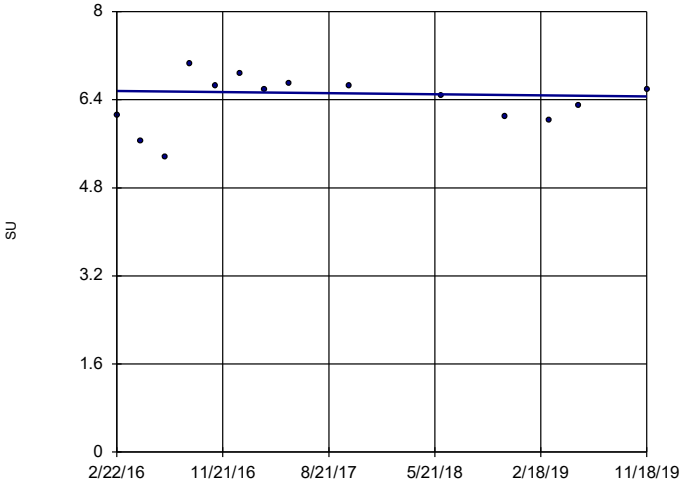
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 3/6/2020 7:43 AM View: Intrawell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 14

Slope = -0.02624 units per year.

Mann-Kendall statistic = -6
critical = -48

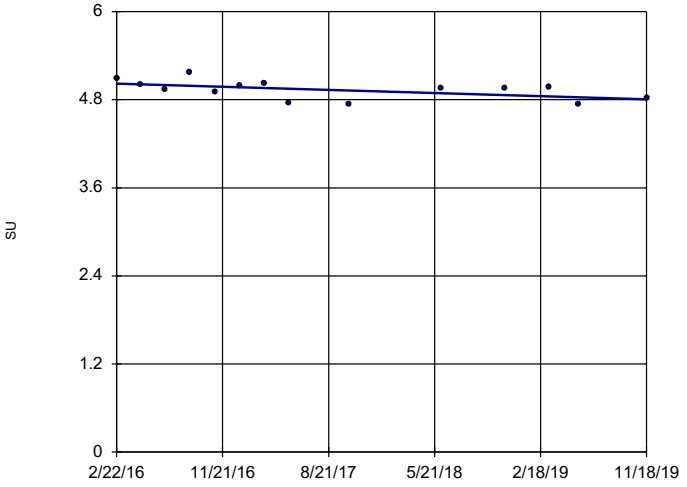
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 3/6/2020 7:43 AM View: Intrawell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 14

Slope = -0.05683 units per year.

Mann-Kendall statistic = -39
critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 3/6/2020 7:43 AM View: Intrawell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Confidence Intervals

Confidence Intervals - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/16/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**MW-11**	**0.02722**	**0.01678**	**0.01**	**Yes**	**14**	**0.022**	**0.007369**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-10**	**25.01**	**19.11**	**5**	**Yes**	**14**	**22.06**	**4.168**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-11**	**36.02**	**26.02**	**5**	**Yes**	**14**	**31.02**	**7.061**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-13**	**16.3**	**11.37**	**5**	**Yes**	**14**	**13.83**	**3.476**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-14**	**8.925**	**5.424**	**5**	**Yes**	**14**	**7.174**	**2.472**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**32.59**	**24.12**	**5**	**Yes**	**14**	**28.36**	**5.976**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**46.3**	**21.6**	**5**	**Yes**	**14**	**31.12**	**11.5**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Combined Radium 226 + 228 (pCi/L)	**MW-8**	**41.42**	**33.61**	**5**	**Yes**	**14**	**37.51**	**5.51**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-9**	**26.64**	**14.74**	**5**	**Yes**	**14**	**20.69**	**8.399**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**MW-13**	**0.2239**	**0.1763**	**0.04**	**Yes**	**14**	**0.2014**	**0.03634**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/16/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MW-11	0.0025	0.0015	0.006	No	10	0.00212	0.0005051	60	None	No	0.011	NP (normality)
Arsenic (mg/L)	MW-10	0.003424	0.00204	0.01	No	14	0.002732	0.0009774	7.143	None	No	0.01	Param.
Arsenic (mg/L)	**MW-11**	**0.02722**	**0.01678**	**0.01**	**Yes**	**14**	**0.022**	**0.007369**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	MW-13	0.002027	0.000665	0.01	No	14	0.001639	0.00178	14.29	None	ln(x)	0.01	Param.
Arsenic (mg/L)	MW-14	0.005435	0.002893	0.01	No	14	0.004164	0.001794	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-6	0.001402	0.0006989	0.01	No	14	0.001055	0.0006764	28.57	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	MW-7	0.002238	0.001074	0.01	No	14	0.001646	0.001149	21.43	Kaplan-Meier	x^(1/3)	0.01	Param.
Arsenic (mg/L)	MW-8	0.002	0.00065	0.01	No	14	0.001601	0.001279	21.43	None	No	0.01	NP (normality)
Arsenic (mg/L)	MW-9	0.003749	0.002129	0.01	No	14	0.002939	0.001144	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-10	0.1171	0.1007	2	No	14	0.1089	0.01158	0	None	No	0.01	Param.
Barium (mg/L)	MW-11	0.1439	0.09101	2	No	14	0.1175	0.03734	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-13	0.1339	0.09091	2	No	14	0.1124	0.03037	0	None	No	0.01	Param.
Barium (mg/L)	MW-14	0.05816	0.04906	2	No	14	0.05361	0.006422	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.07139	0.05768	2	No	14	0.06454	0.009676	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.14	0.055	2	No	14	0.08389	0.04007	7.143	None	No	0.01	NP (normality)
Barium (mg/L)	MW-8	0.07097	0.05639	2	No	14	0.06368	0.01029	7.143	None	No	0.01	Param.
Barium (mg/L)	MW-9	0.1012	0.07427	2	No	14	0.08775	0.01904	7.143	None	No	0.01	Param.
Beryllium (mg/L)	MW-10	0.00061	0.00033	0.004	No	13	0.0007523	0.0007841	15.38	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-11	0.0025	0.00078	0.004	No	13	0.00177	0.0008506	46.15	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-6	0.001824	0.0009865	0.004	No	13	0.001405	0.0005633	7.692	None	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	13	0.002325	0.0006324	92.31	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-8	0.0016	0.0011	0.004	No	13	0.0014	0.0003697	7.692	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-9	0.0025	0.00043	0.004	No	13	0.001793	0.000945	61.54	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-10	0.003	0.0015	0.1	No	14	0.002464	0.0003079	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-11	0.0048	0.0025	0.1	No	14	0.008286	0.01727	14.29	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-13	0.0025	0.0024	0.1	No	14	0.002493	0.00002673	92.86	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-14	0.0025	0.0017	0.1	No	14	0.00235	0.0003937	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.0025	0.0012	0.1	No	14	0.002071	0.0007248	42.86	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-11	0.0025	0.00046	0.006	No	12	0.00233	0.0005889	91.67	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-10**	**25.01**	**19.11**	**5**	**Yes**	**14**	**22.06**	**4.168**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-11**	**36.02**	**26.02**	**5**	**Yes**	**14**	**31.02**	**7.061**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-13**	**16.3**	**11.37**	**5**	**Yes**	**14**	**13.83**	**3.476**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-14**	**8.925**	**5.424**	**5**	**Yes**	**14**	**7.174**	**2.472**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**32.59**	**24.12**	**5**	**Yes**	**14**	**28.36**	**5.976**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**46.3**	**21.6**	**5**	**Yes**	**14**	**31.12**	**11.5**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Combined Radium 226 + 228 (pCi/L)	**MW-8**	**41.42**	**33.61**	**5**	**Yes**	**14**	**37.51**	**5.51**	**0**	**None**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-9**	**26.64**	**14.74**	**5**	**Yes**	**14**	**20.69**	**8.399**	**0**	**None**	**No**	**0.01**	**Param.**
Fluoride (mg/L)	MW-10	0.1	0.04	4	No	15	0.074	0.02923	53.33	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-11	0.1	0.05	4	No	15	0.08933	0.02219	80	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-13	0.1	0.04	4	No	15	0.06733	0.05244	6.667	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-14	0.08408	0.05032	4	No	15	0.0672	0.02491	6.667	None	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	15	0.05967	0.02349	20	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.04	4	No	15	0.08447	0.02671	73.33	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-9	0.1	0.04	4	No	15	0.0598	0.02684	26.67	None	No	0.01	NP (normality)
Lead (mg/L)	MW-10	0.0093	0.0013	0.015	No	12	0.001967	0.002309	91.67	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-11	0.0013	0.0013	0.015	No	12	0.0013	1.0e-12	91.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-10	0.05	0.0049	0.04	No	14	0.01519	0.01888	21.43	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-11	0.05	0.0044	0.04	No	14	0.03136	0.02247	57.14	None	No	0.01	NP (normality)
Lithium (mg/L)	**MW-13**	**0.2239**	**0.1763**	**0.04**	**Yes**	**14**	**0.2014**	**0.03634**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Lithium (mg/L)	MW-14	0.05	0.0026	0.04	No	14	0.03971	0.02045	78.57	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.0264	0.01228	0.04	No	14	0.01991	0.01088	7.143	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	MW-7	0.05	0.002	0.04	No	14	0.03306	0.0236	64.29	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-8	0.05	0.0075	0.04	No	14	0.01761	0.01768	21.43	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-9	0.01366	0.003046	0.04	No	14	0.01191	0.01652	14.29	None	ln(x)	0.01	Param.
Mercury (mg/L)	MW-10	0.0002	0.0002	0.002	No	10	0.0001889	0.0000351	90	None	No	0.011	NP (NDs)

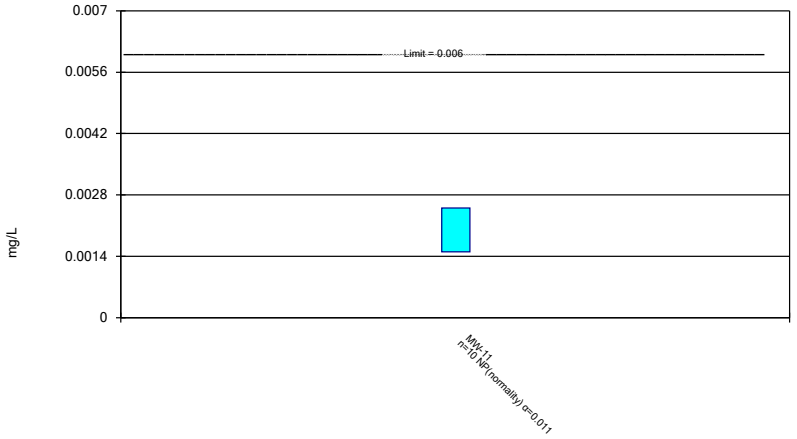
Confidence Intervals - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 3/16/2020, 1:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	MW-10	0.015	0.0018	0.1	No	14	0.007798	0.006521	42.86	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-11	0.01596	0.009636	0.1	No	14	0.0128	0.004466	7.143	None	No	0.01	Param.
Molybdenum (mg/L)	MW-13	0.02872	0.01311	0.1	No	14	0.02091	0.01102	7.143	None	No	0.01	Param.
Molybdenum (mg/L)	MW-14	0.01824	0.01381	0.1	No	14	0.01602	0.003129	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.015	0.0011	0.1	No	14	0.01401	0.003715	92.86	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.015	0.005	0.1	No	14	0.009157	0.004689	35.71	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-9	0.015	0.0023	0.1	No	14	0.01066	0.006117	64.29	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-10	0.0013	0.00041	0.05	No	12	0.001138	0.0003791	83.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-11	0.0013	0.00051	0.05	No	12	0.0009925	0.0003829	58.33	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-13	0.0013	0.00044	0.05	No	12	0.001113	0.000364	75	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-14	0.0013	0.00041	0.05	No	12	0.001138	0.0003812	83.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-6	0.0013	0.00027	0.05	No	12	0.001041	0.0004505	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-7	0.0013	0.00028	0.05	No	12	0.00099	0.0004661	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-8	0.0013	0.00032	0.05	No	12	0.001053	0.0004011	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-9	0.0013	0.00035	0.05	No	12	0.00114	0.0003737	83.33	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

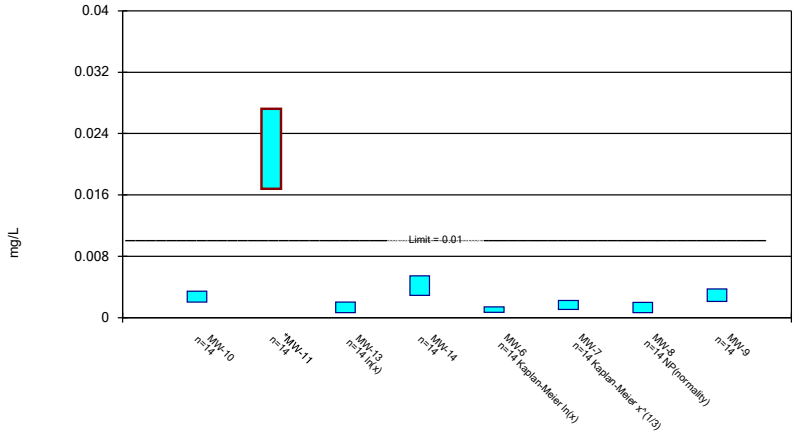
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

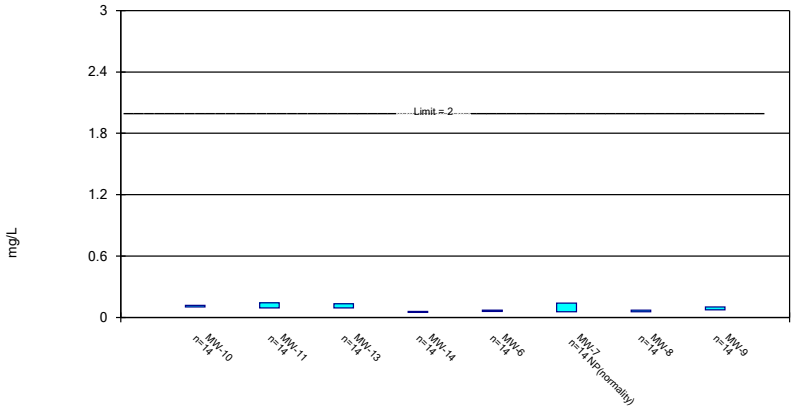
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

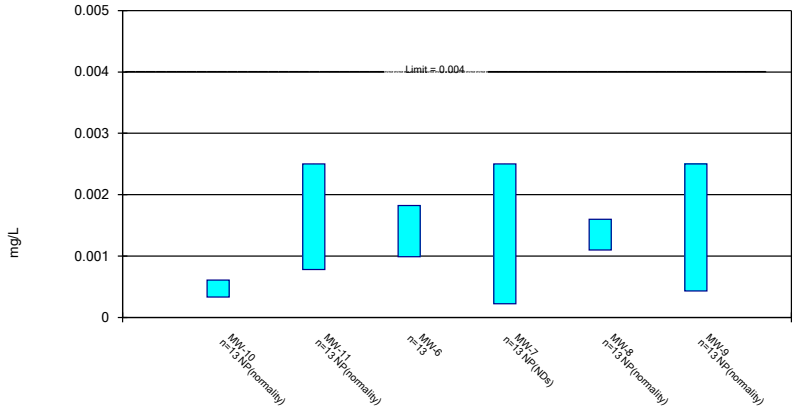
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

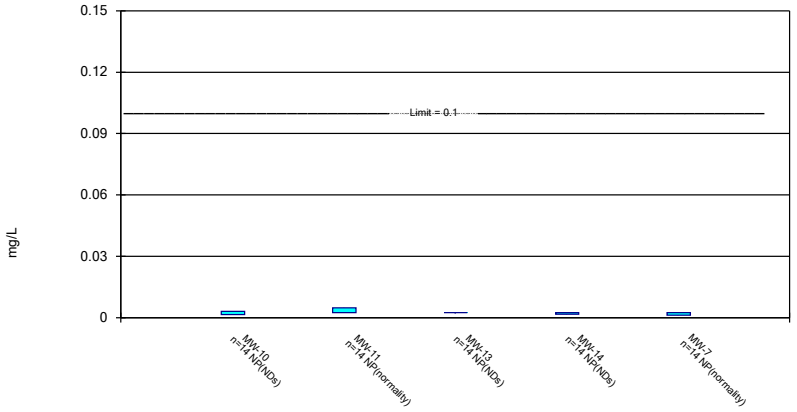
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

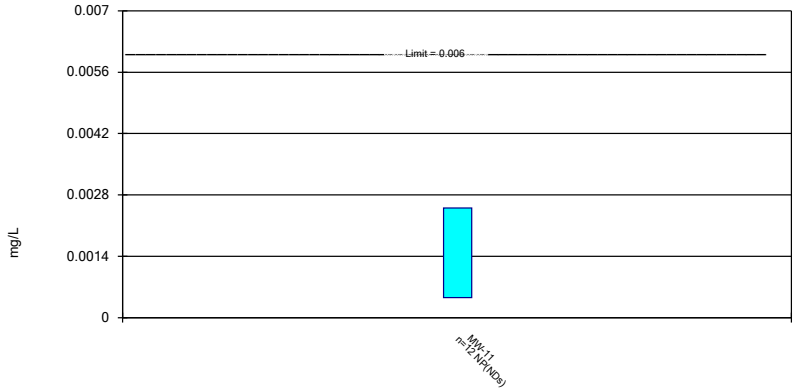
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

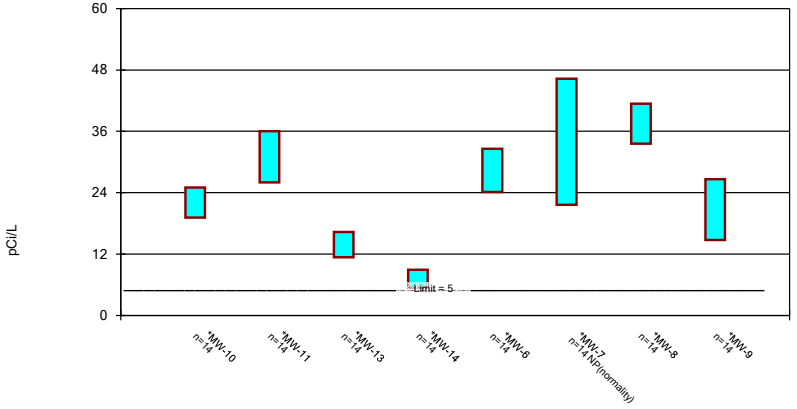
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cobalt Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

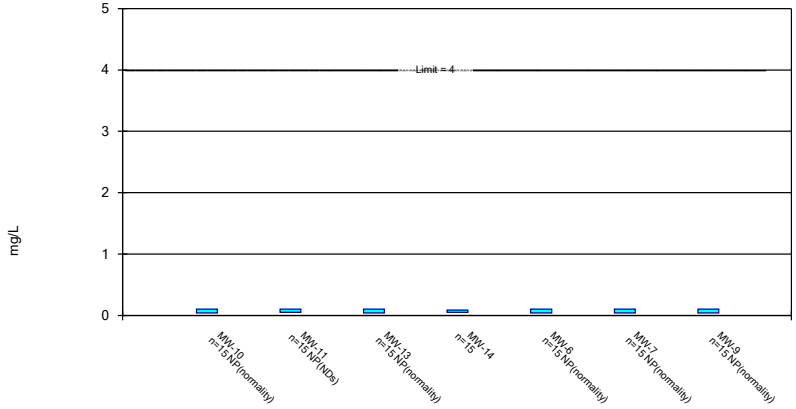
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

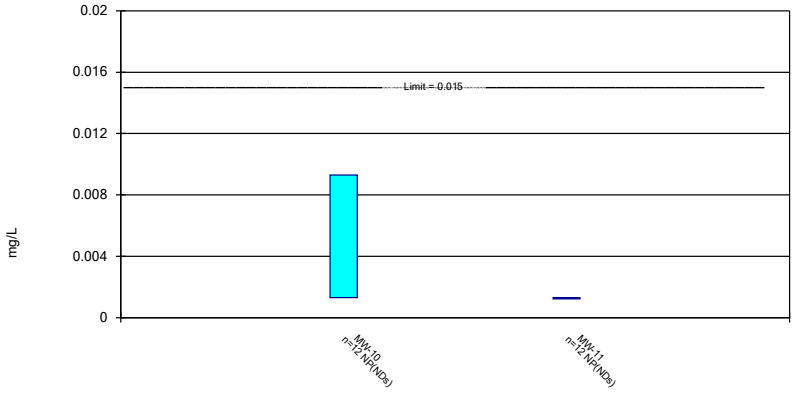
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

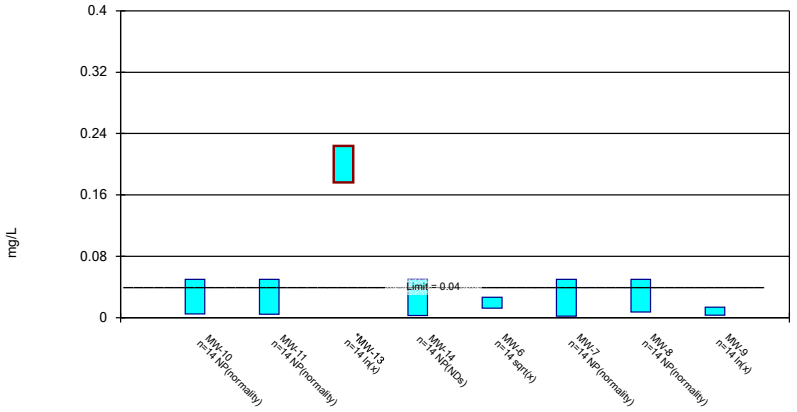
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

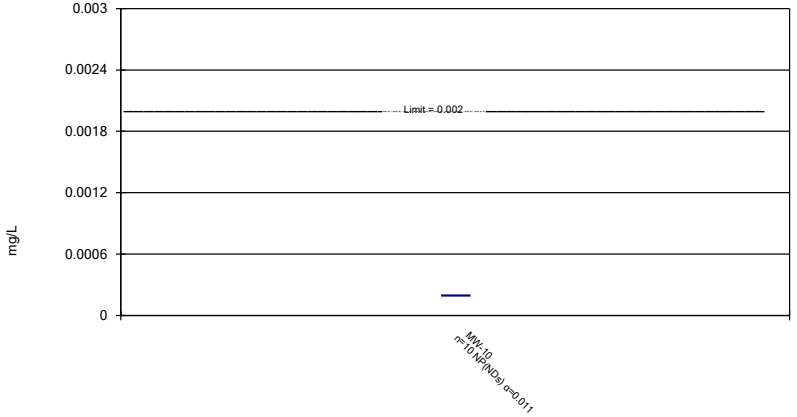
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

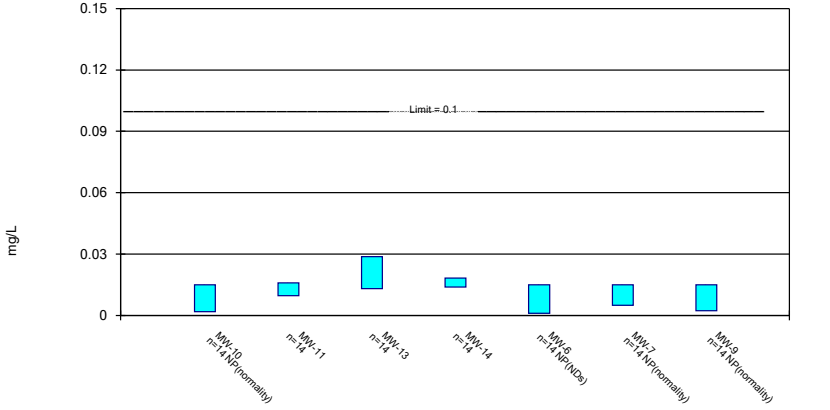
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

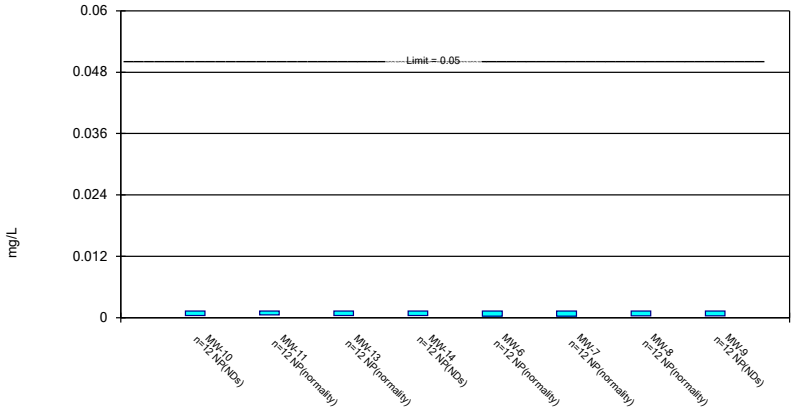
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/16/2020 1:06 PM View: App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



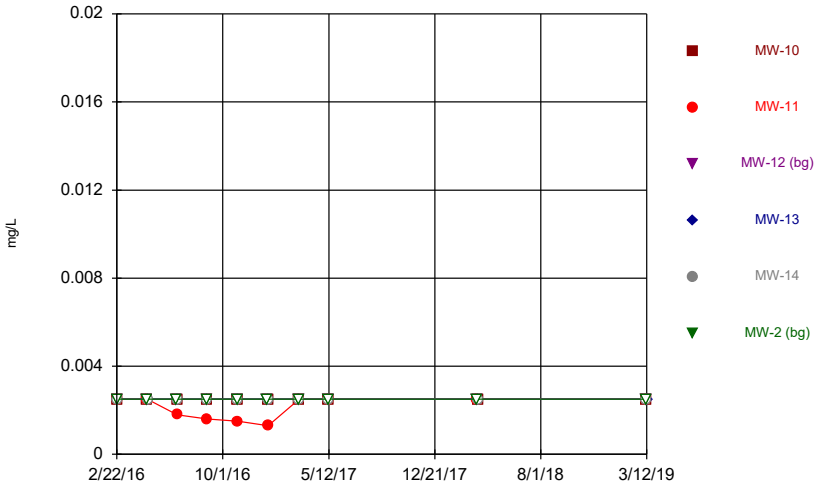
Constituent: Selenium Analysis Run 3/16/2020 1:06 PM View: App IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

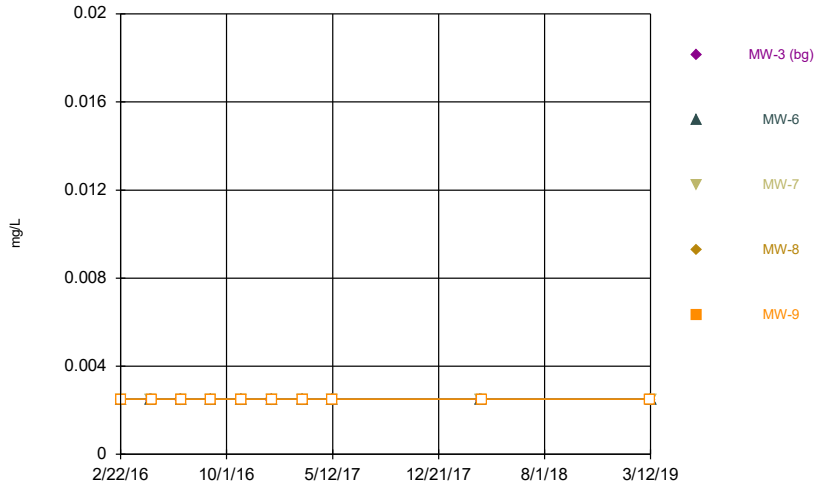
Time Series



Constituent: Antimony Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

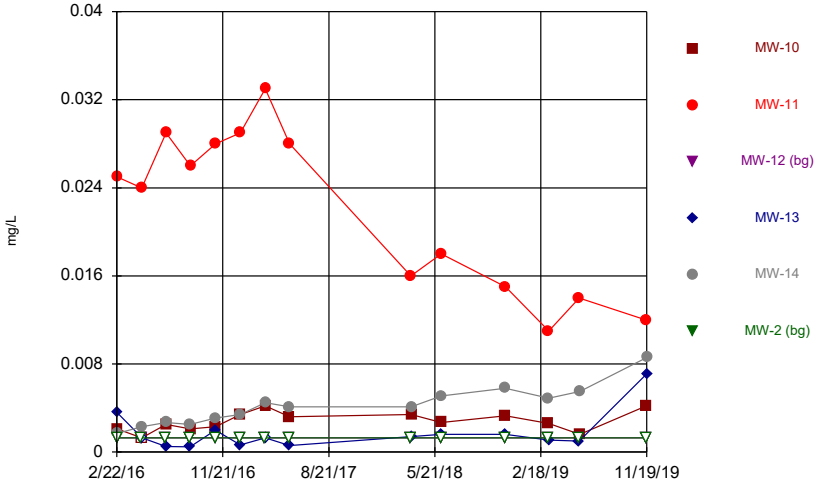
Time Series



Constituent: Antimony Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

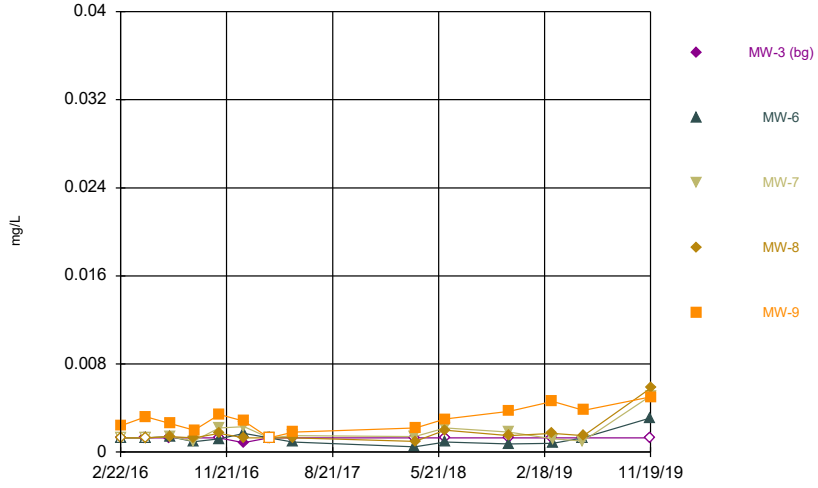
Time Series



Constituent: Arsenic Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Arsenic Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0025	<0.0025			<0.0025
2/23/2016	<0.0025			<0.0025	<0.0025	
4/25/2016						<0.0025
4/26/2016	<0.0025	<0.0025	<0.0025			
4/27/2016				<0.0025	<0.0025	
6/27/2016			<0.0025			<0.0025
6/28/2016	<0.0025	0.0018 (J)		<0.0025	<0.0025	
8/29/2016			<0.0025	<0.0025	<0.0025	<0.0025
8/30/2016	<0.0025	0.0016 (J)				
11/1/2016			<0.0025			<0.0025
11/2/2016				<0.0025		
11/3/2016	<0.0025	0.0015 (J)			<0.0025	
1/4/2017			<0.0025			<0.0025
1/5/2017	<0.0025	0.0013 (J)		<0.0025	<0.0025	
3/10/2017			<0.0025			<0.0025
3/11/2017	<0.0025	<0.0025 (*)		<0.0025	<0.0025	
5/11/2017			<0.0025			<0.0025
5/12/2017	<0.0025	<0.0025		<0.0025	<0.0025	
3/20/2018			<0.0025			
3/21/2018		<0.0025				<0.0025
3/22/2018	<0.0025			<0.0025	<0.0025	
3/11/2019	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
3/12/2019				<0.0025		

Time Series

Constituent: Antimony (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0025				
2/23/2016		<0.0025	<0.0025	<0.0025	<0.0025
4/25/2016	<0.0025				
4/26/2016		<0.0025	<0.0025		
4/27/2016				<0.0025	<0.0025
6/27/2016	<0.0025				
6/28/2016		<0.0025	<0.0025	<0.0025	<0.0025
8/29/2016	<0.0025	<0.0025	<0.0025	<0.0025	
8/30/2016					<0.0025
11/1/2016	<0.0025				
11/2/2016		<0.0025	<0.0025	<0.0025	
11/3/2016					<0.0025
1/4/2017	<0.0025				
1/5/2017		<0.0025	<0.0025	<0.0025	<0.0025
3/10/2017	<0.0025				
3/11/2017		<0.0025	<0.0025	<0.0025	<0.0025
5/11/2017	<0.0025	<0.0025			
5/12/2017			<0.0025	<0.0025	<0.0025
3/20/2018	<0.0025				
3/21/2018		<0.0025	<0.0025		
3/22/2018				<0.0025	
3/23/2018					<0.0025
3/11/2019	<0.0025			<0.0025	<0.0025
3/12/2019		<0.0025	<0.0025		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.025	<0.0013			<0.0013
2/23/2016	0.0021 (J)			0.0036 (J)	0.0017 (J)	
4/25/2016						<0.0013
4/26/2016	<0.0013	0.024	<0.0013			
4/27/2016				<0.0013	0.0023 (J)	
6/27/2016			<0.0013			<0.0013
6/28/2016	0.0025	0.029		0.00051 (J)	0.0027	
8/29/2016			<0.0013	0.00047 (J)	0.0025	<0.0013
8/30/2016	0.0021	0.026				
11/1/2016			<0.0013			<0.0013
11/2/2016				0.002		
11/3/2016	0.0023	0.028			0.0031	
1/4/2017			<0.0013			<0.0013
1/5/2017	0.0034	0.029		0.00066 (J)	0.0034	
3/10/2017			<0.0013			<0.0013 (*)
3/11/2017	0.0042	0.033		<0.0013 (*)	0.0045	
5/11/2017			<0.0013			<0.0013
5/12/2017	0.0032	0.028		0.0006 (J)	0.0041	
3/20/2018			<0.0013			
3/21/2018		0.016				<0.0013
3/22/2018	0.0034			0.0014	0.0041	
6/6/2018			<0.0013			<0.0013
6/7/2018	0.0027	0.018		0.0016	0.0051	
11/19/2018			<0.0013	0.0016	0.0058	<0.0013
11/20/2018	0.0033	0.015				
3/11/2019	0.0026	0.011	<0.0013		0.0049	<0.0013
3/12/2019				0.0011 (J)		
5/28/2019			<0.0013			<0.0013
5/29/2019		0.014		0.001 (J)		
5/30/2019	0.0016				0.0055	
11/18/2019	0.0042	0.012	<0.0013			<0.0013
11/19/2019				0.0071	0.0086	

Time Series

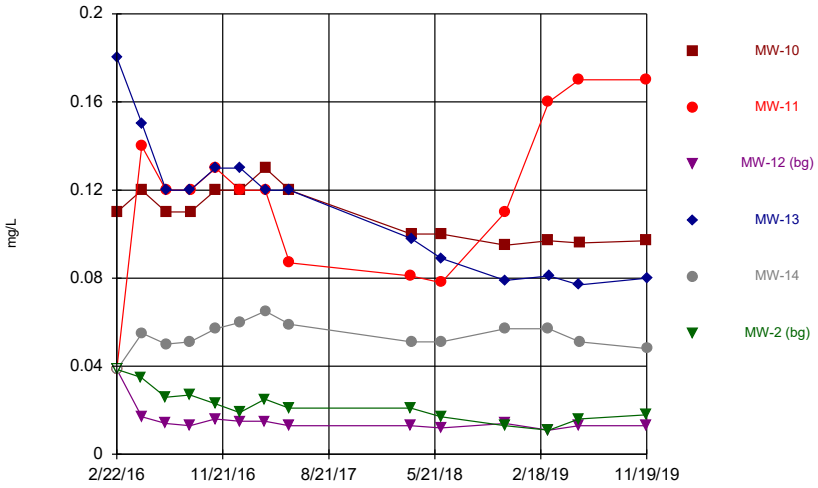
Constituent: Arsenic (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0013				
2/23/2016		<0.0013	<0.0013	<0.0013	0.0024 (J)
4/25/2016	<0.0013				
4/26/2016		<0.0013	<0.0013		
4/27/2016				<0.0013	0.0032 (J)
6/27/2016	<0.0013				
6/28/2016		0.0014	0.0014	0.0014	0.0026
8/29/2016	<0.0013	0.00095 (J)	0.001 (J)	0.0013	
8/30/2016					0.002
11/1/2016	<0.0013				
11/2/2016		0.0012 (J)	0.0022	0.0017	
11/3/2016					0.0034
1/4/2017	0.00085 (J)				
1/5/2017		0.0017	0.0023	0.0013	0.0028
3/10/2017	<0.0013				
3/11/2017		<0.0013 (*)	<0.0013 (*)	<0.0013 (*)	<0.0013 (*)
5/11/2017	<0.0013	0.0009 (J)			
5/12/2017			0.0015	0.0013	0.0018
3/20/2018	<0.0013				
3/21/2018		0.00048 (J)	0.0014		
3/22/2018				0.00097 (J)	
3/23/2018					0.0022
6/6/2018	<0.0013				
6/7/2018				0.002	0.003
6/8/2018		0.0009 (J)	0.0022		
11/19/2018	<0.0013	0.00075 (J)	0.0018	0.0015	
11/20/2018					0.0037
3/11/2019	<0.0013			0.0017	0.0046
3/12/2019		0.00079 (J)	0.0012 (J)		
5/28/2019	<0.0013				
5/29/2019		<0.0013	0.00099 (J)		
5/30/2019				0.0015	0.0038
11/18/2019	<0.0013	0.0031			
11/19/2019			0.0051	0.0058	0.005

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

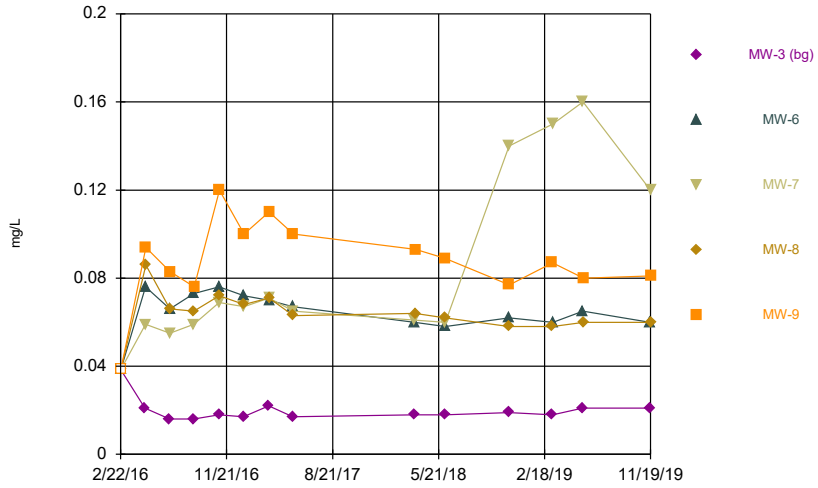
Time Series



Constituent: Barium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

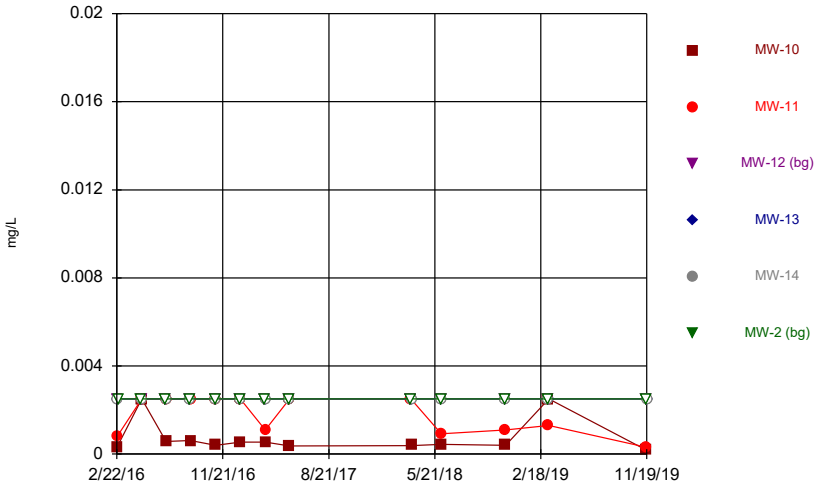
Time Series



Constituent: Barium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

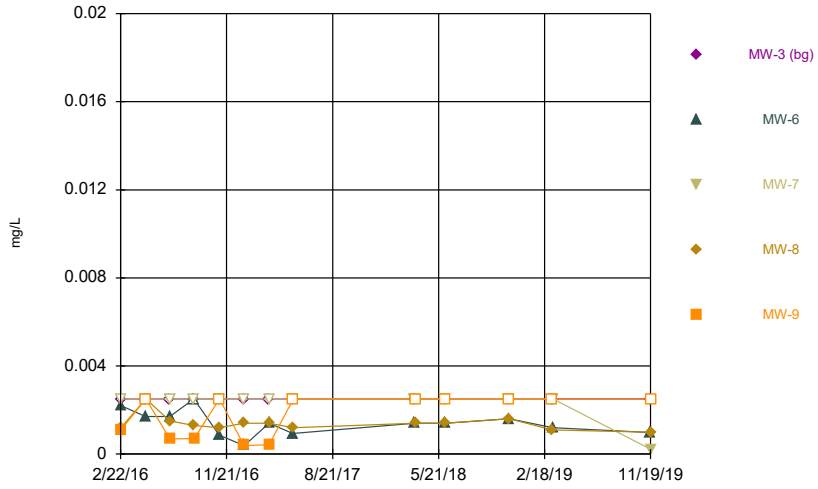
Time Series



Constituent: Beryllium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Barium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.077 (*)	<0.077 (*)			<0.077 (*)
2/23/2016	0.11			0.18	<0.077 (*)	
4/25/2016						0.035
4/26/2016	0.12	0.14	0.017			
4/27/2016				0.15	0.055	
6/27/2016			0.014			0.026
6/28/2016	0.11	0.12		0.12	0.05	
8/29/2016			0.013	0.12	0.051	0.027
8/30/2016	0.11	0.12				
11/1/2016			0.016			0.023
11/2/2016				0.13		
11/3/2016	0.12	0.13			0.057	
1/4/2017			0.015			0.019
1/5/2017	0.12	0.12		0.13	0.06	
3/10/2017			0.015			0.025
3/11/2017	0.13	0.12		0.12	0.065	
5/11/2017			0.013			0.021
5/12/2017	0.12	0.087		0.12	0.059	
3/20/2018			0.013			
3/21/2018		0.081				0.021
3/22/2018	0.1			0.098	0.051	
6/6/2018			0.012			0.017
6/7/2018	0.1	0.078		0.089	0.051	
11/19/2018			0.014	0.079	0.057	0.013
11/20/2018	0.095	0.11				
3/11/2019	0.097	0.16	0.011		0.057	0.011
3/12/2019				0.081		
5/28/2019			0.013			0.016
5/29/2019		0.17		0.077		
5/30/2019	0.096				0.051	
11/18/2019	0.097	0.17	0.013			0.018
11/19/2019				0.08	0.048	

Time Series

Constituent: Barium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.077 (*)				
2/23/2016		<0.077 (*)	<0.077 (*)	<0.077 (*)	<0.077 (*)
4/25/2016	0.021				
4/26/2016		0.076	0.059		
4/27/2016				0.086	0.094
6/27/2016	0.016				
6/28/2016		0.066	0.055	0.066	0.083
8/29/2016	0.016	0.073	0.059	0.065	
8/30/2016					0.076
11/1/2016	0.018				
11/2/2016		0.076	0.069	0.072	
11/3/2016					0.12
1/4/2017	0.017				
1/5/2017		0.072	0.067	0.068	0.1
3/10/2017	0.022				
3/11/2017		0.07	0.071	0.071	0.11
5/11/2017	0.017	0.067			
5/12/2017			0.065	0.063	0.1
3/20/2018	0.018				
3/21/2018		0.06	0.061		
3/22/2018				0.064	
3/23/2018					0.093
6/6/2018	0.018				
6/7/2018				0.062	0.089
6/8/2018		0.058	0.06		
11/19/2018	0.019	0.062	0.14	0.058	
11/20/2018					0.077
3/11/2019	0.018			0.058	0.087
3/12/2019		0.06	0.15		
5/28/2019	0.021				
5/29/2019		0.065	0.16		
5/30/2019				0.06	0.08
11/18/2019	0.021	0.06			
11/19/2019			0.12	0.06	0.081

Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.00078 (J)	<0.0025			
2/23/2016	0.00033 (J)			<0.0025	<0.0025	
2/26/2016						<0.0025
4/25/2016						<0.0025
4/26/2016	<0.0025	<0.0025	<0.0025			
4/27/2016				<0.0025	<0.0025	
6/27/2016			<0.0025			<0.0025
6/28/2016	0.00057 (J)	<0.0025		<0.0025	<0.0025	
8/29/2016			<0.0025	<0.0025	<0.0025	<0.0025
8/30/2016	0.00061 (J)	<0.0025				
11/1/2016			<0.0025			<0.0025
11/2/2016				<0.0025		
11/3/2016	0.0004 (J)	<0.0025			<0.0025	
1/4/2017			<0.0025			<0.0025
1/5/2017	0.00055 (J)	<0.0025		<0.0025	<0.0025	
3/10/2017			<0.0025			<0.0025
3/11/2017	0.00054 (J)	0.0011 (J)		<0.0025	<0.0025	
5/11/2017			<0.0025			<0.0025
5/12/2017	0.00037 (J)	<0.0025		<0.0025	<0.0025	
3/20/2018			<0.0025			
3/21/2018		0.0025				<0.0025
3/22/2018	0.00039 (J)			<0.0025	<0.0025	
6/6/2018			<0.0025			<0.0025
6/7/2018	0.00044 (J)	0.00092 (J)		<0.0025	<0.0025	
11/19/2018			<0.0025	<0.0025	<0.0025	<0.0025
11/20/2018	0.0004 (J)	0.0011 (J)				
3/11/2019	<0.0025	0.0013 (J)	<0.0025		<0.0025	<0.0025
3/12/2019				<0.0025		
11/18/2019	0.00018 (J)	0.00031 (J)	<0.0025			<0.0025
11/19/2019				<0.0025	<0.0025	

Time Series

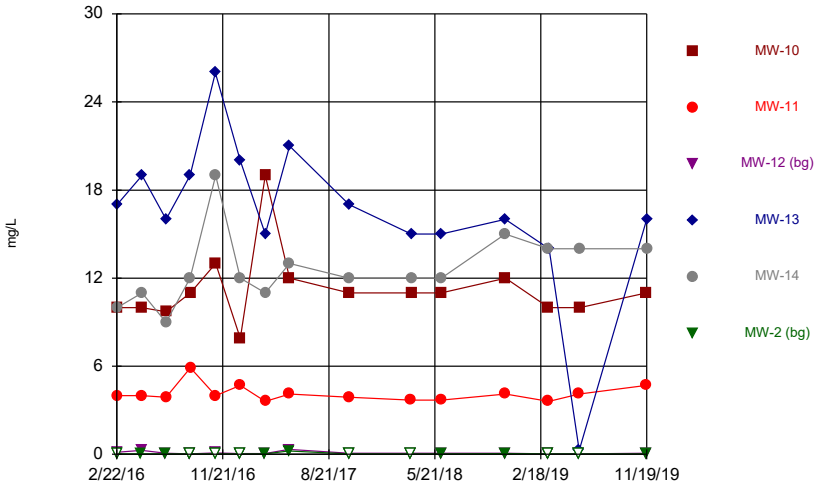
Constituent: Beryllium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0025				
2/23/2016		0.0022 (J)	<0.0025	0.0012 (J)	0.0011 (J)
4/25/2016	<0.0025				
4/26/2016		0.0017 (J)	<0.0025		
4/27/2016				<0.0025	<0.0025
6/27/2016	<0.0025				
6/28/2016		0.0017 (J)	<0.0025	0.0015 (J)	0.00069 (J)
8/29/2016	<0.0025	<0.0025	<0.0025	0.0013 (J)	
8/30/2016					0.0007 (J)
11/1/2016	<0.0025				
11/2/2016		0.00087 (J)	<0.0025	0.0012 (J)	
11/3/2016					<0.0025
1/4/2017	<0.0025				
1/5/2017		0.00039 (J)	<0.0025	0.0014 (J)	0.00039 (J)
3/10/2017	<0.0025				
3/11/2017		0.0014 (J)	<0.0025	0.0014 (J)	0.00043 (J)
5/11/2017	<0.0025	0.00093 (J)			
5/12/2017			<0.0025	0.0012 (J)	<0.0025
3/20/2018	<0.0025				
3/21/2018		0.0014 (J)	<0.0025		
3/22/2018				0.0014 (J)	
3/23/2018					<0.0025
6/6/2018	<0.0025				
6/7/2018				0.0014 (J)	<0.0025
6/8/2018		0.0014 (J)	<0.0025		
11/19/2018	<0.0025	0.0016 (J)	<0.0025	0.0016 (J)	
11/20/2018					<0.0025
3/11/2019	<0.0025			0.0011 (J)	<0.0025
3/12/2019		0.0012 (J)	<0.0025		
11/18/2019	<0.0025	0.00098 (J)			
11/19/2019			0.00022 (J)	0.001 (J)	<0.0025

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

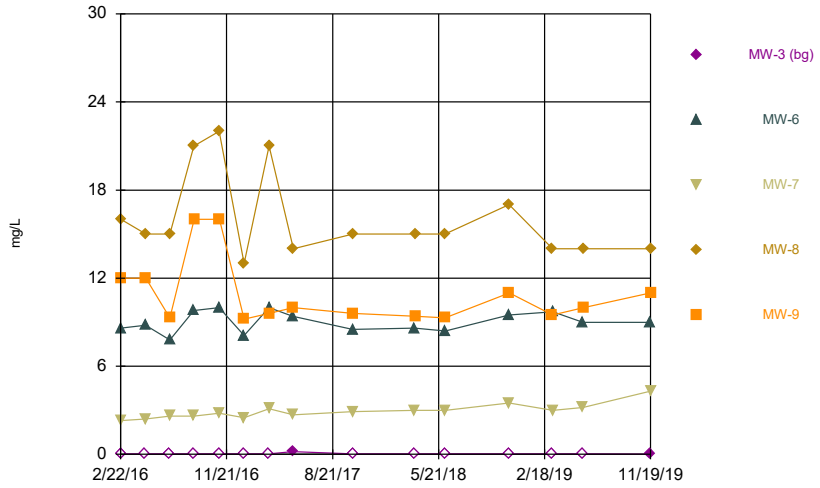
Time Series



Constituent: Boron Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

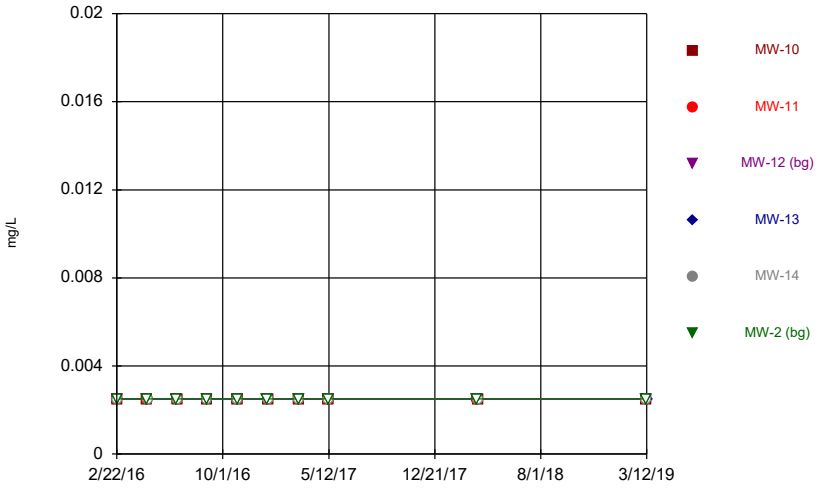
Time Series



Constituent: Boron Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

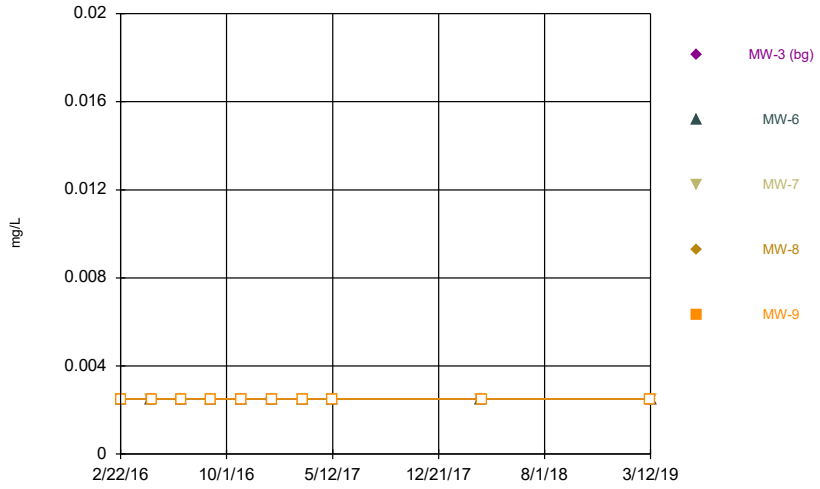
Time Series



Constituent: Cadmium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Boron (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		4	0.14 (J)			<0.05
2/23/2016	10			17	10	
4/25/2016						0.022 (J)
4/26/2016	10	4	0.27			
4/27/2016				19	11	
6/27/2016			0.083			0.032 (J)
6/28/2016	9.7	3.9		16	9	
8/29/2016			<0.05 (*)	19	12	<0.05 (*)
8/30/2016	11	5.9				
11/1/2016			0.1			<0.05
11/2/2016				26		
11/3/2016	13	4			19	
1/4/2017			0.062			<0.05
1/5/2017	7.9	4.7		20	12	
3/10/2017			0.06			0.032 (J)
3/11/2017	19	3.6		15	11	
5/11/2017			0.33			0.23
5/12/2017	12	4.1		21	13	
10/12/2017			0.082			<0.05
10/13/2017	11	3.9		17	12	
3/20/2018			0.072			
3/21/2018		3.7				<0.05
3/22/2018	11			15	12	
6/6/2018			0.077			0.027 (J)
6/7/2018	11	3.7		15	12	
11/19/2018			0.071	16	15	0.045 (J)
11/20/2018	12	4.1				
3/11/2019	10	3.6	<0.05		14	<0.05
3/12/2019				14		
5/28/2019			0.024 (J)			<0.05
5/29/2019		4.1		0.28		
5/30/2019	10				14	
11/18/2019	11 (J3)	4.7 (J3)	0.075			0.036 (V)
11/19/2019				16 (J3)	14 (J3)	

Time Series

Constituent: Boron (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.05				
2/23/2016		8.6	2.3	16	12
4/25/2016	<0.05				
4/26/2016		8.8	2.4		
4/27/2016				15	12
6/27/2016	<0.05				
6/28/2016		7.8	2.6	15	9.3
8/29/2016	<0.05	9.8	2.6	21	
8/30/2016					16
11/1/2016	<0.05				
11/2/2016		10	2.8	22	
11/3/2016					16
1/4/2017	<0.05				
1/5/2017		8.1	2.5	13	9.2
3/10/2017	<0.05				
3/11/2017		10	3.1	21	9.6
5/11/2017	0.18	9.4			
5/12/2017			2.7	14	10
10/12/2017	<0.05	8.5	2.9		
10/13/2017				15	9.6
3/20/2018	<0.05				
3/21/2018		8.6	3		
3/22/2018				15	
3/23/2018					9.4
6/6/2018	<0.05				
6/7/2018				15	9.3
6/8/2018		8.4	3		
11/19/2018	<0.05	9.5	3.5	17	
11/20/2018					11
3/11/2019	<0.05			14	9.5
3/12/2019		9.7	3		
5/28/2019	<0.05				
5/29/2019		9	3.2		
5/30/2019				14	10
11/18/2019	0.0094 (IV)	9 (J3)			
11/19/2019			4.3 (J3)	14 (J3)	11 (J3)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0025	<0.0025			<0.0025
2/23/2016	<0.0025			<0.0025	<0.0025	
4/25/2016						<0.0025
4/26/2016	<0.0025	<0.0025	<0.0025			
4/27/2016				<0.0025	<0.0025	
6/27/2016			<0.0025			<0.0025
6/28/2016	<0.0025	<0.0025		<0.0025	<0.0025	
8/29/2016			<0.0025	<0.0025	<0.0025	<0.0025
8/30/2016	<0.0025	<0.0025				
11/1/2016			<0.0025			<0.0025
11/2/2016				<0.0025		
11/3/2016	<0.0025	<0.0025			<0.0025	
1/4/2017			<0.0025			<0.0025
1/5/2017	<0.0025	<0.0025		<0.0025	<0.0025	
3/10/2017			<0.0025			<0.0025
3/11/2017	<0.0025	<0.0025		<0.0025	<0.0025	
5/11/2017			<0.0025			<0.0025
5/12/2017	<0.0025	<0.0025		<0.0025	<0.0025	
3/20/2018			<0.0025			
3/21/2018		<0.0025				<0.0025
3/22/2018	<0.0025			<0.0025	<0.0025	
3/11/2019	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
3/12/2019				<0.0025		

Time Series

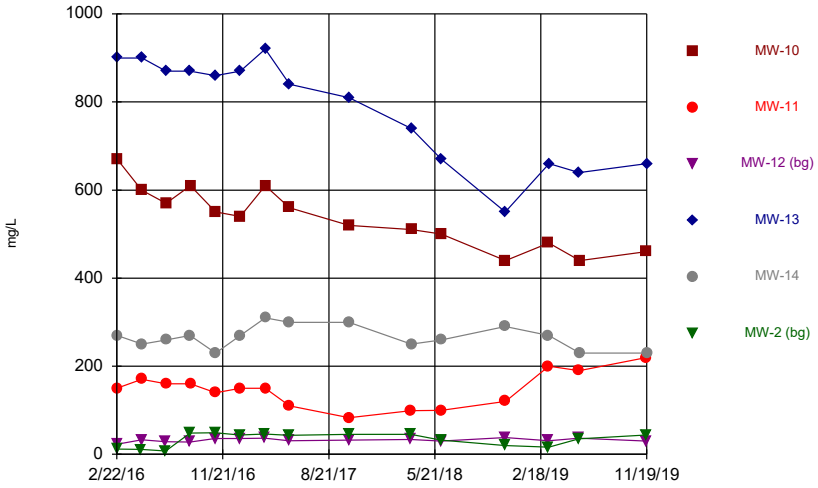
Constituent: Cadmium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0025				
2/23/2016		<0.0025	<0.0025	<0.0025	<0.0025
4/25/2016	<0.0025				
4/26/2016		<0.0025	<0.0025		
4/27/2016				<0.0025	<0.0025
6/27/2016	<0.0025				
6/28/2016		<0.0025	<0.0025	<0.0025	<0.0025
8/29/2016	<0.0025	<0.0025	<0.0025	<0.0025	
8/30/2016					<0.0025
11/1/2016	<0.0025				
11/2/2016		<0.0025	<0.0025	<0.0025	
11/3/2016					<0.0025
1/4/2017	<0.0025				
1/5/2017		<0.0025	<0.0025	<0.0025	<0.0025
3/10/2017	<0.0025				
3/11/2017		<0.0025	<0.0025	<0.0025	<0.0025
5/11/2017	<0.0025	<0.0025			
5/12/2017			<0.0025	<0.0025	<0.0025
3/20/2018	<0.0025				
3/21/2018		<0.0025	<0.0025		
3/22/2018				<0.0025	
3/23/2018					<0.0025
3/11/2019	<0.0025			<0.0025	<0.0025
3/12/2019		<0.0025	<0.0025		

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

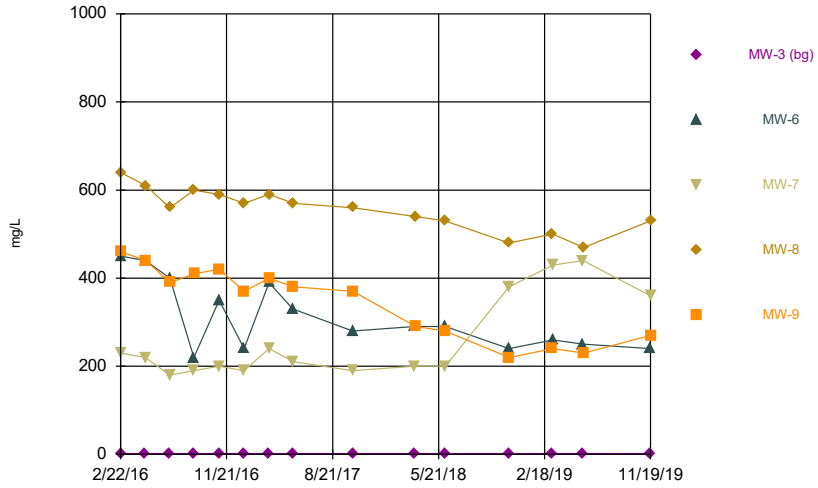
Time Series



Constituent: Calcium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

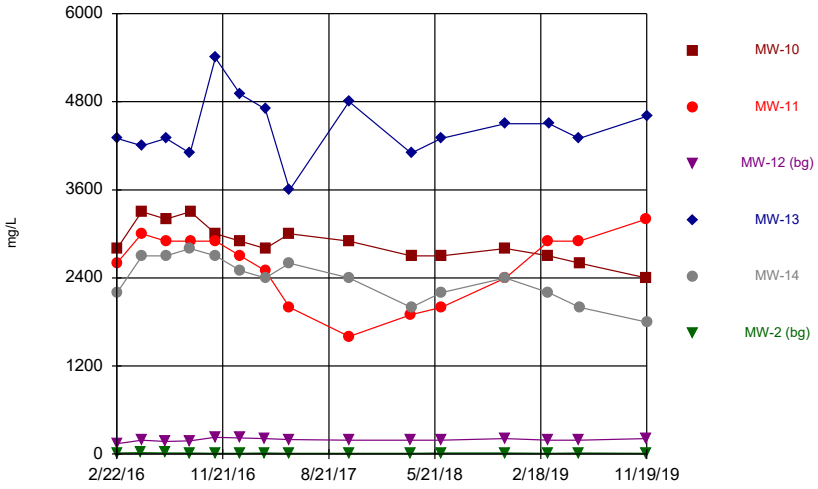
Time Series



Constituent: Calcium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

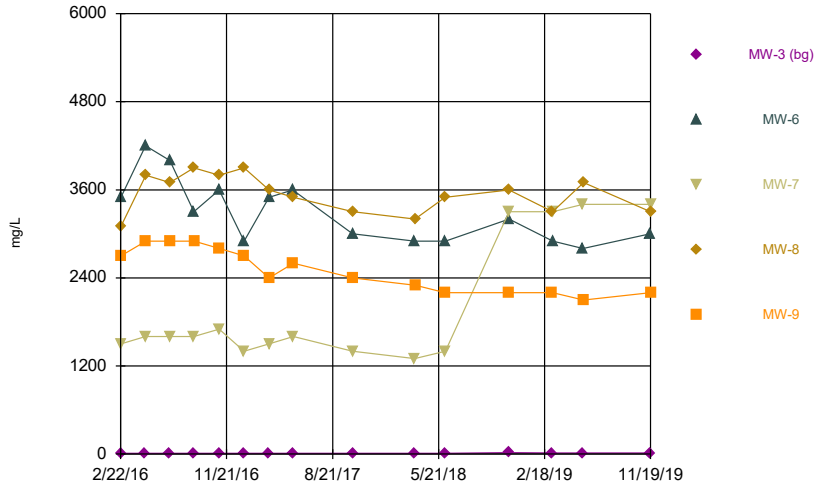
Time Series



Constituent: Chloride Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Time Series



Constituent: Chloride Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Calcium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		150	23			12
2/23/2016	670			900	270	
4/25/2016						11
4/26/2016	600	170	33			
4/27/2016				900	250	
6/27/2016			29			7.7
6/28/2016	570	160		870	260	
8/29/2016			28	870	270	48
8/30/2016	610	160				
11/1/2016			36			49
11/2/2016				860		
11/3/2016	550	140			230	
1/4/2017			36			44
1/5/2017	540	150		870	270	
3/10/2017			37			46
3/11/2017	610	150		920	310	
5/11/2017			31			43
5/12/2017	560	110		840	300	
10/12/2017			32			45
10/13/2017	520	83		810	300	
3/20/2018			34			
3/21/2018		99				45
3/22/2018	510			740	250	
6/6/2018			30			32
6/7/2018	500	100		670	260	
11/19/2018			38	550	290	20
11/20/2018	440	120				
3/11/2019	480	200	31		270	16
3/12/2019				660		
5/28/2019			37			35
5/29/2019		190		640		
5/30/2019	440				230	
11/18/2019	460	220	30			44
11/19/2019				660	230	

Time Series

Constituent: Calcium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	1.9				
2/23/2016		450	230	640	460
4/25/2016	1.8				
4/26/2016		440	220		
4/27/2016				610	440
6/27/2016	1.7				
6/28/2016		400	180	560	390
8/29/2016	1.7	220	190	600	
8/30/2016					410
11/1/2016	1.9				
11/2/2016		350	200	590	
11/3/2016					420
1/4/2017	1.8				
1/5/2017		240	190	570	370
3/10/2017	1.9				
3/11/2017		390	240	590	400
5/11/2017	1.7	330			
5/12/2017			210	570	380
10/12/2017	1.9	280	190		
10/13/2017				560	370
3/20/2018	1.9				
3/21/2018		290	200		
3/22/2018				540	
3/23/2018					290
6/6/2018	1.8				
6/7/2018				530	280
6/8/2018		290	200		
11/19/2018	1.8	240	380	480	
11/20/2018					220
3/11/2019	1.9			500	240
3/12/2019		260	430		
5/28/2019	2.1				
5/29/2019		250	440		
5/30/2019				470	230
11/18/2019	1.9	240			
11/19/2019			360	530	270

Time Series

Constituent: Chloride (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		2600	140			15
2/23/2016	2800			4300	2200	
4/25/2016						18
4/26/2016	3300	3000	190			
4/27/2016				4200	2700	
6/27/2016			170			17
6/28/2016	3200	2900		4300	2700	
8/29/2016			180	4100	2800	16
8/30/2016	3300	2900				
11/1/2016			230			11
11/2/2016				5400		
11/3/2016	3000	2900			2700	
1/4/2017			220			11
1/5/2017	2900	2700		4900	2500	
3/10/2017			210			14
3/11/2017	2800	2500		4700	2400	
5/11/2017			200			11
5/12/2017	3000	2000		3600	2600	
10/12/2017			190			12
10/13/2017	2900	1600		4800	2400	
3/20/2018			190			
3/21/2018		1900				9.3
3/22/2018	2700			4100	2000	
6/6/2018			190			13
6/7/2018	2700	2000		4300	2200	
11/19/2018			210	4500	2400	13
11/20/2018	2800	2400				
3/11/2019	2700	2900	190		2200	12
3/12/2019				4500		
5/28/2019			190			13
5/29/2019		2900		4300		
5/30/2019	2600				2000	
11/18/2019	2400	3200	210			12
11/19/2019				4600	1800	

Time Series

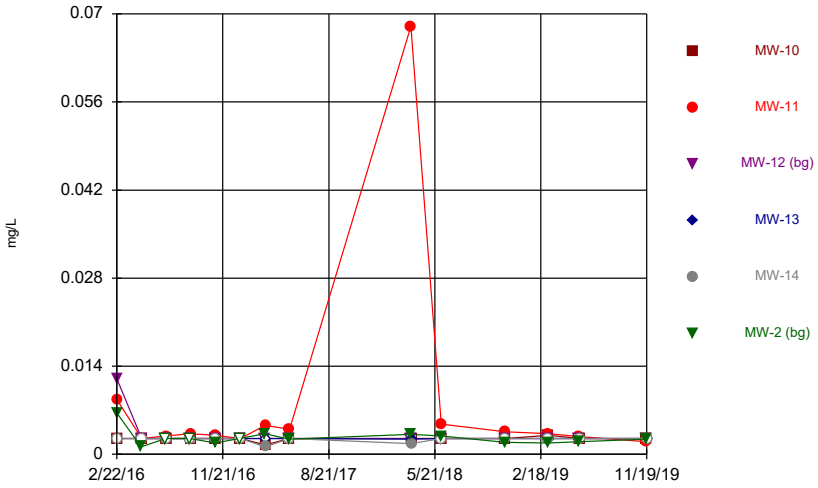
Constituent: Chloride (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	11				
2/23/2016		3500	1500	3100	2700
4/25/2016	10				
4/26/2016		4200	1600		
4/27/2016				3800	2900
6/27/2016	11				
6/28/2016		4000	1600	3700	2900
8/29/2016	11	3300	1600	3900	
8/30/2016					2900
11/1/2016	11				
11/2/2016		3600	1700	3800	
11/3/2016					2800
1/4/2017	11				
1/5/2017		2900	1400	3900	2700
3/10/2017	11				
3/11/2017		3500	1500	3600	2400
5/11/2017	12	3600			
5/12/2017			1600	3500	2600
10/12/2017	12	3000	1400		
10/13/2017				3300	2400
3/20/2018	11				
3/21/2018		2900	1300		
3/22/2018				3200	
3/23/2018					2300
6/6/2018	11				
6/7/2018				3500	2200
6/8/2018		2900	1400		
11/19/2018	19.9 (D)	3200	3300	3600	
11/20/2018					2200
3/11/2019	13			3300	2200
3/12/2019		2900	3300		
5/28/2019	13				
5/29/2019		2800	3400		
5/30/2019				3700	2100
11/18/2019	14	3000			
11/19/2019			3400	3300	2200

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

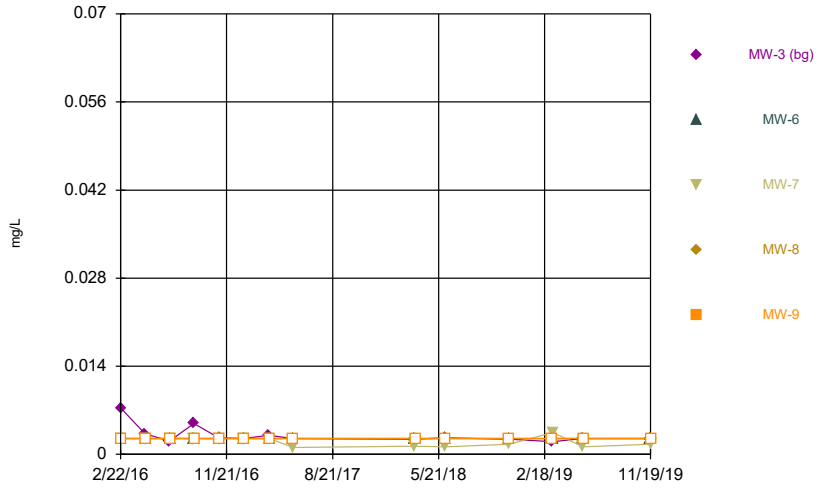
Time Series



Constituent: Chromium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

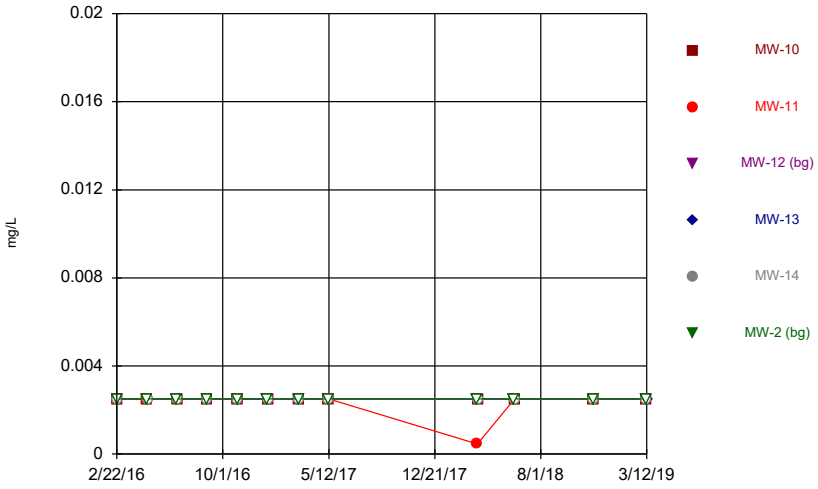
Time Series



Constituent: Chromium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

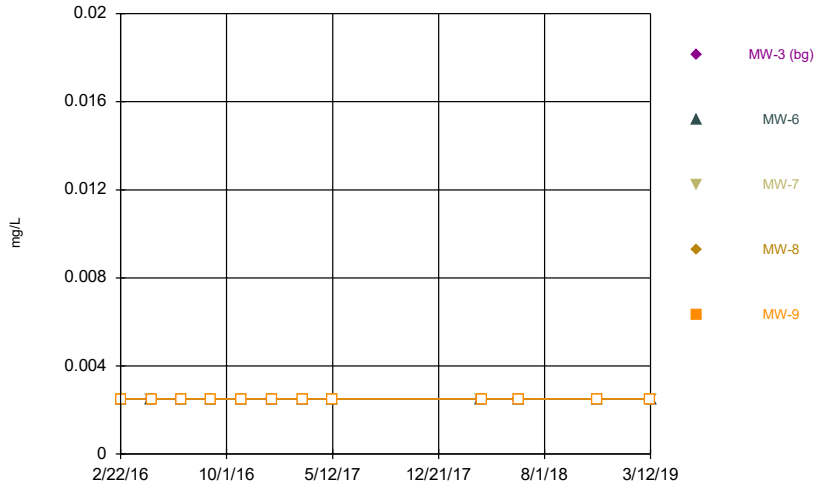
Time Series



Constituent: Cobalt Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Chromium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.0087 (J)	0.012 (J)			0.0066 (JV)
2/23/2016	<0.0025			<0.0025	<0.0025	
4/25/2016						0.0012 (J)
4/26/2016	<0.0025	<0.0025	<0.0025			
4/27/2016				<0.0025	<0.0025	
6/27/2016			<0.0025			<0.0025
6/28/2016	<0.0025	0.0029		<0.0025	<0.0025	
8/29/2016			<0.0025	<0.0025	<0.0025	<0.0025
8/30/2016	<0.0025	0.0033				
11/1/2016			<0.0025			0.0018 (J)
11/2/2016				<0.0025		
11/3/2016	<0.0025	0.003			<0.0025	
1/4/2017			<0.0025			<0.0025 (*)
1/5/2017	<0.0025	<0.0025 (*)		<0.0025	<0.0025	
3/10/2017			<0.0025			0.0033
3/11/2017	0.0015 (J)	0.0046		<0.0025	0.0012 (J)	
5/11/2017			<0.0025			0.0024 (J)
5/12/2017	<0.0025	0.004		<0.0025	<0.0025	
3/20/2018			<0.0025			
3/21/2018		0.068				0.0032
3/22/2018	<0.0025			0.0024 (J)	0.0017 (J)	
6/6/2018			<0.0025			0.0029
6/7/2018	<0.0025	0.0048		<0.0025	<0.0025	
11/19/2018			<0.0025	<0.0025	<0.0025	0.0019 (J)
11/20/2018	<0.0025	0.0036				
3/11/2019	0.003	0.0033	<0.0025		<0.0025	0.0018 (J)
3/12/2019				<0.0025		
5/28/2019			<0.0025			0.002 (J)
5/29/2019		0.0028		<0.0025		
5/30/2019	<0.0025				<0.0025	
11/18/2019	<0.0025	0.002 (I)	<0.0025			0.0024 (I)
11/19/2019				<0.0025	<0.0025	

Time Series

Constituent: Chromium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	0.0074 (J)				
2/23/2016		<0.0025	<0.0025	<0.0025	<0.0025
4/25/2016	0.0033				
4/26/2016		<0.0025	<0.0025		
4/27/2016				<0.0025	<0.0025
6/27/2016	0.0021 (J)				
6/28/2016		<0.0025	<0.0025	<0.0025	<0.0025
8/29/2016	0.0049	<0.0025	<0.0025	<0.0025	
8/30/2016					<0.0025
11/1/2016	0.0026				
11/2/2016		<0.0025	<0.0025	<0.0025	
11/3/2016					<0.0025
1/4/2017	<0.0025 (*)				
1/5/2017		<0.0025	<0.0025 (*)	<0.0025	<0.0025
3/10/2017	0.003				
3/11/2017		<0.0025	0.0025	<0.0025	<0.0025
5/11/2017	<0.0025	<0.0025			
5/12/2017			0.0011 (J)	<0.0025	<0.0025
3/20/2018	0.0024 (J)				
3/21/2018		<0.0025	0.0013 (J)		
3/22/2018				<0.0025	
3/23/2018					<0.0025
6/6/2018	0.0026				
6/7/2018				<0.0025	<0.0025
6/8/2018		<0.0025	0.0012 (J)		
11/19/2018	0.0024 (J)	<0.0025	0.0016 (J)	<0.0025	
11/20/2018					<0.0025
3/11/2019	0.002 (J)			<0.0025	<0.0025
3/12/2019		<0.0025	0.0035		
5/28/2019	<0.0025				
5/29/2019		<0.0025	0.0012 (J)		
5/30/2019				<0.0025	<0.0025
11/18/2019	<0.0025	<0.0025			
11/19/2019			0.0016 (I)	<0.0025	<0.0025

Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0025	<0.0025			<0.0025
2/23/2016	<0.0025			<0.0025	<0.0025	
4/25/2016						<0.0025
4/26/2016	<0.0025	<0.0025	<0.0025			
4/27/2016				<0.0025	<0.0025	
6/27/2016			<0.0025			<0.0025
6/28/2016	<0.0025	<0.0025		<0.0025	<0.0025	
8/29/2016			<0.0025	<0.0025	<0.0025	<0.0025
8/30/2016	<0.0025	<0.0025				
11/1/2016			<0.0025			<0.0025
11/2/2016				<0.0025		
11/3/2016	<0.0025	<0.0025			<0.0025	
1/4/2017			<0.0025			<0.0025
1/5/2017	<0.0025	<0.0025		<0.0025	<0.0025	
3/10/2017			<0.0025			<0.0025
3/11/2017	<0.0025	<0.0025		<0.0025	<0.0025	
5/11/2017			<0.0025			<0.0025
5/12/2017	<0.0025	<0.0025		<0.0025	<0.0025	
3/20/2018			<0.0025			
3/21/2018		0.00046 (J)				<0.0025
3/22/2018	<0.0025			<0.0025	<0.0025	
6/6/2018			<0.0025			<0.0025
6/7/2018	<0.0025	<0.0025		<0.0025	<0.0025	
11/19/2018			<0.0025	<0.0025	<0.0025	<0.0025
11/20/2018	<0.0025	<0.0025				
3/11/2019	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
3/12/2019				<0.0025		

Time Series

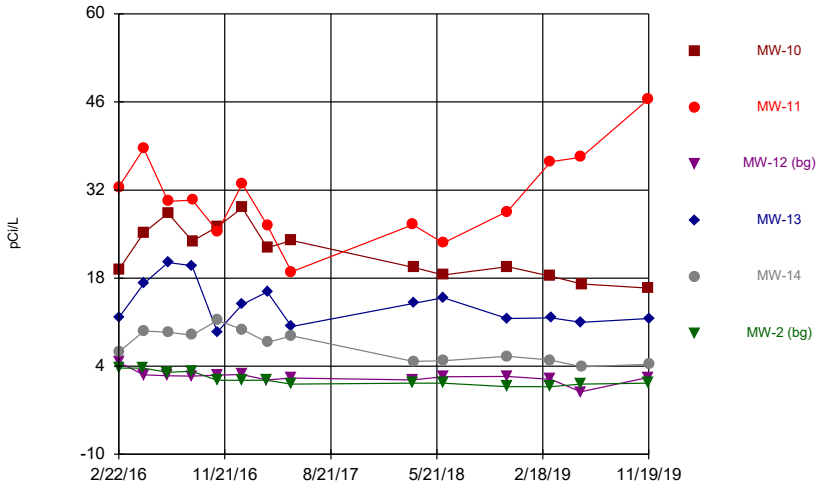
Constituent: Cobalt (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0025				
2/23/2016		<0.0025	<0.0025	<0.0025	<0.0025
4/25/2016	<0.0025				
4/26/2016		<0.0025	<0.0025		
4/27/2016				<0.0025	<0.0025
6/27/2016	<0.0025				
6/28/2016		<0.0025	<0.0025	<0.0025	<0.0025
8/29/2016	<0.0025	<0.0025	<0.0025	<0.0025	
8/30/2016					<0.0025
11/1/2016	<0.0025				
11/2/2016		<0.0025	<0.0025	<0.0025	
11/3/2016					<0.0025
1/4/2017	<0.0025				
1/5/2017		<0.0025	<0.0025	<0.0025	<0.0025
3/10/2017	<0.0025				
3/11/2017		<0.0025	<0.0025	<0.0025	<0.0025
5/11/2017	<0.0025	<0.0025			
5/12/2017			<0.0025	<0.0025	<0.0025
3/20/2018	<0.0025				
3/21/2018		<0.0025	<0.0025		
3/22/2018				<0.0025	
3/23/2018					<0.0025
6/6/2018	<0.0025				
6/7/2018				<0.0025	<0.0025
6/8/2018		<0.0025	<0.0025		
11/19/2018	<0.0025	<0.0025	<0.0025	<0.0025	
11/20/2018					<0.0025
3/11/2019	<0.0025			<0.0025	<0.0025
3/12/2019		<0.0025	<0.0025		

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

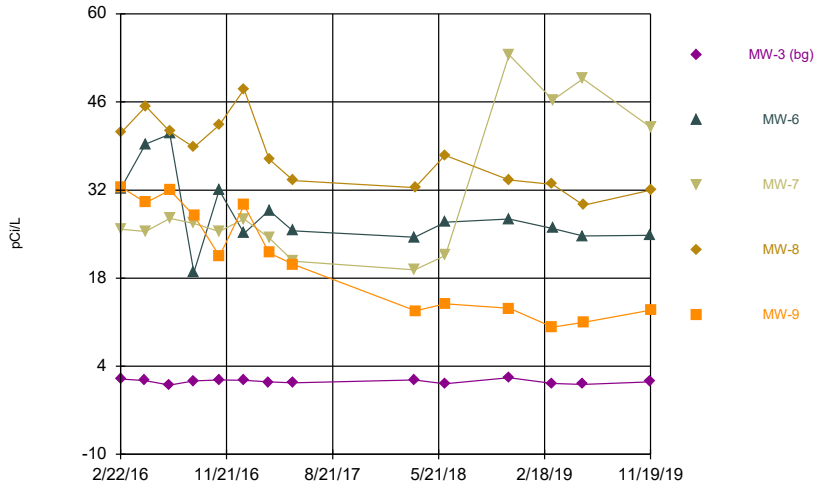
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

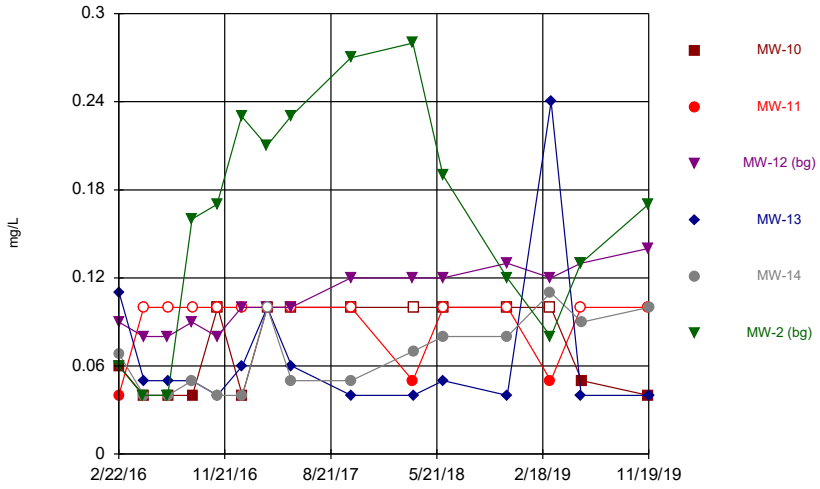
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

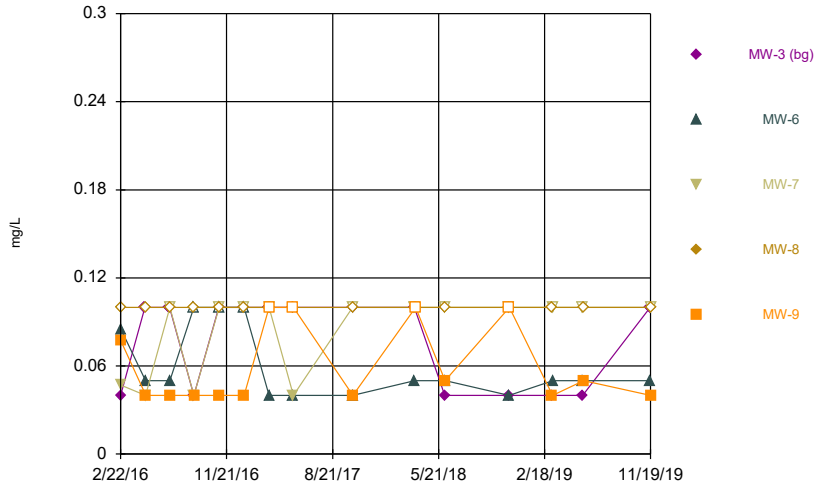
Time Series



Constituent: Fluoride Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		32.5	4.64			3.71
2/23/2016	19.4			11.8	6.3	
4/25/2016						3.7
4/26/2016	25.2	38.6	2.65			
4/27/2016				17.2	9.6	
6/27/2016			2.49			3.04
6/28/2016	28.3	30.2		20.5	9.41	
8/29/2016			2.45	20	8.93	3.2
8/30/2016	23.9	30.4				
11/1/2016			2.59			1.75
11/2/2016				9.47	11.3	
11/3/2016	26.2	25.4				
1/4/2017			2.69			1.79
1/5/2017	29.2	33		13.8	9.88	
3/10/2017			1.84			1.78
3/11/2017	22.8	26.4		15.8	7.75	
5/11/2017			2.12			1.14
5/12/2017	24	19		10.3	8.83	
3/20/2018			1.81			
3/21/2018		26.5				1.32
3/22/2018	19.7			14	4.78	
6/6/2018			2.32			1.32
6/7/2018	18.5	23.6		14.9	4.88	
11/19/2018			2.37	11.6	5.59	0.763
11/20/2018	19.8	28.6				
3/11/2019	18.3	36.5	1.93		4.99	0.777
3/12/2019				11.7		
5/28/2019			-0.0564 (U)			1.16
5/29/2019		37.2		11		
5/30/2019	17.1				3.89	
11/18/2019	16.4	46.4	2.25			1.31
11/19/2019				11.6	4.31	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	1.96				
2/23/2016		32.3	25.8	41.1	32.5
4/25/2016	1.71				
4/26/2016		39.3	25.4		
4/27/2016				45.3	30
6/27/2016	1				
6/28/2016		40.9	27.5	41.3	32
8/29/2016	1.69	18.9	26.7	38.8	
8/30/2016					27.9
11/1/2016	1.83				
11/2/2016		32	25.4	42.3	
11/3/2016					21.5
1/4/2017	1.75				
1/5/2017		25.1	27.4	48	29.6
3/10/2017	1.5				
3/11/2017		28.8	24.4	36.9	22
5/11/2017	1.34	25.5			
5/12/2017			20.7	33.5	20.2
3/20/2018	1.82				
3/21/2018		24.5	19.3		
3/22/2018				32.4	
3/23/2018					12.8
6/6/2018	1.19				
6/7/2018				37.5	13.9
6/8/2018		26.9	21.6		
11/19/2018	2.18	27.4	53.5	33.6	
11/20/2018					13.2
3/11/2019	1.24			32.9	10.2
3/12/2019		25.9	46.3		
5/28/2019	1.13				
5/29/2019		24.7	49.7		
5/30/2019				29.6	11
11/18/2019	1.52	24.8			
11/19/2019			42	32	12.9

Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.04 (J)	0.09 (J)			0.06 (J)
2/23/2016	0.06 (J)			0.11	0.068 (J)	
4/25/2016						0.04 (J)
4/26/2016	0.04 (J)	<0.1	0.08 (J)			
4/27/2016				0.05 (J)	0.04 (J)	
6/27/2016			0.08 (J)			0.04 (J)
6/28/2016	0.04 (J)	<0.1		0.05 (J)	0.04 (J)	
8/29/2016			0.09 (J)	0.05 (J)	0.05 (J)	0.16
8/30/2016	0.04 (J)	<0.1				
11/1/2016			0.08 (J)			0.17
11/2/2016				0.04 (J)		
11/3/2016	<0.1	<0.1			0.04 (J)	
1/4/2017			0.1			0.23
1/5/2017	0.04 (J)	<0.1		0.06 (J)	0.04 (J)	
3/10/2017			0.1			0.21
3/11/2017	<0.1	<0.1		<0.1	<0.1	
5/11/2017			0.1			0.23
5/12/2017	<0.1	<0.1		0.06 (J)	0.05 (J)	
10/12/2017			0.12			0.27
10/13/2017	<0.1	<0.1		0.04	0.05	
3/20/2018			0.12			
3/21/2018		0.05 (J)				0.28
3/22/2018	<0.1			0.04 (J)	0.07 (J)	
6/6/2018			0.12			0.19
6/7/2018	<0.1	<0.1		0.05 (J)	0.08 (J)	
11/19/2018			0.13	0.04 (J)	0.08 (J)	0.12
11/20/2018	<0.1	<0.1				
3/11/2019	<0.1	0.05 (J)	0.12		0.11	0.08 (J)
3/12/2019				0.24		
5/28/2019			0.13			0.13
5/29/2019		<0.1		0.04 (J)		
5/30/2019	0.05 (J)				0.09 (J)	
11/18/2019	0.04 (I)	<0.1	0.14			0.17
11/19/2019				0.04 (I)	0.1	

Time Series

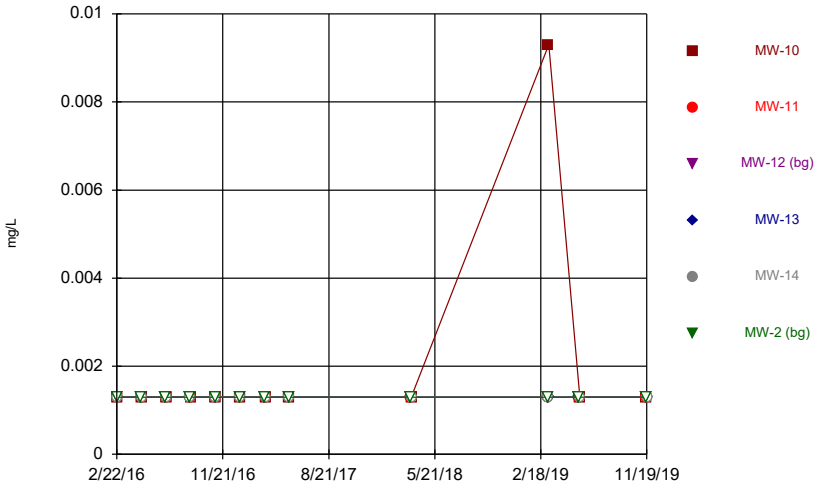
Constituent: Fluoride (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	0.04 (J)				
2/23/2016		0.085 (J)	0.047 (J)	<0.1	0.077 (J)
4/25/2016	<0.1				
4/26/2016		0.05 (J)	0.04 (J)		
4/27/2016				<0.1	0.04 (J)
6/27/2016	<0.1				
6/28/2016		0.05 (J)	<0.1	<0.1	0.04 (J)
8/29/2016	0.04 (J)	<0.1	0.04 (J)	<0.1	
8/30/2016					0.04 (J)
11/1/2016	<0.1				
11/2/2016		<0.1	<0.1	<0.1	
11/3/2016					0.04 (J)
1/4/2017	<0.1				
1/5/2017		<0.1	<0.1	<0.1	0.04 (J)
3/10/2017	<0.1				
3/11/2017		0.04 (J)	<0.1	<0.1	<0.1
5/11/2017	<0.1	0.04 (J)			
5/12/2017			0.04 (J)	<0.1	<0.1
10/12/2017	<0.1	0.04	<0.1		
10/13/2017				<0.1	0.04
3/20/2018	<0.1				
3/21/2018		0.05 (J)	<0.1		
3/22/2018				<0.1	
3/23/2018					<0.1
6/6/2018	0.04 (J)				
6/7/2018				<0.1	0.05 (J)
6/8/2018		0.05 (J)	<0.1		
11/19/2018	0.04 (J)	0.04 (J)	<0.1	<0.1	
11/20/2018					<0.1
3/11/2019	0.04 (J)			<0.1	0.04 (J)
3/12/2019		0.05 (J)	<0.1		
5/28/2019	0.04 (J)				
5/29/2019		0.05 (J)	<0.1		
5/30/2019				<0.1	0.05 (J)
11/18/2019	<0.1	0.05 (I)			
11/19/2019			<0.1	<0.1	0.04 (I)

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

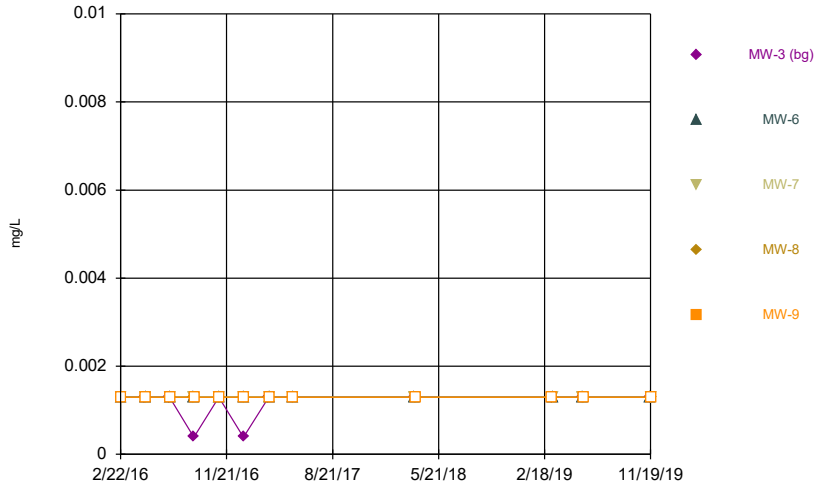
Time Series



Constituent: Lead Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

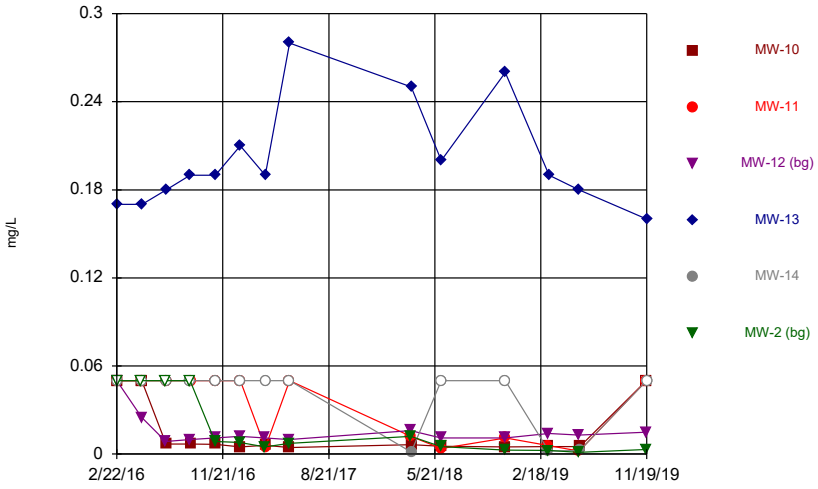
Time Series



Constituent: Lead Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

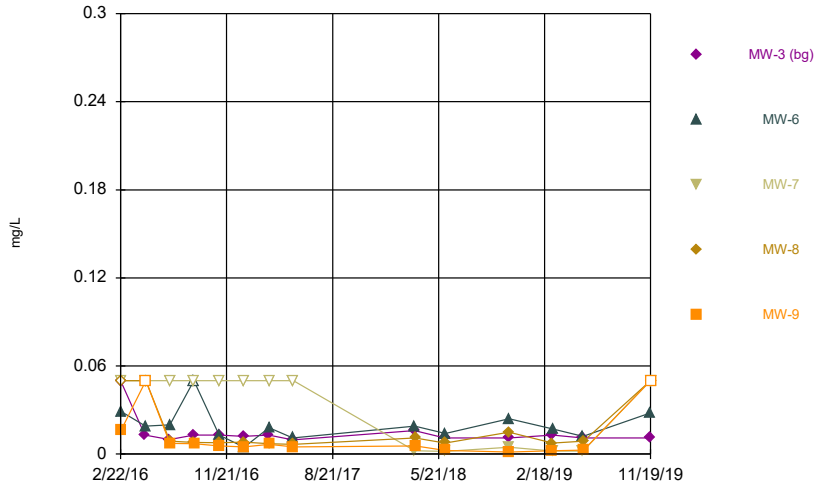
Time Series



Constituent: Lithium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lithium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Lead (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0013	<0.0013			<0.0013
2/23/2016	<0.0013			<0.0013	<0.0013	
4/25/2016						<0.0013
4/26/2016	<0.0013	<0.0013	<0.0013			
4/27/2016				<0.0013	<0.0013	
6/27/2016			<0.0013			<0.0013
6/28/2016	<0.0013	<0.0013		<0.0013	<0.0013	
8/29/2016			<0.0013	<0.0013	<0.0013	<0.0013
8/30/2016	<0.0013	<0.0013				
11/1/2016			<0.0013			<0.0013
11/2/2016				<0.0013		
11/3/2016	<0.0013	<0.0013			<0.0013	
1/4/2017			<0.0013			<0.0013
1/5/2017	<0.0013	<0.0013		<0.0013	<0.0013	
3/10/2017			<0.0013			<0.0013
3/11/2017	<0.0013	<0.0013		<0.0013	<0.0013	
5/11/2017			<0.0013			<0.0013
5/12/2017	<0.0013	<0.0013		<0.0013	<0.0013	
3/20/2018			<0.0013			
3/21/2018		<0.0013				<0.0013
3/22/2018	<0.0013			<0.0013	<0.0013	
3/11/2019	0.0093	<0.0013	<0.0013		<0.0013	<0.0013
3/12/2019				<0.0013		
5/28/2019			<0.0013			<0.0013
5/29/2019		0.0013		<0.0013		
5/30/2019	<0.0013				<0.0013	
11/18/2019	<0.0013	<0.0013	<0.0013			<0.0013
11/19/2019				<0.0013	<0.0013	

Time Series

Constituent: Lead (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0013				
2/23/2016		<0.0013	<0.0013	<0.0013	<0.0013
4/25/2016	<0.0013				
4/26/2016		<0.0013	<0.0013		
4/27/2016				<0.0013	<0.0013
6/27/2016	<0.0013				
6/28/2016		<0.0013	<0.0013	<0.0013	<0.0013
8/29/2016	0.00039 (J)	<0.0013	<0.0013	<0.0013	
8/30/2016					<0.0013
11/1/2016	<0.0013				
11/2/2016		<0.0013	<0.0013	<0.0013	
11/3/2016					<0.0013
1/4/2017	0.00039 (J)				
1/5/2017		<0.0013	<0.0013	<0.0013	<0.0013
3/10/2017	<0.0013				
3/11/2017		<0.0013	<0.0013	<0.0013	<0.0013
5/11/2017	<0.0013	<0.0013			
5/12/2017			<0.0013	<0.0013	<0.0013
3/20/2018	<0.0013				
3/21/2018		<0.0013	<0.0013		
3/22/2018				<0.0013	
3/23/2018					<0.0013
3/11/2019	<0.0013			<0.0013	<0.0013
3/12/2019		<0.0013	<0.0013		
5/28/2019	<0.0013				
5/29/2019		<0.0013	<0.0013		
5/30/2019				<0.0013	<0.0013
11/18/2019	<0.0013	<0.0013			
11/19/2019			<0.0013	<0.0013	<0.0013

Time Series

Constituent: Lithium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.05	<0.05			<0.05
2/23/2016	<0.05			0.17	<0.05	
4/25/2016						<0.05
4/26/2016	<0.05	<0.05	0.025			
4/27/2016				0.17	<0.05	
6/27/2016			0.0085			<0.05
6/28/2016	0.0069	<0.05		0.18	<0.05	
8/29/2016			0.01	0.19	<0.05	<0.05
8/30/2016	0.0069	<0.05				
11/1/2016			0.011			0.0087
11/2/2016				0.19		
11/3/2016	0.0067	<0.05			<0.05	
1/4/2017			0.012			0.0079
1/5/2017	0.0049 (J)	<0.05		0.21	<0.05	
3/10/2017			0.011			0.0049 (J)
3/11/2017	0.006	0.0044 (J)		0.19	<0.05	
5/11/2017			0.0098			0.0073
5/12/2017	0.0044 (J)	<0.05		0.28	<0.05	
3/20/2018			0.016			
3/21/2018		0.012				0.012
3/22/2018	0.0065			0.25	0.0013 (J)	
6/6/2018			0.011			0.0051
6/7/2018	0.0054	0.0038 (J)		0.2	<0.05	
11/19/2018			0.011	0.26	<0.05	0.0028 (J)
11/20/2018	0.0048 (J)	0.011				
3/11/2019	0.0051	0.0058	0.014		0.002 (J)	0.0024 (J)
3/12/2019				0.19		
5/28/2019			0.013			0.0012 (J)
5/29/2019		0.0021 (J)		0.18		
5/30/2019	0.0051				0.0026 (J)	
11/18/2019	<0.05	<0.05	0.015			0.0032
11/19/2019				0.16	<0.05	

Time Series

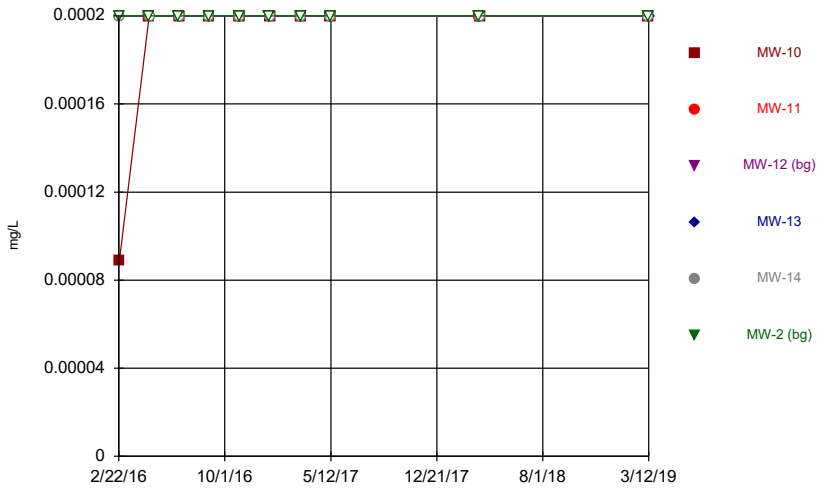
Constituent: Lithium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.05				
2/23/2016		0.029	<0.05	<0.05	0.016
4/25/2016	0.013				
4/26/2016		0.019 (J)	<0.05		
4/27/2016				<0.05	<0.05
6/27/2016	0.01				
6/28/2016		0.02	<0.05	0.0089	0.0072
8/29/2016	0.013	<0.05	<0.05	0.008	
8/30/2016					0.0071
11/1/2016	0.013				
11/2/2016		0.013	<0.05	0.0078	
11/3/2016					0.0055
1/4/2017	0.012				
1/5/2017		0.0047 (J)	<0.05	0.0081	0.0049 (J)
3/10/2017	0.013				
3/11/2017		0.018	<0.05	0.007	0.0067
5/11/2017	0.0096	0.011			
5/12/2017			<0.05	0.0067	0.0048 (J)
3/20/2018	0.016				
3/21/2018		0.019	0.0023 (J)		
3/22/2018				0.011	
3/23/2018					0.0056
6/6/2018	0.011				
6/7/2018				0.0076	0.0026 (J)
6/8/2018		0.014	0.0018 (J)		
11/19/2018	0.011	0.024	0.0047 (J)	0.015	
11/20/2018					0.0013 (J)
3/11/2019	0.013			0.0075	0.0023 (J)
3/12/2019		0.017	0.002 (J)		
5/28/2019	0.011				
5/29/2019		0.012	0.002 (J)		
5/30/2019				0.0089	0.0028 (J)
11/18/2019	0.011	0.028 (I)			
11/19/2019			<0.05	<0.05	<0.05

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

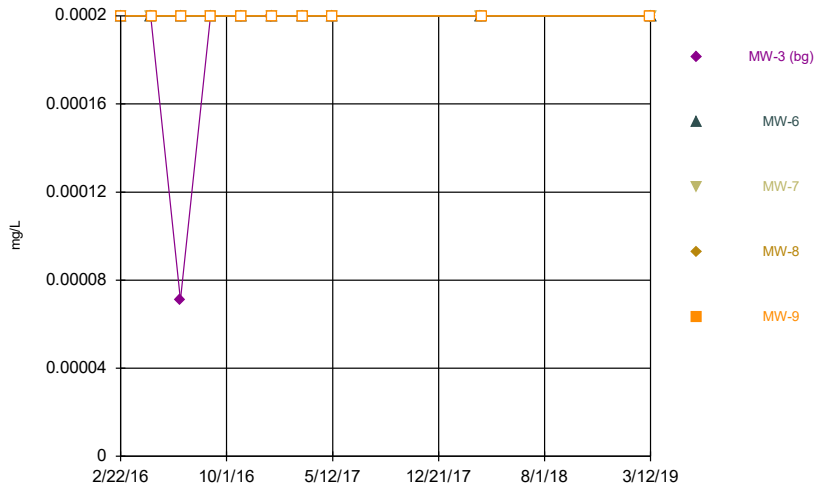
Time Series



Constituent: Mercury Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

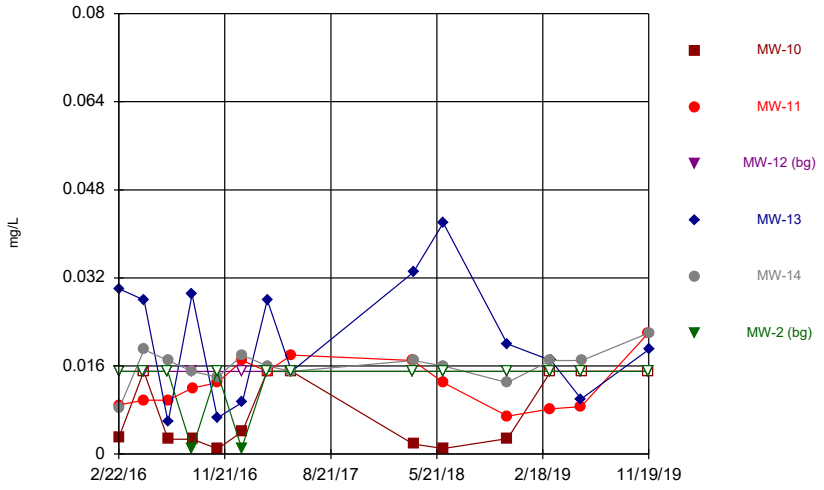
Time Series



Constituent: Mercury Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

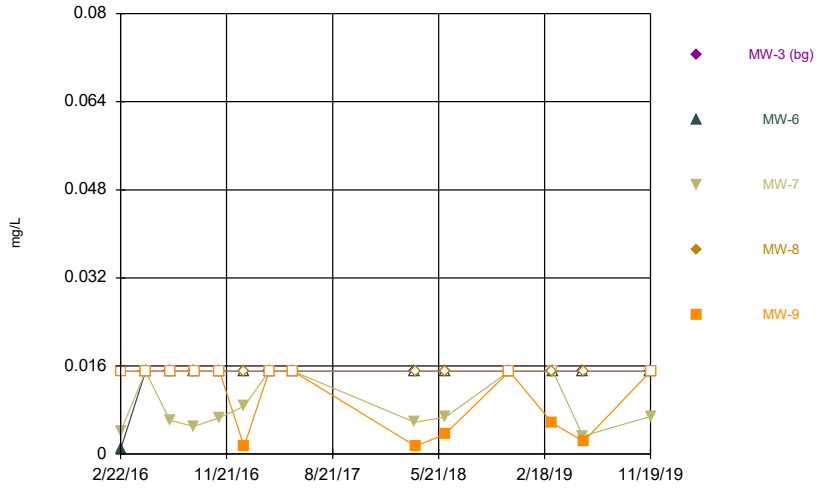
Time Series



Constituent: Molybdenum Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Mercury (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0002	<0.0002			<0.0002
2/23/2016	8.9E-05 (J)			<0.0002 (*)	<0.0002	
4/25/2016						<0.0002
4/26/2016	<0.0002	<0.0002	<0.0002			
4/27/2016				<0.0002	<0.0002	
6/27/2016			<0.0002			<0.0002
6/28/2016	<0.0002	<0.0002		<0.0002	<0.0002	
8/29/2016			<0.0002	<0.0002	<0.0002	<0.0002
8/30/2016	<0.0002	<0.0002				
11/1/2016			<0.0002			<0.0002
11/2/2016				<0.0002		
11/3/2016	<0.0002	<0.0002			<0.0002	
1/4/2017			<0.0002			<0.0002
1/5/2017	<0.0002	<0.0002		<0.0002	<0.0002	
3/10/2017			<0.0002			<0.0002
3/11/2017	<0.0002	<0.0002		<0.0002	<0.0002	
5/11/2017			<0.0002			<0.0002
5/12/2017	<0.0002	<0.0002		<0.0002	<0.0002	
3/20/2018			<0.0002			
3/21/2018		<0.0002				<0.0002
3/22/2018	<0.0002			<0.0002	<0.0002	
3/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/12/2019				<0.0002		

Time Series

Constituent: Mercury (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0002				
2/23/2016		<0.0002 (*)	<0.0002	<0.0002 (*)	<0.0002 (*)
4/25/2016	<0.0002				
4/26/2016		<0.0002	<0.0002		
4/27/2016				<0.0002	<0.0002
6/27/2016	7.1E-05 (J)				
6/28/2016		<0.0002	<0.0002	<0.0002	<0.0002
8/29/2016	<0.0002	<0.0002	<0.0002	<0.0002	
8/30/2016					<0.0002
11/1/2016	<0.0002				
11/2/2016		<0.0002	<0.0002	<0.0002	
11/3/2016					<0.0002
1/4/2017	<0.0002				
1/5/2017		<0.0002	<0.0002	<0.0002	<0.0002
3/10/2017	<0.0002				
3/11/2017		<0.0002	<0.0002	<0.0002	<0.0002
5/11/2017	<0.0002	<0.0002			
5/12/2017			<0.0002	<0.0002	<0.0002
3/20/2018	<0.0002				
3/21/2018		<0.0002	<0.0002		
3/22/2018				<0.0002	
3/23/2018					<0.0002
3/11/2019	<0.0002			<0.0002	<0.0002
3/12/2019		<0.0002	<0.0002		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.0089 (J)	<0.015			<0.015
2/23/2016	0.0031 (J)			0.03 (J)	0.0083 (J)	
4/25/2016						<0.015
4/26/2016	<0.015	0.0098 (J)	<0.015			
4/27/2016				0.028 (J)	0.019 (J)	
6/27/2016			<0.015			<0.015
6/28/2016	0.0027 (J)	0.0098 (J)		0.0058 (J)	0.017	
8/29/2016			<0.015	0.029	0.015	0.0009 (J)
8/30/2016	0.0027 (J)	0.012 (J)				
11/1/2016			<0.015			<0.015
11/2/2016				0.0066 (J)		
11/3/2016	0.00097 (J)	0.013 (J)			0.014 (J)	
1/4/2017			<0.015			0.0011 (J)
1/5/2017	0.0041 (J)	0.017		0.0094 (J)	0.018	
3/10/2017			<0.015			<0.015 (*)
3/11/2017	<0.015 (*)	<0.015 (*)		0.028	0.016	
5/11/2017			<0.015			<0.015
5/12/2017	<0.015 (*)	0.018		<0.015 (*)	0.015	
3/20/2018			<0.015			
3/21/2018		0.017				<0.015
3/22/2018	0.0018 (J)			0.033	0.017	
6/6/2018			<0.015			<0.015
6/7/2018	0.001 (J)	0.013 (J)		0.042	0.016	
11/19/2018			<0.015	0.02	0.013 (J)	<0.015
11/20/2018	0.0028 (J)	0.0069 (J)				
3/11/2019	<0.015	0.0082 (J)	<0.015		0.017	<0.015
3/12/2019				0.017		
5/28/2019			<0.015			<0.015
5/29/2019		0.0086 (J)		0.01 (J)		
5/30/2019	<0.015				0.017	
11/18/2019	<0.015	0.022	<0.015			<0.015
11/19/2019				0.019	0.022	

Time Series

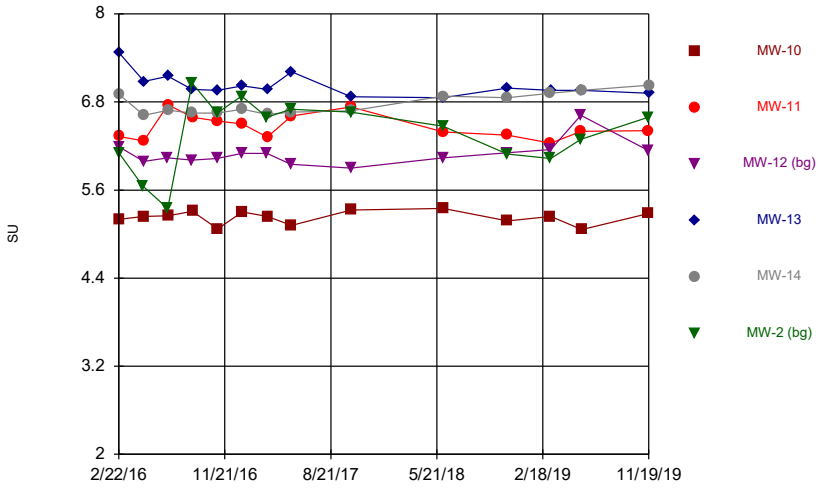
Constituent: Molybdenum (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.015				
2/23/2016		0.0011 (J)	0.0042 (J)	<0.015	<0.015
4/25/2016	<0.015				
4/26/2016		<0.015	<0.015		
4/27/2016				<0.015	<0.015
6/27/2016	<0.015				
6/28/2016		<0.015	0.0061 (J)	<0.015	<0.015
8/29/2016	<0.015	<0.015	0.005 (J)	<0.015	
8/30/2016					<0.015
11/1/2016	<0.015				
11/2/2016		<0.015	0.0066 (J)	<0.015	
11/3/2016					<0.015
1/4/2017	<0.015				
1/5/2017		<0.015	0.0087 (J)	<0.015	0.0014 (J)
3/10/2017	<0.015				
3/11/2017		<0.015 (*)	<0.015 (*)	<0.015	<0.015
5/11/2017	<0.015	<0.015			
5/12/2017			<0.015 (*)	<0.015	<0.015
3/20/2018	<0.015				
3/21/2018		<0.015	0.0058 (J)		
3/22/2018				<0.015	
3/23/2018					0.0014 (J)
6/6/2018	<0.015				
6/7/2018				<0.015	0.0036 (J)
6/8/2018		<0.015	0.0067 (J)		
11/19/2018	<0.015	<0.015	<0.015	<0.015	
11/20/2018					<0.015
3/11/2019	<0.015			<0.015	0.0056 (J)
3/12/2019		<0.015	<0.015		
5/28/2019	<0.015				
5/29/2019		<0.015	0.0033 (J)		
5/30/2019				<0.015	0.0023 (J)
11/18/2019	<0.015	<0.015			
11/19/2019			0.0068 (I)	<0.015	<0.015

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

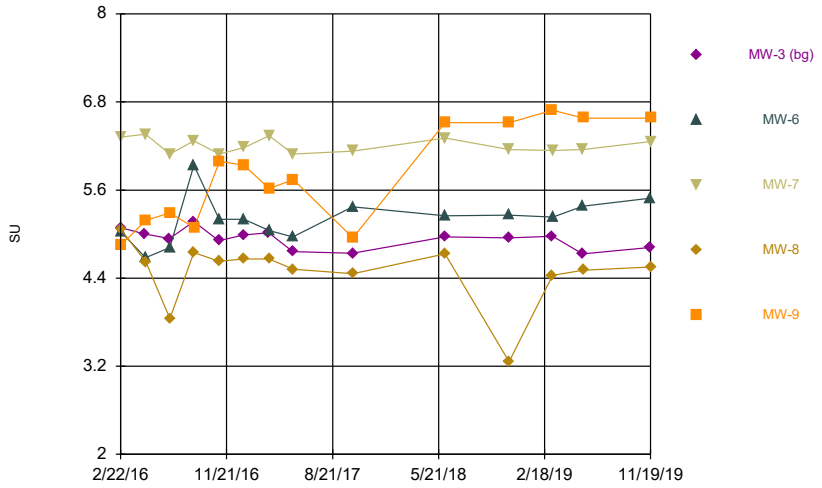
Time Series



Constituent: pH Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

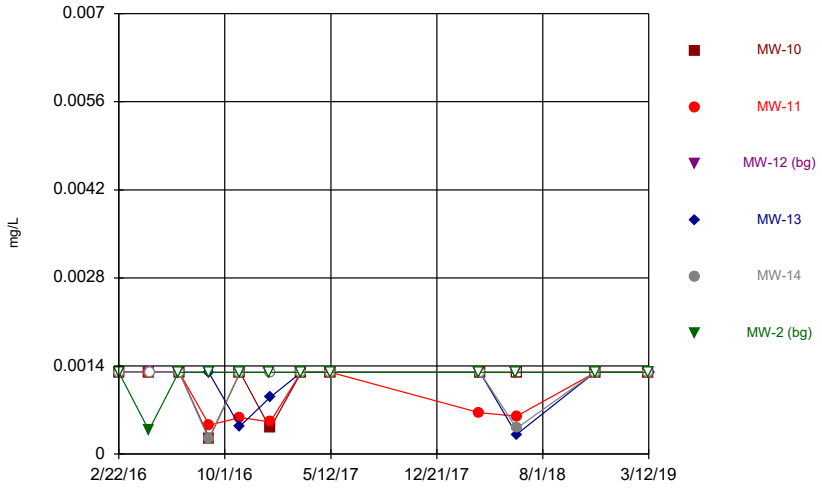
Time Series



Constituent: pH Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

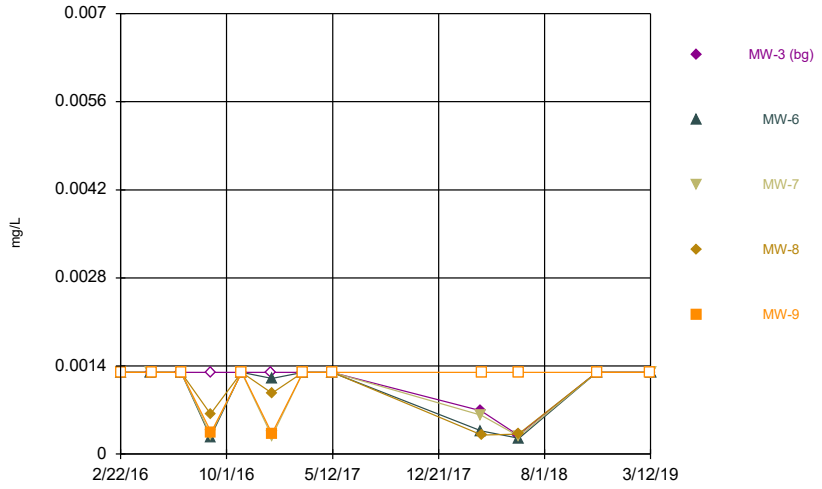
Time Series



Constituent: Selenium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: pH (SU) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		6.33 (B01)	6.19 (B01)			6.11 (B01)
2/23/2016	5.2 (B01)			7.47 (B01)	6.9 (B01)	
4/25/2016						5.65 (B02)
4/26/2016	5.24 (B02)	6.27 (B02)	5.99 (B02)			
4/27/2016				7.08 (B02)	6.62 (B02)	
6/27/2016			6.04 (B03)			5.35 (B03)
6/28/2016	5.25 (B03)	6.76 (B03)		7.15 (B03)	6.69 (B03)	
8/29/2016			6.01 (B04)	6.97 (B04)	6.65 (B04)	7.06 (B04)
8/30/2016	5.31 (B04)	6.59 (B04)				
11/1/2016			6.03 (B05)			6.65 (B05)
11/2/2016				6.96 (B05)	6.65 (B05)	
11/3/2016	5.07 (B05)	6.54 (B05)				
1/4/2017			6.1 (B06)			6.88 (B06)
1/5/2017	5.3 (B06)	6.5 (B06)		7.02 (B06)	6.7 (B06)	
3/10/2017			6.1 (B07)			6.59 (B07)
3/11/2017	5.24 (B07)	6.32 (B07)		6.97 (B07)	6.63 (B07)	
5/11/2017			5.95 (B08)			6.7 (B08)
5/12/2017	5.12 (B08)	6.61 (B08)		7.21 (B08)	6.66 (B08)	
10/12/2017			5.9			6.66
10/13/2017	5.33	6.73		6.87	6.68	
6/6/2018			6.04			6.47
6/7/2018	5.35	6.39		6.86	6.88	
11/19/2018			6.11	6.99	6.86	6.09
11/20/2018	5.18	6.35				
3/11/2019	5.24	6.24	6.15		6.92	6.03
3/12/2019				6.96		
5/28/2019			6.62			6.29
5/29/2019		6.4		6.96		
5/30/2019	5.06				6.96	
11/18/2019	5.28	6.41	6.14			6.59
11/19/2019				6.92	7.03	

Time Series

Constituent: pH (SU) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	5.09 (B01)				
2/23/2016		5.03 (B01)	6.32 (B01)	5.06 (B01)	4.85 (B01)
4/25/2016	5 (B02)				
4/26/2016		4.68 (B02)	6.36 (B02)		
4/27/2016				4.62 (B02)	5.19 (B02)
6/27/2016	4.94 (B03)				
6/28/2016		4.82 (B03)	6.09 (B03)	3.85 (B03)	5.29 (B03)
8/29/2016	5.17 (B04)	5.94 (B04)	6.27 (B04)	4.75 (B04)	
8/30/2016					5.09 (B04)
11/1/2016	4.91 (B05)				
11/2/2016		5.2 (B05)	6.09 (B05)	4.63 (B05)	
11/3/2016					5.99 (B05)
1/4/2017	4.99 (B06)				
1/5/2017		5.2 (B06)	6.18 (B06)	4.66 (B06)	5.94 (B06)
3/10/2017	5.02 (B07)				
3/11/2017		5.05 (B07)	6.34 (B07)	4.66 (B07)	5.62 (B07)
5/11/2017	4.76 (B08)	4.96 (B08)			
5/12/2017			6.09 (B08)	4.52 (B08)	5.74 (B08)
10/12/2017	4.74	5.37	6.13		
10/13/2017				4.46	4.95
6/6/2018	4.96				
6/7/2018				4.73	6.52
6/8/2018		5.25	6.31		
11/19/2018	4.95	5.26	6.15	3.26	
11/20/2018					6.52
3/11/2019	4.97			4.44	6.69
3/12/2019		5.23	6.14		
5/28/2019	4.73				
5/29/2019		5.38	6.15		
5/30/2019				4.51	6.58
11/18/2019	4.82	5.49			
11/19/2019			6.26	4.55	6.58

Time Series

Constituent: Selenium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0013	<0.0013			<0.0013
2/23/2016	<0.0013			<0.0013	<0.0013	
4/25/2016						0.00038 (J)
4/26/2016	<0.0013	<0.0013	<0.0013			
4/27/2016				<0.0013	<0.0013	
6/27/2016			<0.0013			<0.0013
6/28/2016	<0.0013 (*)	<0.0013 (*)		<0.0013	<0.0013 (*)	
8/29/2016			<0.0013	<0.0013	0.00024 (J)	<0.0013
8/30/2016	0.00025 (J)	0.00046 (J)				
11/1/2016			<0.0013			<0.0013
11/2/2016				0.00044 (J)		
11/3/2016	<0.0013	0.00058 (J)			<0.0013	
1/4/2017			<0.0013			<0.0013
1/5/2017	0.00041 (J)	0.00051 (J)		0.0009 (J)	<0.0013	
3/10/2017			<0.0013			<0.0013 (*)
3/11/2017	<0.0013	<0.0013 (*)		<0.0013	<0.0013	
5/11/2017			<0.0013			<0.0013
5/12/2017	<0.0013	<0.0013		<0.0013	<0.0013	
3/20/2018			<0.0013			
3/21/2018		0.00066 (J)				<0.0013
3/22/2018	<0.0013			<0.0013	<0.0013	
6/6/2018			<0.0013			<0.0013
6/7/2018	<0.0013	0.0006 (J)		0.00031 (J)	0.00041 (J)	
11/19/2018			<0.0013	<0.0013	<0.0013	<0.0013
11/20/2018	<0.0013	<0.0013				
3/11/2019	<0.0013	<0.0013	<0.0013		<0.0013	<0.0013
3/12/2019				<0.0013		

Time Series

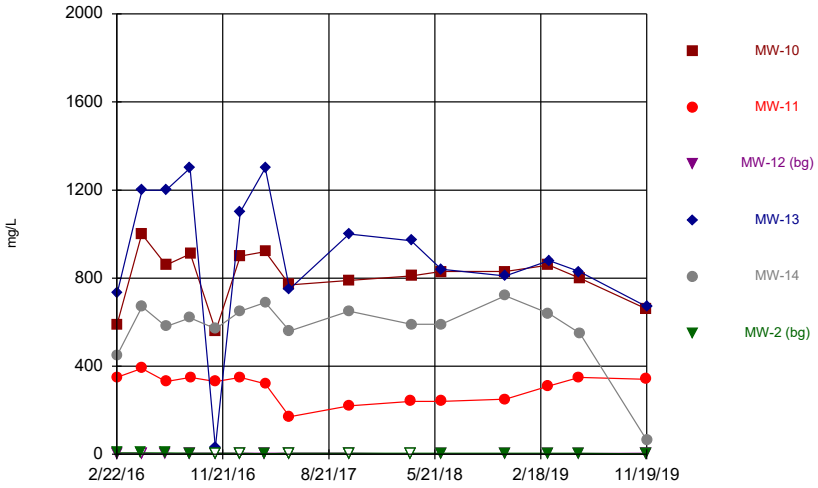
Constituent: Selenium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0013				
2/23/2016		<0.0013	<0.0013	<0.0013	<0.0013
4/25/2016	<0.0013				
4/26/2016		<0.0013	<0.0013		
4/27/2016				<0.0013	<0.0013
6/27/2016	<0.0013				
6/28/2016		<0.0013 (*)	<0.0013 (*)	<0.0013 (*)	<0.0013 (*)
8/29/2016	<0.0013	0.00027 (J)	0.0003 (J)	0.00064 (J)	
8/30/2016					0.00035 (J)
11/1/2016	<0.0013				
11/2/2016		<0.0013	<0.0013	<0.0013	
11/3/2016					<0.0013
1/4/2017	<0.0013				
1/5/2017		0.0012 (J)	0.00028 (J)	0.00097 (J)	0.00033 (J)
3/10/2017	<0.0013				
3/11/2017		<0.0013 (*)	<0.0013	<0.0013	<0.0013
5/11/2017	<0.0013	<0.0013			
5/12/2017			<0.0013	<0.0013	<0.0013
3/20/2018	0.00069 (J)				
3/21/2018		0.00037 (J)	0.00062 (J)		
3/22/2018				0.0003 (J)	
3/23/2018					<0.0013
6/6/2018	0.0003 (J)				
6/7/2018				0.00032 (J)	<0.0013
6/8/2018		0.00025 (J)	0.00028 (J)		
11/19/2018	<0.0013	<0.0013	<0.0013	<0.0013	
11/20/2018					<0.0013
3/11/2019	<0.0013			<0.0013	<0.0013
3/12/2019		<0.0013	<0.0013		

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

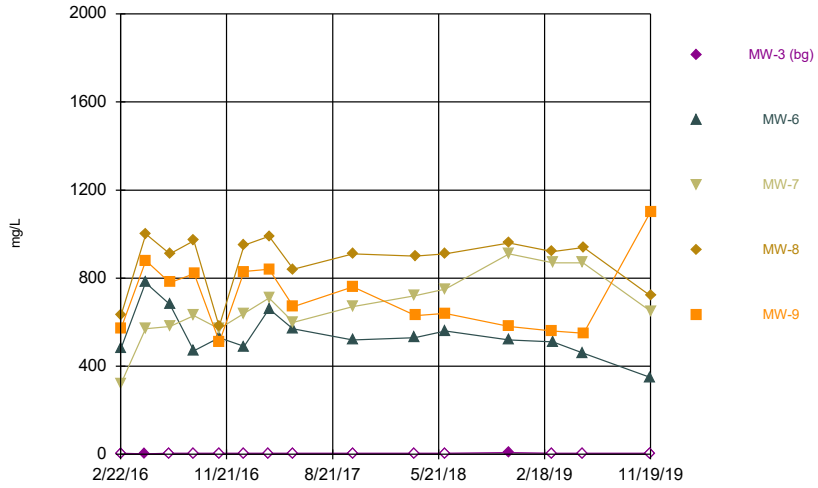
Time Series



Constituent: Sulfate Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

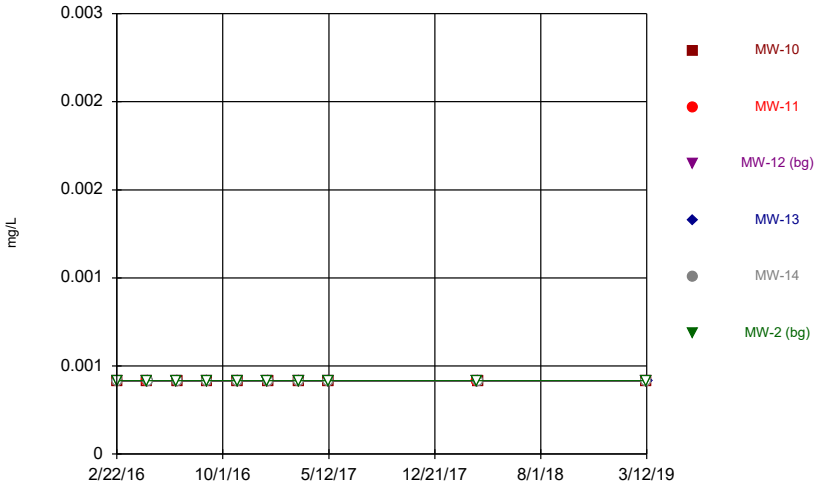
Time Series



Constituent: Sulfate Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

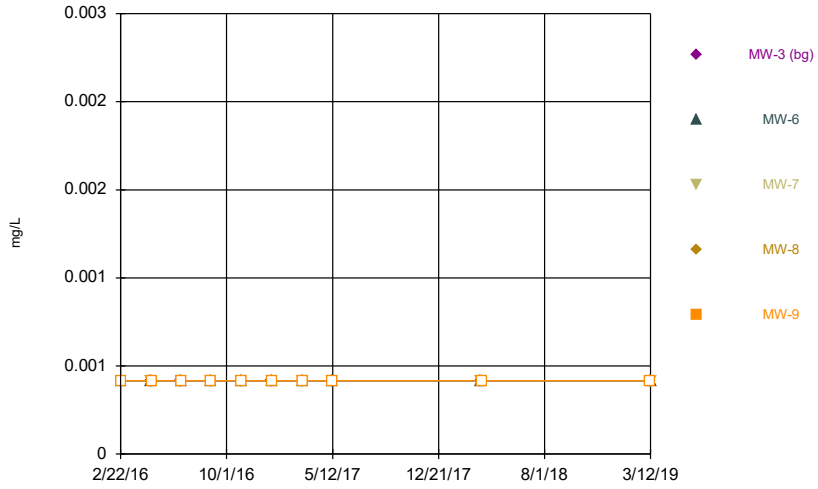
Time Series



Constituent: Thallium Analysis Run 3/16/2020 1:12 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 3/16/2020 1:13 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		350	<5			6.3
2/23/2016	590			730	450	
4/25/2016						6.1
4/26/2016	1000	390	<5			
4/27/2016				1200	670	
6/27/2016			1.6 (J)			6.6
6/28/2016	860	330		1200	580	
8/29/2016			<5	1300	620	4.5 (J)
8/30/2016	910	350				
11/1/2016			<5			<5
11/2/2016				31		
11/3/2016	560	330			570	
1/4/2017			<5			<5 (*)
1/5/2017	900	350		1100	650	
3/10/2017			<5			2.3 (J)
3/11/2017	920	320		1300	690	
5/11/2017			<5			<5
5/12/2017	770	170 (J)		750	560	
10/12/2017			<5			<5
10/13/2017	790	220		1000	650	
3/20/2018			1.8 (J)			
3/21/2018		240				<5
3/22/2018	810			970	590	
6/6/2018			2.3 (J)			4.8 (J)
6/7/2018	830	240		840	590	
11/19/2018			2.2 (J)	810	720	4.4 (J)
11/20/2018	830	250				
3/11/2019	860	310	1.5 (J)		640	5.2
3/12/2019				880		
5/28/2019			3 (J)			4.3 (J)
5/29/2019		350		830		
5/30/2019	800				550	
11/18/2019	660	340	<5			2.8 (I)
11/19/2019				670	65 (I)	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<5				
2/23/2016		480	320	630	570
4/25/2016	1.4 (J)				
4/26/2016		780	570		
4/27/2016				1000	880
6/27/2016	<5				
6/28/2016		680	580	910	780
8/29/2016	<5	470 (J)	630	970	
8/30/2016					820
11/1/2016	<5				
11/2/2016		530	570	580	
11/3/2016					510
1/4/2017	<5 (*)				
1/5/2017		490	640	950	830
3/10/2017	<5				
3/11/2017		660	710	990	840
5/11/2017	<5	570			
5/12/2017			600	840	670
10/12/2017	<5	520	670		
10/13/2017				910	760
3/20/2018	<5				
3/21/2018		530	720		
3/22/2018				900	
3/23/2018					630
6/6/2018	<5				
6/7/2018				910	640
6/8/2018		560	750		
11/19/2018	7.473 (D)	520	910	960	
11/20/2018					580
3/11/2019	<5			920	560
3/12/2019		510	870		
5/28/2019	<5				
5/29/2019		460	870		
5/30/2019				940	550
11/18/2019	<5	350			
11/19/2019			650	720	1100 (I)

Time Series

Constituent: Thallium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0005	<0.0005			<0.0005
2/23/2016	<0.0005			<0.0005	<0.0005	
4/25/2016						<0.0005
4/26/2016	<0.0005	<0.0005	<0.0005			
4/27/2016				<0.0005	<0.0005	
6/27/2016			<0.0005			<0.0005
6/28/2016	<0.0005	<0.0005		<0.0005	<0.0005	
8/29/2016			<0.0005	<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005	<0.0005				
11/1/2016			<0.0005			<0.0005
11/2/2016				<0.0005		
11/3/2016	<0.0005	<0.0005			<0.0005	
1/4/2017			<0.0005			<0.0005
1/5/2017	<0.0005	<0.0005		<0.0005	<0.0005	
3/10/2017			<0.0005			<0.0005
3/11/2017	<0.0005	<0.0005		<0.0005	<0.0005	
5/11/2017			<0.0005			<0.0005
5/12/2017	<0.0005	<0.0005		<0.0005	<0.0005	
3/20/2018			<0.0005			
3/21/2018		<0.0005				<0.0005
3/22/2018	<0.0005			<0.0005	<0.0005	
3/11/2019	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
3/12/2019				<0.0005		

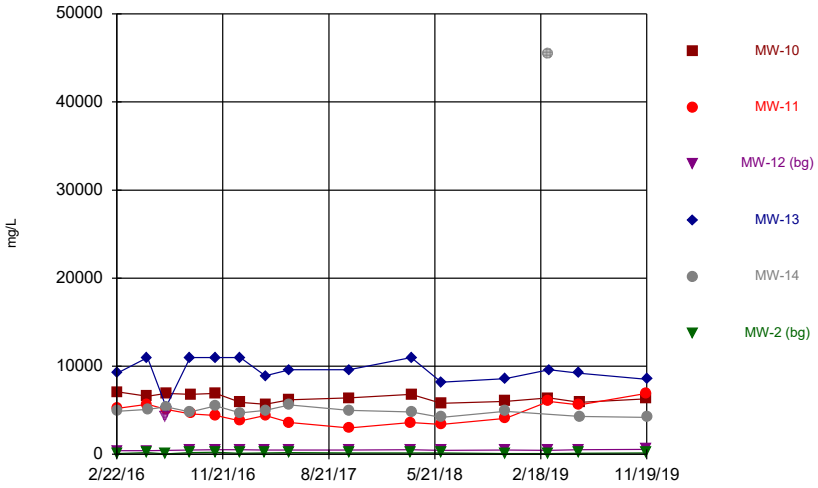
Time Series

Constituent: Thallium (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0005				
2/23/2016		<0.0005	<0.0005	<0.0005	<0.0005
4/25/2016	<0.0005				
4/26/2016		<0.0005	<0.0005		
4/27/2016				<0.0005	<0.0005
6/27/2016	<0.0005				
6/28/2016		<0.0005	<0.0005	<0.0005	<0.0005
8/29/2016	<0.0005	<0.0005	<0.0005	<0.0005	
8/30/2016					<0.0005
11/1/2016	<0.0005				
11/2/2016		<0.0005	<0.0005	<0.0005	
11/3/2016					<0.0005
1/4/2017	<0.0005				
1/5/2017		<0.0005	<0.0005	<0.0005	<0.0005
3/10/2017	<0.0005				
3/11/2017		<0.0005	<0.0005	<0.0005	<0.0005
5/11/2017	<0.0005	<0.0005			
5/12/2017			<0.0005	<0.0005	<0.0005
3/20/2018	<0.0005				
3/21/2018		<0.0005	<0.0005		
3/22/2018				<0.0005	
3/23/2018					<0.0005
3/11/2019	<0.0005			<0.0005	<0.0005
3/12/2019		<0.0005	<0.0005		

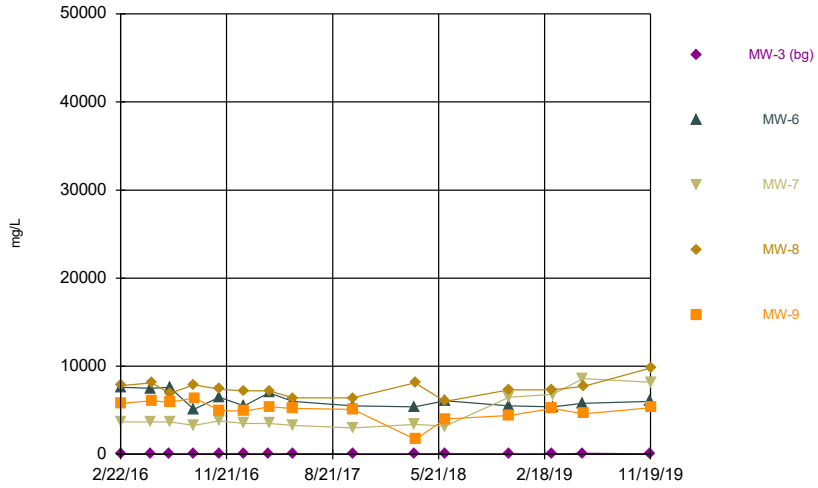
Time Series



Constituent: Total Dissolved Solids Analysis Run 3/16/2020 1:13 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 3/16/2020 1:13 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		5200	410			74
2/23/2016	7100			9200	4900	
5/11/2016	6600	5700	410	11000		200
5/12/2016					5100	
6/27/2016			4200 (o)			42
6/28/2016	6900	5100		5400	5400	
8/29/2016			490	11000	4800	200
8/30/2016	6800	4600				
11/1/2016			540			220
11/2/2016				11000		
11/3/2016	6900	4400			5500	
1/4/2017			520			140
1/5/2017	5900	3800		11000	4700	
3/10/2017			490			160
3/11/2017	5700	4400		8900	5000	
5/11/2017			490			190
5/12/2017	6200	3600		9600	5600	
10/12/2017			470			150
10/13/2017	6400	3000		9600	5000	
3/20/2018			510			
3/21/2018		3600				150
3/22/2018	6800			11000	4800	
6/6/2018			460			160
6/7/2018	5800	3400		8200	4200	
11/19/2018			490	8600	4900	88 (D)
11/20/2018	6000	4100				
3/11/2019	6400	6000	440		45500 (oD)	72
3/12/2019				9600		
5/28/2019			540			140
5/29/2019		5600		9200		
5/30/2019	5900				4300	
11/18/2019	6300	6900	560			170
11/19/2019				8500	4200	

Time Series

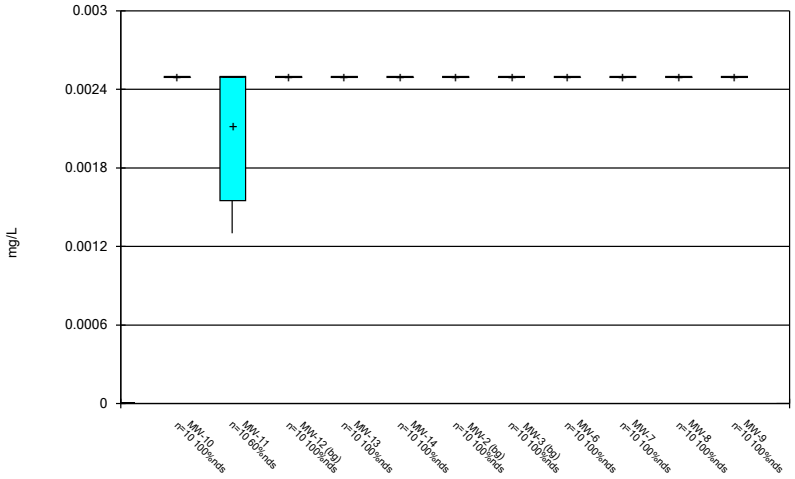
Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/16/2020 1:13 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	46				
2/23/2016		7600	3700	7800	5800
5/11/2016	42	7500	3700		
5/12/2016				8100	6100
6/27/2016	24				
6/28/2016		7600	3700	6900	5900
8/29/2016	42	5100	3300	7900	
8/30/2016					6400
11/1/2016	64				
11/2/2016		6500	3800	7400	
11/3/2016					5000
1/4/2017	44				
1/5/2017		5500	3500	7200	4900
3/10/2017	16				
3/11/2017		7000	3500	7200	5400
5/11/2017	42	6000			
5/12/2017			3300	6400	5200
10/12/2017	30	5500	3000		
10/13/2017				6400	5100
3/20/2018	12				
3/21/2018		5400	3400		
3/22/2018				8100	
3/23/2018					1700
6/6/2018	46				
6/7/2018				6000	4000
6/8/2018		6100	3200		
11/19/2018	22	5500	6500	7300	
11/20/2018					4400
3/11/2019	12			7300	5200
3/12/2019		5400	6800		
5/28/2019	110				
5/29/2019		5800	8600		
5/30/2019				7700	4600
11/18/2019	52	6000			
11/19/2019			8200	9800	5300

Box Plots

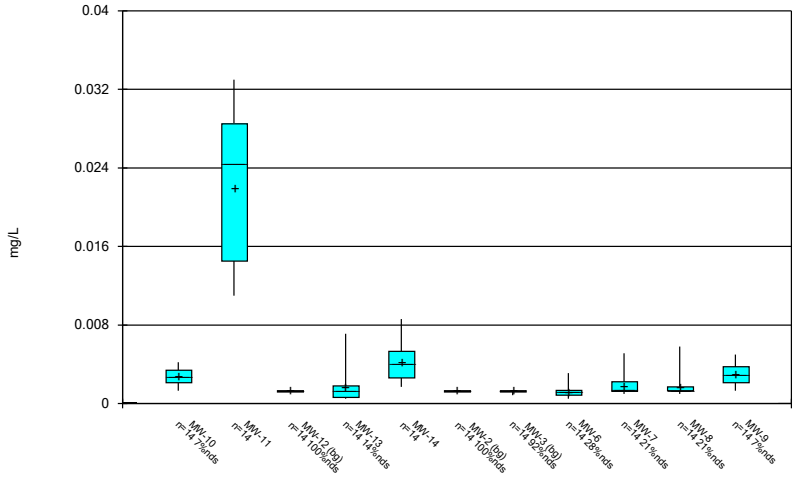
Box & Whiskers Plot



Constituent: Antimony Analysis Run 3/16/2020 1:13 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

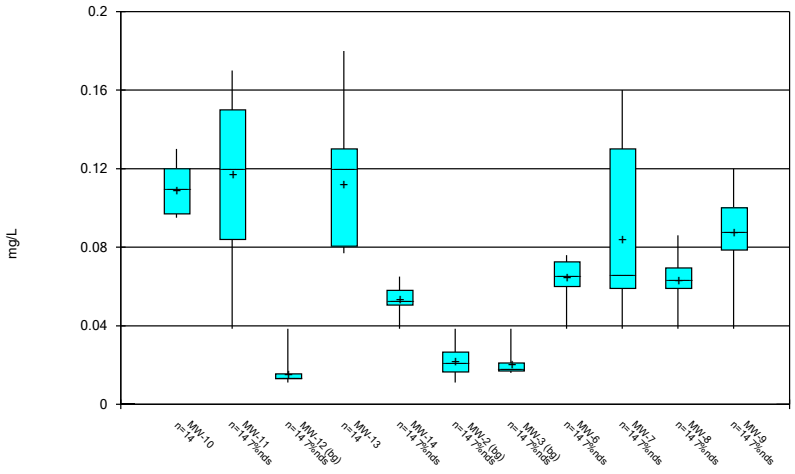
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 3/16/2020 1:13 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

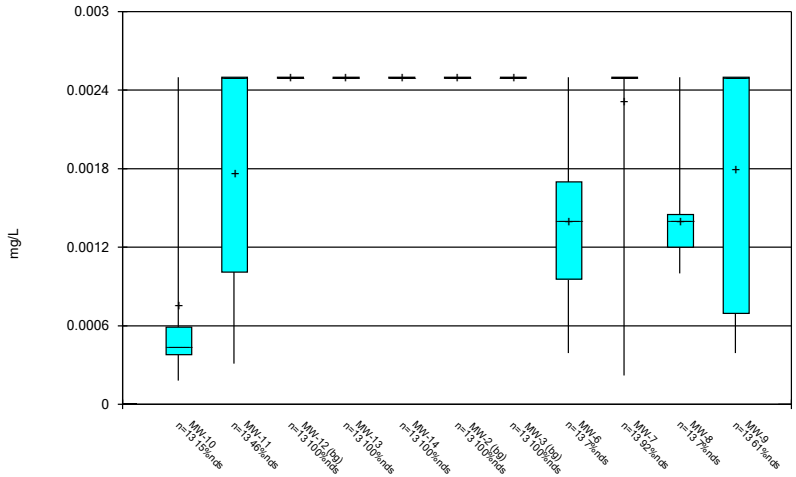
Box & Whiskers Plot



Constituent: Barium Analysis Run 3/16/2020 1:13 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

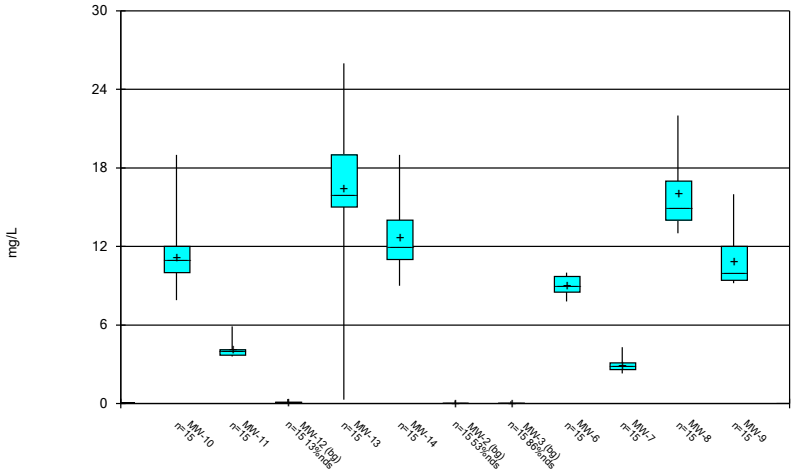
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

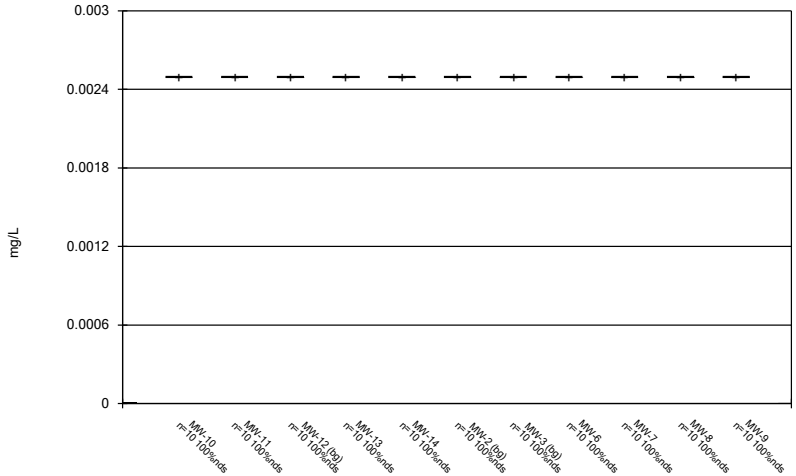
Box & Whiskers Plot



Constituent: Boron Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

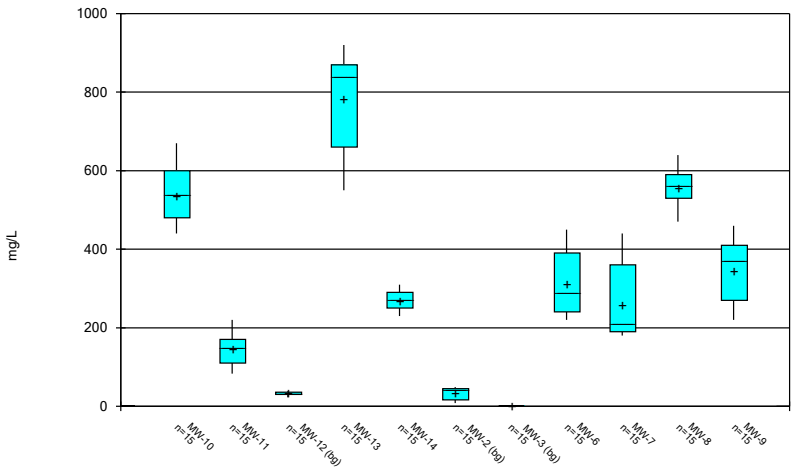
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

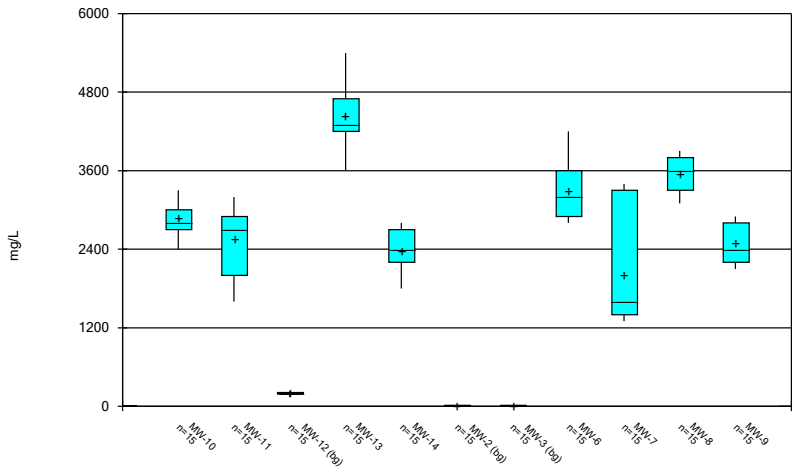
Box & Whiskers Plot



Constituent: Calcium Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

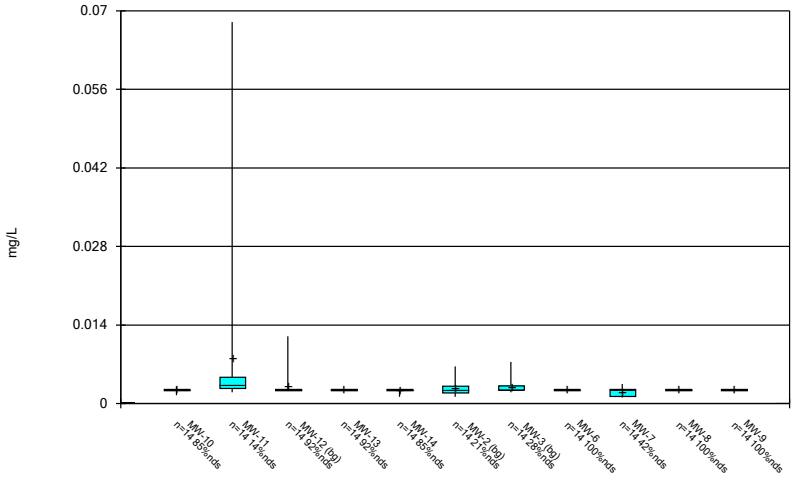
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

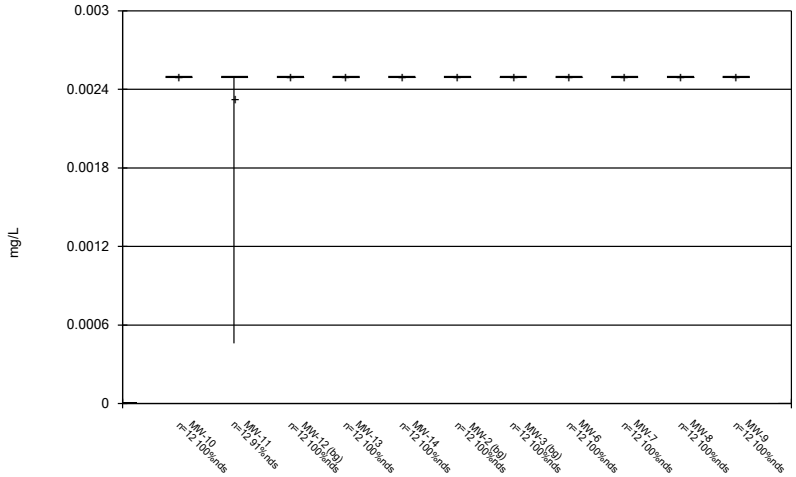
Box & Whiskers Plot



Constituent: Chromium Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

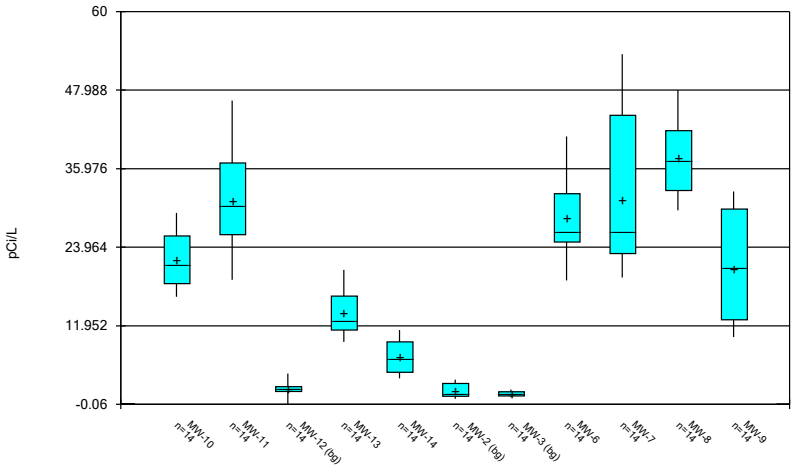
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

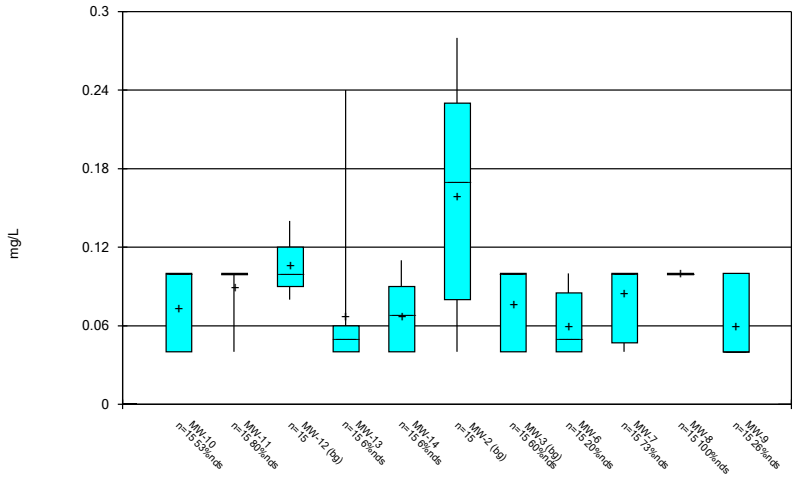
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

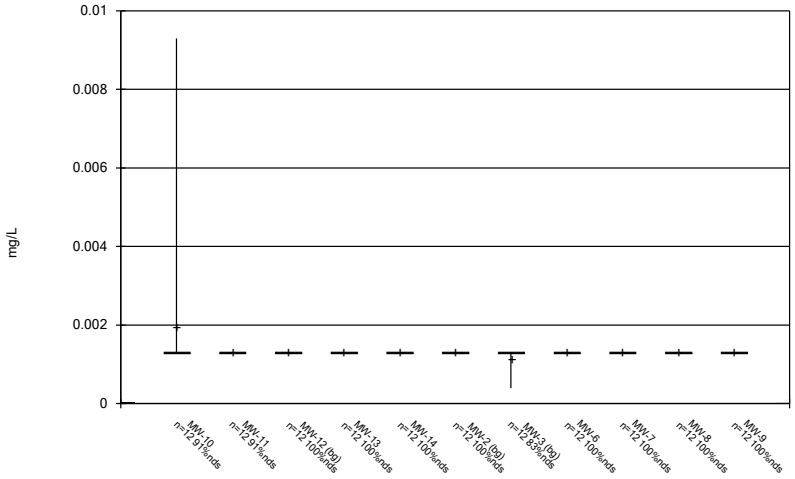
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

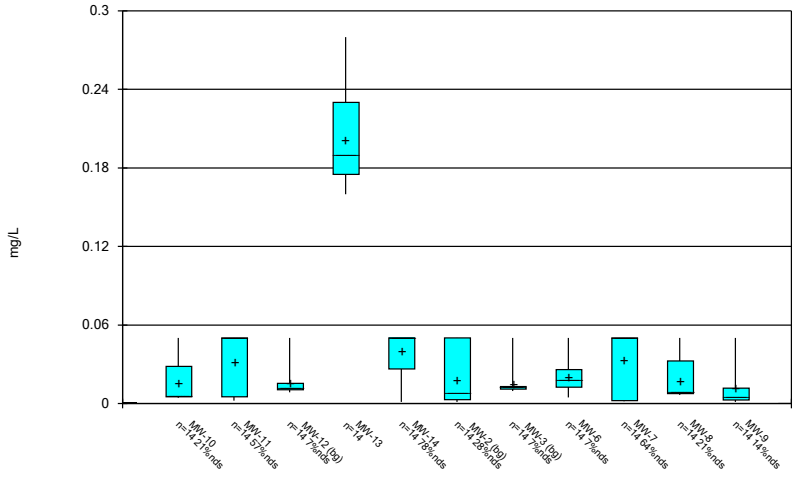
Box & Whiskers Plot



Constituent: Lead Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

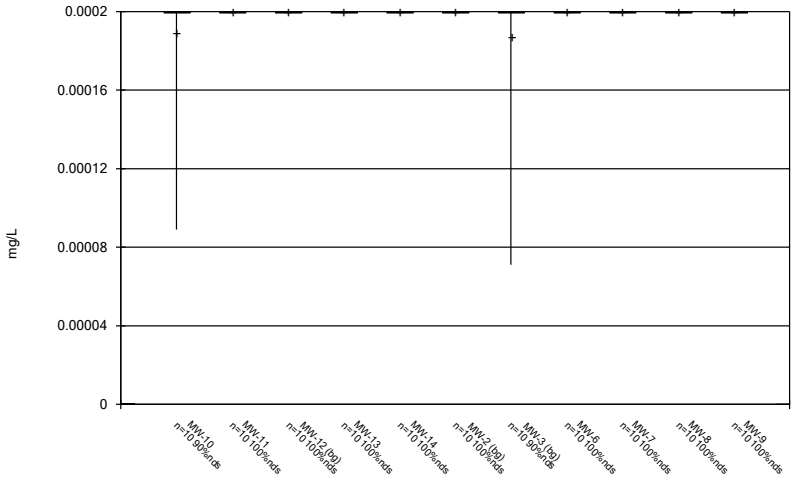
Box & Whiskers Plot



Constituent: Lithium Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

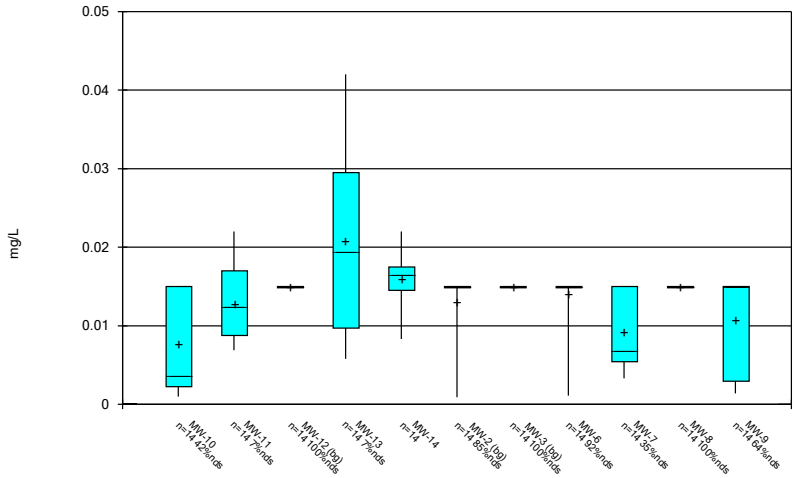
Box & Whiskers Plot



Constituent: Mercury Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

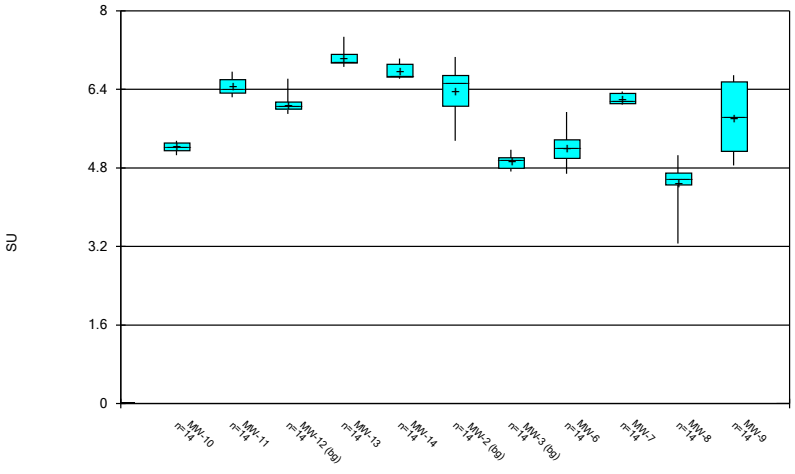
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Box & Whiskers Plot



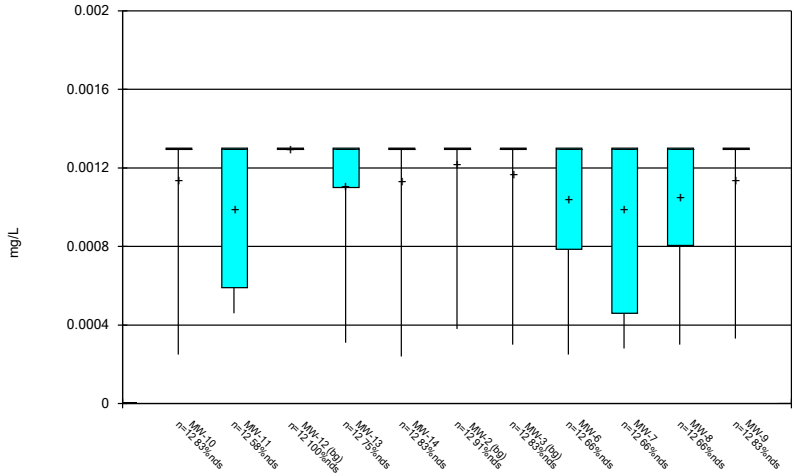
Constituent: Molybdenum Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



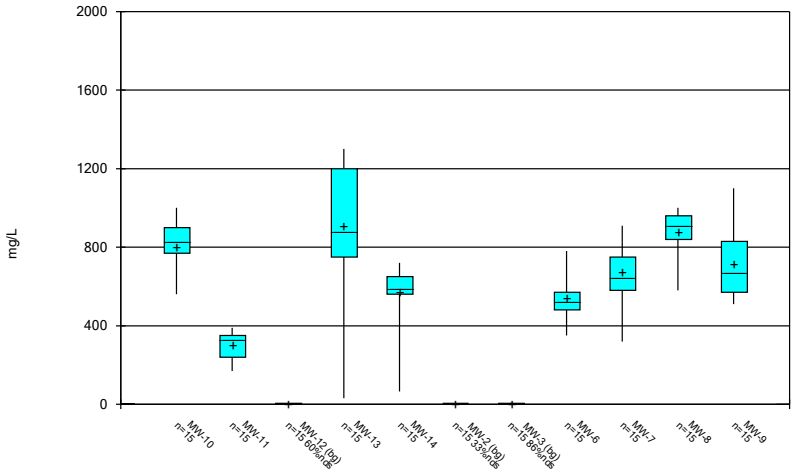
Constituent: pH Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



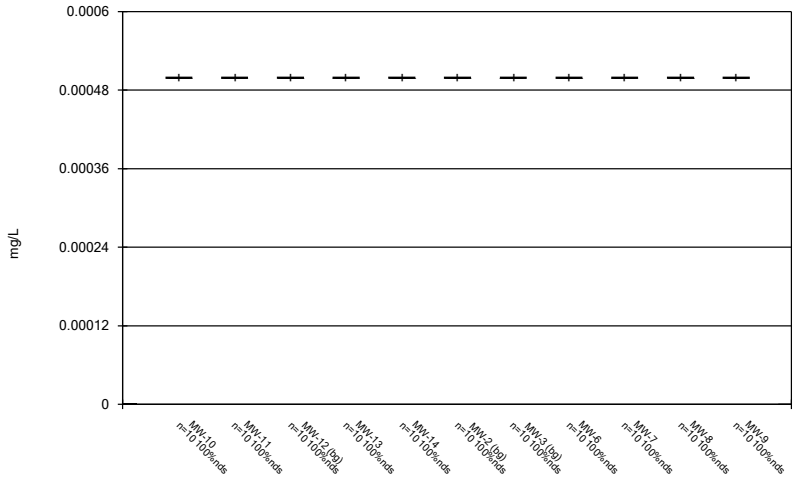
Constituent: Selenium Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



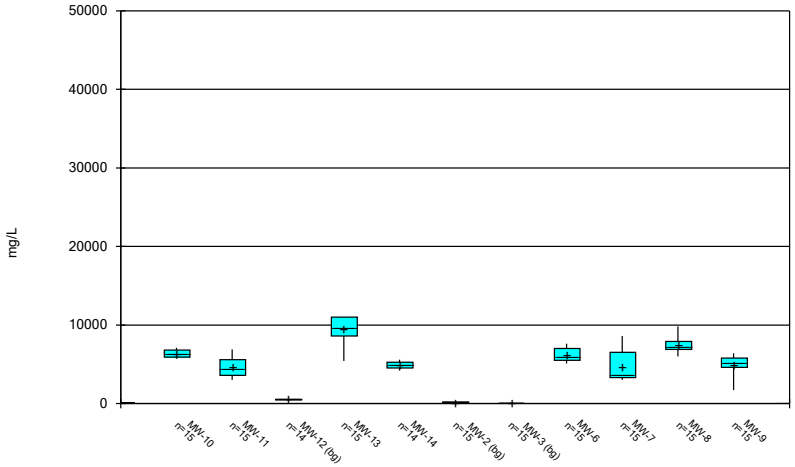
Constituent: Sulfate Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Thallium Analysis Run 3/16/2020 1:14 PM View: App III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 3/16/2020 1:14 PM View: App III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

APPENDIX C

Statistical Analyses – May 2020
Semi-Annual Monitoring

May 2020

GROUNDWATER STATISTICAL ANALYSIS

FOR GULF POWER'S

PLANT SMITH

Prepared by:

Groundwater Stats Consulting LLC

TABLE OF CONTENTS

GROUNDWATER STATS CONSULTING

August 3, 2020

Geosyntec Consultants
Attn: Mr. Benjamin K. Amos, Ph.D., P.E.
1255 Roberts Boulevard, Suite 200
Kennesaw, GA 30144

Re: Plant Smith – May 2020 Statistical Analysis

Dear Mr. Amos,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of the groundwater data for the May 2020 sample event at Gulf Power Company's Plant Smith. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

Sampling began at Plant Smith for the CCR program in 2016 at each of the groundwater monitoring wells. The monitoring well network, as provided by Geosyntec Consultants, consists of the following:

- **Upgradient wells:** MW-2, MW-3, MW-12
- **Downgradient wells:** MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-13, MW-14

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

The CCR program consists of the following constituents:

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

- **Appendix IV** (Assessment Monitoring) **–** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Time series and box plots are provided for the above Appendix III and IV constituents at all wells. The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. While all Appendix IV constituents are plotted on the time series graphs and box plots, confidence intervals are provided (at all wells) only for those parameters for which at least one downgradient well had detections. A summary of well/constituent pairs with 100% nondetects follows this letter.

Proposed background data at all wells were initially evaluated, and reports submitted, during the October 2017 screening for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended.

Summary of Statistical Methods:

Based on the earlier evaluation described above, the following methods were selected:

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

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% for each semi-annual sample event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).

- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In the intrawell case, data for all wells and constituents may re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, earlier data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the deselected data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. A summary of the findings of the original background screening conducted in October 2017 as well as the background update conducted in October 2019 is provided below.

Historical Summary Background Screening – October 2017

Outlier and Trend Testing

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits. The results of those findings were submitted with the October 2017 report.

No suspected outliers were observed in any of the data sets, with the exception of TDS in upgradient well MW-12. Tukey's box plot method was used to screen this and resulted in a value of 4200 mg/L being flagged. Any values identified as outliers are plotted in a

lighter font on the time series graph. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

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

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

The results of the trend analyses were provided with the 2017 screening report and showed one statistically significant decreasing trend for total dissolved solids in well MW-11. This trend was relatively low in magnitude when compared to average concentrations; therefore, no adjustments were necessary.

Appendix III – Determination of Spatial Variation

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

The ANOVA identified variation among upgradient wells at Plant Smith for the following Appendix III parameters: boron, calcium, chloride, pH, and TDS, suggesting consideration of intrawell methods for these parameters. These constituents were further evaluated as described below for the appropriateness of intrawell testing to accommodate the groundwater quality. No statistically significant variation was noted for fluoride or sulfate, making these parameters eligible for interwell methods. A summary table of the ANOVA results was included with the screening report.

Appendix III – Intrawell Method Eligibility Screening

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

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

Either parametric or nonparametric tolerance limits are calculated based on the data characteristics that are described below for prediction limits. Parametric tolerance limits (for normal or transformed-normally distributed data) were constructed with a target of 99% confidence and 95% coverage using pooled upgradient well data for each of the Appendix III parameters recommended for intrawell analyses. For non-normal data, nonparametric tolerance limits are used. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As more data are collected, the background population is better represented, and the confidence and coverage levels increase.

Confidence intervals were constructed on downgradient wells for each of the Appendix III parameters exhibiting spatial variation, using the tolerance limits discussed above, to determine intrawell eligibility. Either parametric or nonparametric confidence intervals

were constructed as appropriate. When the entire confidence interval is above the background limit for a given parameter, interwell methods are initially recommended as the statistical method. Note that this screening identifies whether confidence intervals are above a background limit but does not identify the reason for this occurrence. Therefore, only the wells/parameters with confidence intervals which did not exceed background limits are eligible for intrawell prediction limits.

Confidence intervals for the above Appendix III parameters were found to be within their respective background limit for pH in all downgradient wells. The confidence intervals for boron, calcium, chloride, and TDS were above the background standard which precludes using intrawell methods without further evaluation. The results of the upper tolerance limits calculations and confidence interval comparisons were presented in the background screening report.

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

Summary of Background Update – Conducted in October 2019

Historical data were evaluated for updating with newer data through March 2019 through the use of time series graphs to identify potential outliers when necessary, as well as with the Mann Whitney test for equality of medians. Intrawell prediction limits are used to evaluate pH due to natural spatial variation for this parameter.

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend, as well as for outliers over the entire record.

Interwell prediction limits are used to evaluate boron, calcium, chloride, fluoride, sulfate, and TDS.

Prior to constructing prediction limits, proposed background data through May 2019 were reviewed to identify any newly suspected outliers at all wells for pH for intrawell testing and all Appendix IV parameters, and at upgradient wells for boron, calcium, chloride, fluoride, sulfate, and TDS for interwell testing. Visual screening is used to identify potential outliers using time series graphs. When necessary, Tukey's outlier test is used to formally test suspected outliers. No new outliers were identified for pH in any of the wells or for all other Appendix III parameters in upgradient wells. However, the value of 45,500 for TDS in well MW-14 was flagged, even though it is in a downgradient well, since it appears to be off by an order of magnitude--along with the TDS outlier in well MW-12 from the previous screening. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of flagged values follows this letter.

For pH, which required intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through October 2017 to newer compliance samples through March 2019 at each of the wells to evaluate whether the groups are statistically similar at the 99% confidence level. If no statistically significant difference is found, background data may be updated with compliance data. No statistically significant differences were found between the two groups for pH; therefore, all background data sets were updated.

When the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data, but will be reconsidered in the future.

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant trends are identified in upgradient wells, the earlier portion of data is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. No statistically significant increasing trends were noted in upgradient wells with the exception of fluoride in MW-12; however, the magnitude of the trend was moderate relative to average concentrations, and truncation of the background would not affect the nonparametric prediction limit. Therefore, no adjustment of the record was required.

Evaluation of Appendix III Parameters – May 2020 Sample Event

Prediction Limits

All available historical data through March 2019 for pH at each well were used to construct intrawell prediction limits based on a 1-of-2 resample plan, and the May 2020 sample from the same well is compared to its respective background. Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all available data from upgradient wells through May 2020 for boron, calcium, chloride, fluoride, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of an additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary.

For intrawell prediction limits, an exceedance was noted only for pH in downgradient well MW-14. For interwell prediction limits, exceedances were noted for calcium, chloride, sulfate, and TDS in all downgradient wells. Summaries of both intrawell and interwell prediction limits and exceedances, along with complete results may be found following this letter in the Prediction Limits section.

The Sen's Slope/Mann Kendall trend test was used to determine whether a statistically significant trend exists over the entire period of record for both the intrawell and interwell exceedances noted above. Upgradient wells are included in the trend testing to determine whether similar patterns exist upgradient of the facility. Statistically significant increasing trends were noted for boron and sulfate in well MW-7 and for chloride in upgradient well MW-3. When changes occur upgradient of the facility, this is an indication that groundwater quality is naturally changing for a given constituent. Statistically significant decreasing trends were noted for the following: calcium in downgradient wells MW-10, MW-13, MW-6, MW-8, and MW-9; and chloride in downgradient well MW-10, MW-14, MW-6, and MW-9. Summaries of the trend tests follow this report.

Evaluation of Appendix IV Parameters

Either parametric or nonparametric tolerance limits, depending on the distribution of the background data, were used to calculate background limits from pooled upgradient well data for Appendix IV parameters, with a target of 95% confidence and 95% coverage for parametric limits, to determine the background limits. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. These limits were compared to the Maximum Contaminant Levels (MCLs) and CCR rule-specified levels to determine the highest limit for use as the Groundwater Protection Standard (GWPS) in the Confidence Interval comparisons.

Confidence intervals were then constructed on downgradient wells for each of the Appendix IV constituents that had at least one detection in a downgradient well and were compared to the highest limit of either the MCL, rule-specified level, or background discussed above. A list of Appendix IV well/constituent pairs with 100% nondetects follows this letter. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. Exceedances were noted for arsenic in downgradient well MW-11, combined radium in all downgradient wells, and lithium in downgradient well MW-13.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Smith. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew T. Collins
Groundwater Analyst

Kristina L. Rayner
Groundwater Statistician

Outlier Summary

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 7/30/2020, 5:36 AM

	MW-12 Total Dissolved Solids (mg/L)	MW-14 Total Dissolved Solids (mg/L)
6/27/2016	4200 (o)	
3/11/2019		45500 (oD)

100% ND

Date: 7/30/2020 4:55 AM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Antimony (mg/L)

MW-10, MW-12, MW-13, MW-14, MW-2, MW-3, MW-6, MW-7, MW-8, MW-9

Arsenic (mg/L)

MW-12, MW-2

Beryllium (mg/L)

MW-13, MW-14

Cadmium (mg/L)

MW-10, MW-11, MW-12, MW-13, MW-14, MW-2, MW-3, MW-6, MW-7, MW-8, MW-9

Chromium (mg/L)

MW-6, MW-8, MW-9

Cobalt (mg/L)

MW-10, MW-12, MW-13, MW-14, MW-2, MW-3, MW-6, MW-8

Fluoride (mg/L)

MW-8

Lead (mg/L)

MW-12, MW-13, MW-14, MW-2, MW-6, MW-7, MW-8, MW-9

Mercury (mg/L)

MW-11, MW-12, MW-13, MW-14, MW-2, MW-6, MW-7, MW-8, MW-9

Molybdenum (mg/L)

MW-12, MW-3, MW-8

Selenium (mg/L)

MW-12

Thallium (mg/L)

MW-10, MW-11, MW-12, MW-13, MW-14, MW-2, MW-3, MW-6, MW-7, MW-8, MW-9

Interwell Prediction Limit Summary - Significant Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:36 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-10	0.5	n/a	5/6/2020	10	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-11	0.5	n/a	5/6/2020	3.8	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-13	0.5	n/a	5/7/2020	14	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-6	0.5	n/a	5/6/2020	7.7	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-7	0.5	n/a	5/6/2020	3.6	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-8	0.5	n/a	5/7/2020	15	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-9	0.5	n/a	5/6/2020	11	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-10	49	n/a	5/6/2020	450	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-11	49	n/a	5/6/2020	160	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-13	49	n/a	5/7/2020	560	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-14	49	n/a	5/7/2020	290	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-6	49	n/a	5/6/2020	180	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-7	49	n/a	5/6/2020	290	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-8	49	n/a	5/7/2020	550	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-9	49	n/a	5/6/2020	260	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-10	230	n/a	5/6/2020	2500	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-11	230	n/a	5/6/2020	2700	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-13	230	n/a	5/7/2020	4300	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-14	230	n/a	5/7/2020	1900	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-6	230	n/a	5/6/2020	2500	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-7	230	n/a	5/6/2020	2600	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-8	230	n/a	5/7/2020	3600	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-9	230	n/a	5/6/2020	2200	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-10	7.473	n/a	5/6/2020	640	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-11	7.473	n/a	5/6/2020	270	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-13	7.473	n/a	5/7/2020	530	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-14	7.473	n/a	5/7/2020	490	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-6	7.473	n/a	5/6/2020	320	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-7	7.473	n/a	5/6/2020	550	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-8	7.473	n/a	5/7/2020	760	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-9	7.473	n/a	5/6/2020	440	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-10	560	n/a	5/6/2020	5400	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	560	n/a	5/6/2020	5200	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-13	560	n/a	5/7/2020	9100	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-14	560	n/a	5/7/2020	4400	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-6	560	n/a	5/6/2020	5000	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-7	560	n/a	5/6/2020	6100	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-8	560	n/a	5/7/2020	8100	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-9	560	n/a	5/6/2020	5000	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2

Interwell Prediction Limit Summary - All Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:36 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-10**	**0.5**	**n/a**	**5/6/2020**	**10**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-11**	**0.5**	**n/a**	**5/6/2020**	**3.8**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-13**	**0.5**	**n/a**	**5/7/2020**	**14**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	MW-14	0.5	n/a	5/7/2020	0.5ND	No	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	**MW-6**	**0.5**	**n/a**	**5/6/2020**	**7.7**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.5**	**n/a**	**5/6/2020**	**3.6**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-8**	**0.5**	**n/a**	**5/7/2020**	**15**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-9**	**0.5**	**n/a**	**5/6/2020**	**11**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-10**	**49**	**n/a**	**5/6/2020**	**450**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-11**	**49**	**n/a**	**5/6/2020**	**160**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-13**	**49**	**n/a**	**5/7/2020**	**560**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-14**	**49**	**n/a**	**5/7/2020**	**290**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**5/6/2020**	**180**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**5/6/2020**	**290**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-8**	**49**	**n/a**	**5/7/2020**	**550**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-9**	**49**	**n/a**	**5/6/2020**	**260**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-10**	**230**	**n/a**	**5/6/2020**	**2500**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-11**	**230**	**n/a**	**5/6/2020**	**2700**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-13**	**230**	**n/a**	**5/7/2020**	**4300**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-14**	**230**	**n/a**	**5/7/2020**	**1900**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**5/6/2020**	**2500**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**5/6/2020**	**2600**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-8**	**230**	**n/a**	**5/7/2020**	**3600**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-9**	**230**	**n/a**	**5/6/2020**	**2200**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	MW-10	0.28	n/a	5/6/2020	0.04J	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-11	0.28	n/a	5/6/2020	0.1ND	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-13	0.28	n/a	5/7/2020	0.04J	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.28	n/a	5/7/2020	0.09J	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-6	0.28	n/a	5/6/2020	0.1ND	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-7	0.28	n/a	5/6/2020	0.1ND	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-8	0.28	n/a	5/7/2020	0.1ND	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-9	0.28	n/a	5/6/2020	0.04J	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**MW-10**	**7.473**	**n/a**	**5/6/2020**	**640**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-11**	**7.473**	**n/a**	**5/6/2020**	**270**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-13**	**7.473**	**n/a**	**5/7/2020**	**530**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-14**	**7.473**	**n/a**	**5/7/2020**	**490**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-6**	**7.473**	**n/a**	**5/6/2020**	**320**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**7.473**	**n/a**	**5/6/2020**	**550**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-8**	**7.473**	**n/a**	**5/7/2020**	**760**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-9**	**7.473**	**n/a**	**5/6/2020**	**440**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-10**	**560**	**n/a**	**5/6/2020**	**5400**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-11**	**560**	**n/a**	**5/6/2020**	**5200**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-13**	**560**	**n/a**	**5/7/2020**	**9100**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-14**	**560**	**n/a**	**5/7/2020**	**4400**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**560**	**n/a**	**5/6/2020**	**5000**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**560**	**n/a**	**5/6/2020**	**6100**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-8**	**560**	**n/a**	**5/7/2020**	**8100**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-9**	**560**	**n/a**	**5/6/2020**	**5000**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**

Intrawell Prediction Limit Summary - Significant Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 7/30/2020, 3:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	**MW-14**	**6.92**	**6.62**	**5/7/2020**	**7.02**	**Yes**	**12**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.02155**	**NP Intra (normality) 1 of 2**

Intrawell Prediction Limit Summary - All Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 7/30/2020, 3:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-10	5.446	5.026	5/6/2020	5.09	No	12	5.236	0.08372	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-11	6.916	6.023	5/6/2020	6.78	No	12	6.469	0.1777	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-12	6.26	5.841	5/5/2020	6.09	No	12	6.051	0.08339	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-13	7.467	6.618	5/7/2020	7.14	No	12	7.043	0.169	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	**MW-14**	**6.92**	**6.62**	**5/7/2020**	**7.02**	**Yes**	**12**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.02155**	**NP Intra (normality) 1 of 2**
pH (SU)	MW-2	7.639	5.067	5/5/2020	5.91	No	12	6.353	0.512	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-3	5.26	4.657	5/5/2020	5.04	No	12	4.958	0.1201	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-6	5.958	4.374	5/6/2020	5.61	No	12	5.166	0.3153	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-7	6.472	5.939	5/6/2020	6.41	No	12	6.206	0.1061	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-8	5.477	3.221	5/7/2020	4.66	No	12	20.19	3.906	0	None	x^2	0.0004701	Param Intra 1 of 2
pH (SU)	MW-9	7.317	4.082	5/6/2020	6.75	No	12	5.699	0.6438	0	None	No	0.0004701	Param Intra 1 of 2

Trend Test Summary - Significant Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:42 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-7**	**0.2899**	**92**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-10**	**-46.93**	**-92**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-13**	**-83.38**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-51.54**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-8**	**-37.48**	**-84**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-9**	**-56.83**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-10**	**-177.5**	**-83**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-14**	**-207.9**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.8881**	**72**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-264.9**	**-71**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-9**	**-201.7**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-7**	**87.82**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary - All Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:42 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-10	0	1	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-11	-0.03246	-12	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-12 (bg)	-0.01221	-31	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	MW-13	-1.331	-55	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0.001086	35	58	No	16	50	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	-28	-58	No	16	81.25	n/a	n/a	0.01	NP
Boron (mg/L)	MW-6	-0.03269	-5	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-7**	**0.2899**	**92**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-8	-0.333	-30	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-9	-0.025	-8	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-10**	**-46.93**	**-92**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-11	0	4	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-12 (bg)	0.5582	20	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-13**	**-83.38**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-14	0	-3	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-1.441	-12	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	0.05204	44	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-6**	**-51.54**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	29.25	48	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-8**	**-37.48**	**-84**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-9**	**-56.83**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-10**	**-177.5**	**-83**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-11	0	-10	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	3.771	23	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-13	0	4	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-14**	**-207.9**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-2 (bg)	-0.804	-30	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.8881**	**72**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-264.9**	**-71**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	279.3	34	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-8	-78.63	-26	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-9**	**-201.7**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	MW-12 (bg)	0.02483	21	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-14	0.08831	48	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-2 (bg)	-0.1354	-17	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-3 (bg)	-0.02497	-23	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-10	-38.69	-26	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-11	-15.69	-30	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-19	-58	No	16	62.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-13	-131.4	-44	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-14	-18.07	-18	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.4075	-55	-58	No	16	31.25	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	58	No	16	87.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-6	-56.27	-52	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-7**	**87.82**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-8	-12.63	-13	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-9	-73.9	-38	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-10	-252.6	-54	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-11	-79.07	-5	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	5.017	11	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-13	-195.1	-30	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-14	-194.1	-43	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-14.96	-26	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	-2.002	-9	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-6	-427.8	-52	-58	No	16	0	n/a	n/a	0.01	NP

Trend Test Summary - All Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:42 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	MW-7	611.9	25	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-8	47.96	8	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-9	-312.6	-44	-58	No	16	0	n/a	n/a	0.01	NP

Upper Tolerance Limits

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 7/30/2020, 6:06 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0005	n/a	n/a	n/a	33	100	n/a	0.184	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.00085	n/a	n/a	n/a	45	97.78	n/a	0.09944	NP Inter(NDs)
Barium (mg/L)	n/a	0.0283	n/a	n/a	n/a	45	6.667	No	0.05	Inter
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	42	92.86	n/a	0.116	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	33	100	n/a	0.184	NP Inter(NDs)
Chromium (mg/L)	n/a	0.012	n/a	n/a	n/a	45	44.44	n/a	0.09944	NP Inter(normal...
Cobalt (mg/L)	n/a	0.0005	n/a	n/a	n/a	39	100	n/a	0.1353	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	3.698	n/a	n/a	n/a	45	0	No	0.05	Inter
Fluoride (mg/L)	n/a	0.28	n/a	n/a	n/a	48	18.75	n/a	0.08526	NP Inter(normal...
Lead (mg/L)	n/a	0.00039	n/a	n/a	n/a	39	94.87	n/a	0.1353	NP Inter(NDs)
Lithium (mg/L)	n/a	0.025	n/a	n/a	n/a	45	13.33	n/a	0.09944	NP Inter(normal...
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	33	96.97	n/a	0.184	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.003	n/a	n/a	n/a	45	95.56	n/a	0.09944	NP Inter(NDs)
Selenium (mg/L)	n/a	0.00069	n/a	n/a	n/a	39	92.31	n/a	0.1353	NP Inter(NDs)
Thallium (mg/L)	n/a	0.0001	n/a	n/a	n/a	33	100	n/a	0.184	NP Inter(NDs)

PLANT SMITH GWPS				
Constituent Name	**MCL**	**CCR Rule Specified**	**Background**	**GWPS**
Antimony, Total (mg/L)	0.006		0.0005	0.006
Arsenic, Total (mg/L)	0.01		0.00085	0.01
Barium, Total (mg/L)	2		0.028	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.012	0.1
Cobalt, Total (mg/L)		0.006	0.0005	0.006
Combined Radium, Total (pCi/L)	5		3.7	5
Fluoride, Total (mg/L)	4		0.28	4
Lead, Total (mg/L)	0.015		0.00039	0.015
Lithium, Total (mg/L)		0.04	0.025	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.003	0.1
Selenium, Total (mg/L)	0.05		0.00069	0.05
Thallium, Total (mg/L)	0.002		0.0001	0.002

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Confidence Interval - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 7/30/2020, 6:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**MW-11**	**0.02645**	**0.01608**	**0.01**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-10**	**24.64**	**19.13**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-11**	**35.41**	**26.08**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-13**	**15.96**	**11.31**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-14**	**8.694**	**5.395**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**31.99**	**23.85**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**37.06**	**23.8**	**5**	**Yes**	**15**	**0**	**ln(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-8**	**41.06**	**33.86**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-9**	**30**	**11**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**NP (normality)**
Lithium (mg/L)	**MW-13**	**0.2216**	**0.1728**	**0.04**	**Yes**	**15**	**0**	**sqrt(x)**	**0.01**	**Param.**

Confidence Interval - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 7/30/2020, 6:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	MW-11	0.0016	0.0005	0.006	No	11	63.64	No	0.006	NP (NDs)
Arsenic (mg/L)	MW-10	0.003353	0.002327	0.01	No	15	13.33	No	0.01	Param.
Arsenic (mg/L)	**MW-11**	**0.02645**	**0.01608**	**0.01**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	MW-13	0.002256	0.0006443	0.01	No	15	20	sqrt(x)	0.01	Param.
Arsenic (mg/L)	MW-14	0.00525	0.002777	0.01	No	15	0	No	0.01	Param.
Arsenic (mg/L)	MW-6	0.001857	0.0007128	0.01	No	15	26.67	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.002154	0.001124	0.01	No	15	26.67	x^(1/3)	0.01	Param.
Arsenic (mg/L)	MW-8	0.002099	0.001072	0.01	No	15	20	ln(x)	0.01	Param.
Arsenic (mg/L)	MW-9	0.003661	0.002406	0.01	No	15	13.33	No	0.01	Param.
Barium (mg/L)	MW-10	0.1166	0.1014	2	No	15	0	No	0.01	Param.
Barium (mg/L)	MW-11	0.1447	0.09459	2	No	15	6.667	No	0.01	Param.
Barium (mg/L)	MW-13	0.131	0.08998	2	No	15	0	No	0.01	Param.
Barium (mg/L)	MW-14	0.05861	0.04972	2	No	15	6.667	No	0.01	Param.
Barium (mg/L)	MW-6	0.07091	0.05938	2	No	15	6.667	x^2	0.01	Param.
Barium (mg/L)	MW-7	0.14	0.059	2	No	15	6.667	No	0.01	NP (normality)
Barium (mg/L)	MW-8	0.07091	0.05729	2	No	15	6.667	No	0.01	Param.
Barium (mg/L)	MW-9	0.1006	0.07563	2	No	15	6.667	No	0.01	Param.
Beryllium (mg/L)	MW-10	0.00063	0.00037	0.004	No	14	14.29	No	0.01	NP (normality)
Beryllium (mg/L)	MW-11	0.0025	0.00078	0.004	No	14	42.86	No	0.01	NP (normality)
Beryllium (mg/L)	MW-6	0.001761	0.0009193	0.004	No	14	7.143	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	14	85.71	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-8	0.0016	0.0011	0.004	No	14	7.143	No	0.01	NP (normality)
Beryllium (mg/L)	MW-9	0.0025	0.00043	0.004	No	14	57.14	No	0.01	NP (NDs)
Chromium (mg/L)	MW-10	0.005	0.003	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	MW-11	0.0087	0.0029	0.1	No	15	20	No	0.01	NP (normality)
Chromium (mg/L)	MW-13	0.005	0.0024	0.1	No	15	93.33	No	0.01	NP (NDs)
Chromium (mg/L)	MW-14	0.005	0.0017	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0012	0.1	No	15	46.67	No	0.01	NP (normality)
Cobalt (mg/L)	MW-11	0.0025	0.00046	0.006	No	13	84.62	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-7	0.0025	0.00029	0.006	No	13	92.31	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-9	0.0025	0.00018	0.006	No	13	92.31	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-10**	**24.64**	**19.13**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-11**	**35.41**	**26.08**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-13**	**15.96**	**11.31**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-14**	**8.694**	**5.395**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**31.99**	**23.85**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**37.06**	**23.8**	**5**	**Yes**	**15**	**0**	**ln(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-8**	**41.06**	**33.86**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-9**	**30**	**11**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**NP (normality)**
Fluoride (mg/L)	MW-10	0.1	0.04	4	No	16	50	No	0.01	NP (normality)
Fluoride (mg/L)	MW-11	0.1	0.05	4	No	16	81.25	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-13	0.1	0.04	4	No	16	6.25	No	0.01	NP (normality)
Fluoride (mg/L)	MW-14	0.08471	0.05254	4	No	16	6.25	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	16	25	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.047	4	No	16	75	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-9	0.1	0.04	4	No	16	25	No	0.01	NP (normality)
Lead (mg/L)	MW-10	0.0093	0.00025	0.015	No	13	92.31	No	0.01	NP (NDs)
Lead (mg/L)	MW-11	0.0013	0.00025	0.015	No	13	92.31	No	0.01	NP (NDs)
Lithium (mg/L)	MW-10	0.00606	0.003715	0.04	No	15	20	x^2	0.01	Param.
Lithium (mg/L)	MW-11	0.0058	0.001	0.04	No	15	60	No	0.01	NP (NDs)
Lithium (mg/L)	**MW-13**	**0.2216**	**0.1728**	**0.04**	**Yes**	**15**	**0**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	MW-14	0.002	0.001	0.04	No	15	73.33	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.02125	0.01051	0.04	No	15	6.667	No	0.01	Param.
Lithium (mg/L)	MW-7	0.002	0.001	0.04	No	15	60	No	0.01	NP (NDs)
Lithium (mg/L)	MW-8	0.009374	0.004228	0.04	No	15	20	No	0.01	Param.
Lithium (mg/L)	MW-9	0.006724	0.002307	0.04	No	15	13.33	sqrt(x)	0.01	Param.
Mercury (mg/L)	MW-10	0.0002	0.0002	0.002	No	11	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	MW-10	0.0031	0.0018	0.1	No	15	46.67	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-11	0.01813	0.008435	0.1	No	15	6.667	No	0.01	Param.
Molybdenum (mg/L)	MW-13	0.02734	0.01123	0.1	No	15	6.667	No	0.01	Param.
Molybdenum (mg/L)	MW-14	0.019	0.014	0.1	No	15	0	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-6	0.003	0.0011	0.1	No	15	93.33	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.006514	0.003595	0.1	No	15	33.33	ln(x)	0.01	Param.
Molybdenum (mg/L)	MW-9	0.0036	0.0023	0.1	No	15	60	No	0.01	NP (NDs)
Selenium (mg/L)	MW-10	0.00041	0.00025	0.05	No	13	84.62	No	0.01	NP (NDs)
Selenium (mg/L)	MW-11	0.0006	0.00025	0.05	No	13	61.54	No	0.01	NP (NDs)
Selenium (mg/L)	MW-13	0.00044	0.00025	0.05	No	13	76.92	No	0.01	NP (NDs)
Selenium (mg/L)	MW-14	0.00041	0.00024	0.05	No	13	84.62	No	0.01	NP (NDs)

Confidence Interval - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 7/30/2020, 6:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	MW-6	0.00037	0.00025	0.05	No	13	69.23	No	0.01	NP (NDs)
Selenium (mg/L)	MW-7	0.0003	0.00025	0.05	No	13	69.23	No	0.01	NP (NDs)
Selenium (mg/L)	MW-8	0.00064	0.00025	0.05	No	13	69.23	No	0.01	NP (NDs)
Selenium (mg/L)	MW-9	0.00033	0.00025	0.05	No	13	84.62	No	0.01	NP (NDs)

Prediction Limits - Interwell

Interwell Prediction Limit Summary - Significant Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:36 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MW-10	0.5	n/a	5/6/2020	10	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-11	0.5	n/a	5/6/2020	3.8	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-13	0.5	n/a	5/7/2020	14	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-6	0.5	n/a	5/6/2020	7.7	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-7	0.5	n/a	5/6/2020	3.6	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-8	0.5	n/a	5/7/2020	15	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	MW-9	0.5	n/a	5/6/2020	11	Yes	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-10	49	n/a	5/6/2020	450	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-11	49	n/a	5/6/2020	160	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-13	49	n/a	5/7/2020	560	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-14	49	n/a	5/7/2020	290	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-6	49	n/a	5/6/2020	180	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-7	49	n/a	5/6/2020	290	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-8	49	n/a	5/7/2020	550	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Calcium (mg/L)	MW-9	49	n/a	5/6/2020	260	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-10	230	n/a	5/6/2020	2500	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-11	230	n/a	5/6/2020	2700	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-13	230	n/a	5/7/2020	4300	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-14	230	n/a	5/7/2020	1900	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-6	230	n/a	5/6/2020	2500	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-7	230	n/a	5/6/2020	2600	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-8	230	n/a	5/7/2020	3600	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Chloride (mg/L)	MW-9	230	n/a	5/6/2020	2200	Yes	48	n/a	n/a	0	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MW-10	7.473	n/a	5/6/2020	640	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-11	7.473	n/a	5/6/2020	270	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-13	7.473	n/a	5/7/2020	530	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-14	7.473	n/a	5/7/2020	490	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-6	7.473	n/a	5/6/2020	320	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-7	7.473	n/a	5/6/2020	550	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-8	7.473	n/a	5/7/2020	760	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	MW-9	7.473	n/a	5/6/2020	440	Yes	48	n/a	n/a	60.42	n/a	n/a	0.0008114	NP Inter (NDs) 1 of 2
Total Dissolved Solids (mg/L)	MW-10	560	n/a	5/6/2020	5400	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-11	560	n/a	5/6/2020	5200	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-13	560	n/a	5/7/2020	9100	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-14	560	n/a	5/7/2020	4400	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-6	560	n/a	5/6/2020	5000	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-7	560	n/a	5/6/2020	6100	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-8	560	n/a	5/7/2020	8100	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	MW-9	560	n/a	5/6/2020	5000	Yes	47	n/a	n/a	0	n/a	n/a	0.0008496	NP Inter (normality) 1 of 2

Interwell Prediction Limit Summary - All Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:36 PM

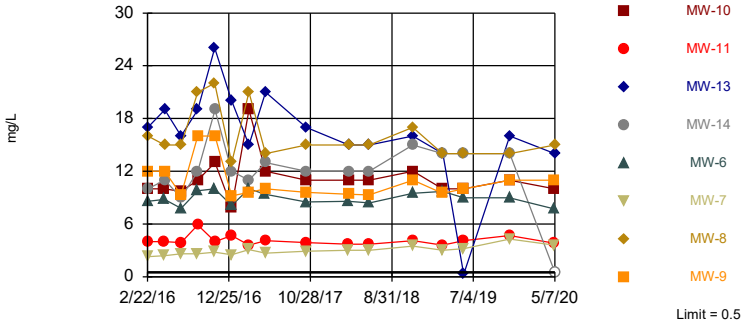
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-10**	**0.5**	**n/a**	**5/6/2020**	**10**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-11**	**0.5**	**n/a**	**5/6/2020**	**3.8**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-13**	**0.5**	**n/a**	**5/7/2020**	**14**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	MW-14	0.5	n/a	5/7/2020	0.5ND	No	48	n/a	n/a	47.92	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Boron (mg/L)	**MW-6**	**0.5**	**n/a**	**5/6/2020**	**7.7**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.5**	**n/a**	**5/6/2020**	**3.6**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-8**	**0.5**	**n/a**	**5/7/2020**	**15**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-9**	**0.5**	**n/a**	**5/6/2020**	**11**	**Yes**	**48**	**n/a**	**n/a**	**47.92**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-10**	**49**	**n/a**	**5/6/2020**	**450**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-11**	**49**	**n/a**	**5/6/2020**	**160**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-13**	**49**	**n/a**	**5/7/2020**	**560**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-14**	**49**	**n/a**	**5/7/2020**	**290**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**5/6/2020**	**180**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**5/6/2020**	**290**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-8**	**49**	**n/a**	**5/7/2020**	**550**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-9**	**49**	**n/a**	**5/6/2020**	**260**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-10**	**230**	**n/a**	**5/6/2020**	**2500**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-11**	**230**	**n/a**	**5/6/2020**	**2700**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-13**	**230**	**n/a**	**5/7/2020**	**4300**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-14**	**230**	**n/a**	**5/7/2020**	**1900**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**5/6/2020**	**2500**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**5/6/2020**	**2600**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-8**	**230**	**n/a**	**5/7/2020**	**3600**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-9**	**230**	**n/a**	**5/6/2020**	**2200**	**Yes**	**48**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008114**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	MW-10	0.28	n/a	5/6/2020	0.04J	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-11	0.28	n/a	5/6/2020	0.1ND	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-13	0.28	n/a	5/7/2020	0.04J	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-14	0.28	n/a	5/7/2020	0.09J	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-6	0.28	n/a	5/6/2020	0.1ND	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-7	0.28	n/a	5/6/2020	0.1ND	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-8	0.28	n/a	5/7/2020	0.1ND	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MW-9	0.28	n/a	5/6/2020	0.04J	No	48	n/a	n/a	18.75	n/a	n/a	0.0008114	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**MW-10**	**7.473**	**n/a**	**5/6/2020**	**640**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-11**	**7.473**	**n/a**	**5/6/2020**	**270**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-13**	**7.473**	**n/a**	**5/7/2020**	**530**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-14**	**7.473**	**n/a**	**5/7/2020**	**490**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-6**	**7.473**	**n/a**	**5/6/2020**	**320**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**7.473**	**n/a**	**5/6/2020**	**550**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-8**	**7.473**	**n/a**	**5/7/2020**	**760**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-9**	**7.473**	**n/a**	**5/6/2020**	**440**	**Yes**	**48**	**n/a**	**n/a**	**60.42**	**n/a**	**n/a**	**0.0008114**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-10**	**560**	**n/a**	**5/6/2020**	**5400**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-11**	**560**	**n/a**	**5/6/2020**	**5200**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-13**	**560**	**n/a**	**5/7/2020**	**9100**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-14**	**560**	**n/a**	**5/7/2020**	**4400**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**560**	**n/a**	**5/6/2020**	**5000**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**560**	**n/a**	**5/6/2020**	**6100**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-8**	**560**	**n/a**	**5/7/2020**	**8100**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-9**	**560**	**n/a**	**5/6/2020**	**5000**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008496**	**NP Inter (normality) 1 of 2**

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: MW-10, MW-11, MW-13, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. 47.92% NDs. Annual per-constituent alpha = 0.0129. Individual comparison alpha = 0.0008114 (1 of 2). Comparing 8 points to limit.

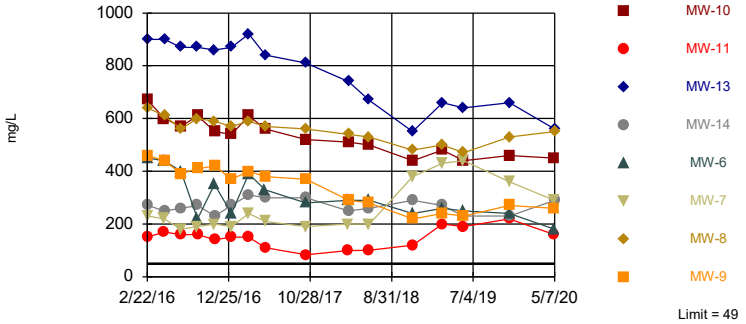
Constituent: Boron Analysis Run 8/3/2020 1:27 PM View: PL's Interwell
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: MW-10, MW-11, MW-13, MW-14, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. Annual per-constituent alpha = 0.0129. Individual comparison alpha = 0.0008114 (1 of 2). Comparing 8 points to limit.

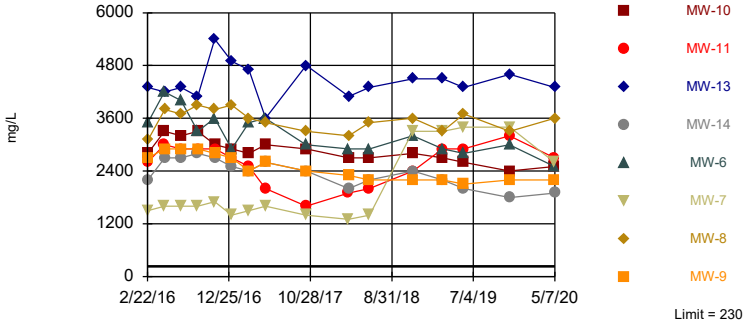
Constituent: Calcium Analysis Run 8/3/2020 1:27 PM View: PL's Interwell
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: MW-10, MW-11, MW-13, MW-14, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. Annual per-constituent alpha = 0.0129. Individual comparison alpha = 0.0008114 (1 of 2). Comparing 8 points to limit.

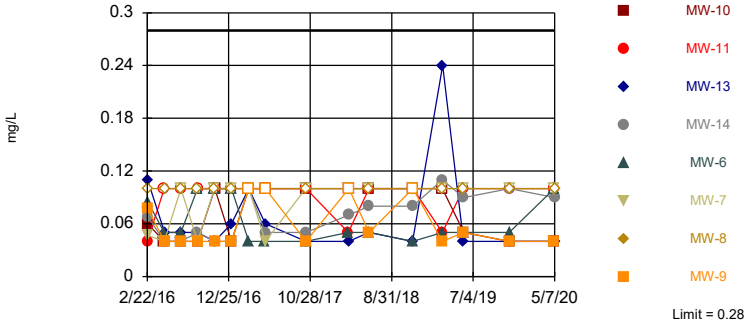
Constituent: Chloride Analysis Run 8/3/2020 1:27 PM View: PL's Interwell
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



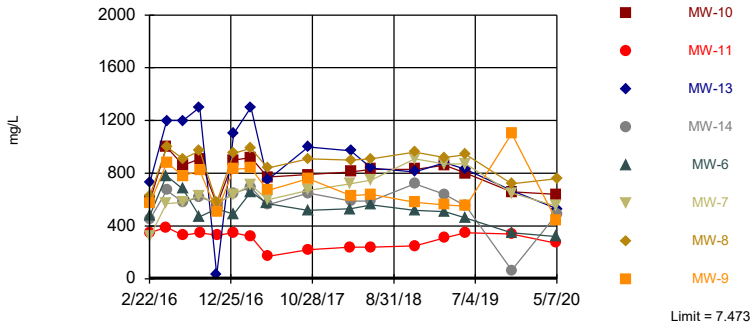
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. 18.75% NDs. Annual per-constituent alpha = 0.0129. Individual comparison alpha = 0.0008114 (1 of 2). Comparing 8 points to limit.

Constituent: Fluoride Analysis Run 8/3/2020 1:28 PM View: PL's Interwell
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Exceeds Limit: MW-10, MW-11, MW-13, MW-14, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 60.42% NDs. Annual per-constituent alpha = 0.0129. Individual comparison alpha = 0.0008114 (1 of 2). Comparing 8 points to limit.

Constituent: Sulfate Analysis Run 8/3/2020 1:28 PM View: PL's Interwell

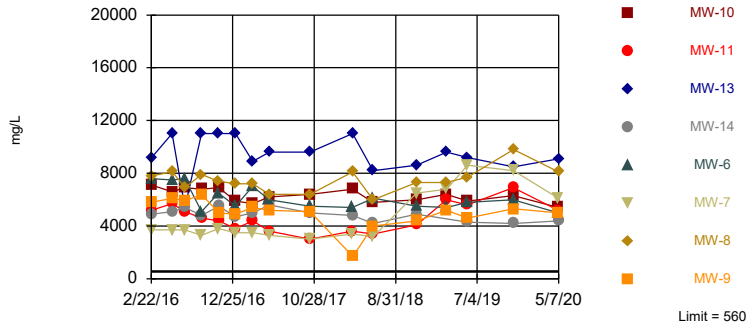
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: MW-10, MW-11, MW-13, MW-14, MW-6, MW-7, MW-8, MW-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. Annual per-constituent alpha = 0.01351. Individual comparison alpha = 0.0008496 (1 of 2). Comparing 8 points to limit.

Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:28 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-2 (bg)	MW-3 (bg)	MW-12 (bg)	MW-11	MW-14	MW-6	MW-13	MW-7	MW-8
2/22/2016	<1	<1	0.14 (J)	4					
2/23/2016					10	8.6	17	2.3	16
4/25/2016	0.022 (J)	<1							
4/26/2016			0.27	4		8.8		2.4	
4/27/2016					11		19		15
6/27/2016	0.032 (J)	<1	0.083						
6/28/2016				3.9	9	7.8	16	2.6	15
8/29/2016	<1 (*)	<1	<1 (*)		12	9.8	19	2.6	21
8/30/2016				5.9					
11/1/2016	<1	<1	0.1						
11/2/2016						10	26	2.8	22
11/3/2016				4	19				
1/4/2017	<1	<1	0.062						
1/5/2017				4.7	12	8.1	20	2.5	13
3/10/2017	0.032 (J)	<1	0.06						
3/11/2017				3.6	11	10	15	3.1	21
5/11/2017	0.23	0.18	0.33			9.4			
5/12/2017				4.1	13		21	2.7	14
10/12/2017	<1	<1	0.082			8.5		2.9	
10/13/2017				3.9	12		17		15
3/20/2018		<1	0.072						
3/21/2018	<1			3.7		8.6		3	
3/22/2018					12		15		15
3/23/2018									
6/6/2018	0.027 (J)	<1	0.077						
6/7/2018				3.7	12		15		15
6/8/2018						8.4		3	
11/19/2018	0.045 (J)	<1	0.071		15	9.5	16	3.5	17
11/20/2018				4.1					
3/11/2019	<1	<1	<1	3.6	14				14
3/12/2019						9.7	14	3	
5/28/2019	<1	<1	0.024 (J)						
5/29/2019				4.1		9	0.28	3.2	
5/30/2019					14				14
11/18/2019	0.036 (V)	0.0094 (IV)	0.075	4.7 (J3)		9 (J3)			
11/19/2019					14 (J3)		16 (J3)	4.3 (J3)	14 (J3)
5/5/2020	0.041	0.0073 (J)	0.11						
5/6/2020				3.8		7.7		3.6	
5/7/2020					<1		14		15

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-9	MW-10
2/22/2016		
2/23/2016	12	10
4/25/2016		
4/26/2016		10
4/27/2016	12	
6/27/2016		
6/28/2016	9.3	9.7
8/29/2016		
8/30/2016	16	11
11/1/2016		
11/2/2016		
11/3/2016	16	13
1/4/2017		
1/5/2017	9.2	7.9
3/10/2017		
3/11/2017	9.6	19
5/11/2017		
5/12/2017	10	12
10/12/2017		
10/13/2017	9.6	11
3/20/2018		
3/21/2018		
3/22/2018		11
3/23/2018	9.4	
6/6/2018		
6/7/2018	9.3	11
6/8/2018		
11/19/2018		
11/20/2018	11	12
3/11/2019	9.5	10
3/12/2019		
5/28/2019		
5/29/2019		
5/30/2019	10	10
11/18/2019		11 (J3)
11/19/2019	11 (J3)	
5/5/2020		
5/6/2020	11	10
5/7/2020		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-2 (bg)	MW-3 (bg)	MW-12 (bg)	MW-11	MW-14	MW-6	MW-13	MW-7	MW-8
2/22/2016	12	1.9	23	150					
2/23/2016					270	450	900	230	640
4/25/2016	11	1.8							
4/26/2016			33	170		440		220	
4/27/2016					250		900		610
6/27/2016	7.7	1.7	29						
6/28/2016				160	260	400	870	180	560
8/29/2016	48	1.7	28		270	220	870	190	600
8/30/2016				160					
11/1/2016	49	1.9	36						
11/2/2016						350	860	200	590
11/3/2016				140	230				
1/4/2017	44	1.8	36						
1/5/2017				150	270	240	870	190	570
3/10/2017	46	1.9	37						
3/11/2017				150	310	390	920	240	590
5/11/2017	43	1.7	31			330			
5/12/2017				110	300		840	210	570
10/12/2017	45	1.9	32			280		190	
10/13/2017				83	300		810		560
3/20/2018		1.9	34						
3/21/2018	45			99		290		200	
3/22/2018					250		740		540
3/23/2018									
6/6/2018	32	1.8	30						
6/7/2018				100	260		670		530
6/8/2018						290		200	
11/19/2018	20	1.8	38		290	240	550	380	480
11/20/2018				120					
3/11/2019	16	1.9	31	200	270				500
3/12/2019						260	660	430	
5/28/2019	35	2.1	37						
5/29/2019				190		250	640	440	
5/30/2019					230				470
11/18/2019	44	1.9	30	220		240			
11/19/2019					230		660	360	530
5/5/2020	13	2.3	31						
5/6/2020				160		180		290	
5/7/2020					290		560		550

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-9	MW-10
2/22/2016		
2/23/2016	460	670
4/25/2016		
4/26/2016		600
4/27/2016	440	
6/27/2016		
6/28/2016	390	570
8/29/2016		
8/30/2016	410	610
11/1/2016		
11/2/2016		
11/3/2016	420	550
1/4/2017		
1/5/2017	370	540
3/10/2017		
3/11/2017	400	610
5/11/2017		
5/12/2017	380	560
10/12/2017		
10/13/2017	370	520
3/20/2018		
3/21/2018		
3/22/2018		510
3/23/2018	290	
6/6/2018		
6/7/2018	280	500
6/8/2018		
11/19/2018		
11/20/2018	220	440
3/11/2019	240	480
3/12/2019		
5/28/2019		
5/29/2019		
5/30/2019	230	440
11/18/2019		460
11/19/2019	270	
5/5/2020		
5/6/2020	260	450
5/7/2020		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-2 (bg)	MW-3 (bg)	MW-12 (bg)	MW-11	MW-14	MW-6	MW-13	MW-7	MW-8
2/22/2016	15	11	140	2600					
2/23/2016					2200	3500	4300	1500	3100
4/25/2016	18	10							
4/26/2016			190	3000		4200		1600	
4/27/2016					2700		4200		3800
6/27/2016	17	11	170						
6/28/2016				2900	2700	4000	4300	1600	3700
8/29/2016	16	11	180		2800	3300	4100	1600	3900
8/30/2016				2900					
11/1/2016	11	11	230						
11/2/2016						3600	5400	1700	3800
11/3/2016				2900	2700				
1/4/2017	11	11	220						
1/5/2017				2700	2500	2900	4900	1400	3900
3/10/2017	14	11	210						
3/11/2017				2500	2400	3500	4700	1500	3600
5/11/2017	11	12	200			3600			
5/12/2017				2000	2600		3600	1600	3500
10/12/2017	12	12	190			3000		1400	
10/13/2017				1600	2400		4800		3300
3/20/2018		11	190						
3/21/2018	9.3			1900		2900		1300	
3/22/2018					2000		4100		3200
3/23/2018									
6/6/2018	13	11	190						
6/7/2018				2000	2200		4300		3500
6/8/2018						2900		1400	
11/19/2018	13	19.9 (D)	210		2400	3200	4500	3300	3600
11/20/2018				2400					
3/11/2019	12	13	190	2900	2200				3300
3/12/2019						2900	4500	3300	
5/28/2019	13	13	190						
5/29/2019				2900		2800	4300	3400	
5/30/2019					2000				3700
11/18/2019	12	14	210	3200		3000			
11/19/2019					1800		4600	3400	3300
5/5/2020	13	15	200						
5/6/2020				2700		2500		2600	
5/7/2020					1900		4300		3600

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-9	MW-10
2/22/2016		
2/23/2016	2700	2800
4/25/2016		
4/26/2016		3300
4/27/2016	2900	
6/27/2016		
6/28/2016	2900	3200
8/29/2016		
8/30/2016	2900	3300
11/1/2016		
11/2/2016		
11/3/2016	2800	3000
1/4/2017		
1/5/2017	2700	2900
3/10/2017		
3/11/2017	2400	2800
5/11/2017		
5/12/2017	2600	3000
10/12/2017		
10/13/2017	2400	2900
3/20/2018		
3/21/2018		
3/22/2018		2700
3/23/2018	2300	
6/6/2018		
6/7/2018	2200	2700
6/8/2018		
11/19/2018		
11/20/2018	2200	2800
3/11/2019	2200	2700
3/12/2019		
5/28/2019		
5/29/2019		
5/30/2019	2100	2600
11/18/2019		2400
11/19/2019	2200	
5/5/2020		
5/6/2020	2200	2500
5/7/2020		

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-2 (bg)	MW-3 (bg)	MW-12 (bg)	MW-11	MW-14	MW-6	MW-13	MW-7	MW-8
2/22/2016	0.06 (J)	0.04 (J)	0.09 (J)	0.04 (J)					
2/23/2016					0.068 (J)	0.085 (J)	0.11	0.047 (J)	<0.1
4/25/2016	0.04 (J)	<0.1							
4/26/2016			0.08 (J)	<0.1		0.05 (J)		0.04 (J)	
4/27/2016					0.04 (J)		0.05 (J)		<0.1
6/27/2016	0.04 (J)	<0.1	0.08 (J)						
6/28/2016				<0.1	0.04 (J)	0.05 (J)	0.05 (J)	<0.1	<0.1
8/29/2016	0.16	0.04 (J)	0.09 (J)		0.05 (J)	<0.1	0.05 (J)	0.04 (J)	<0.1
8/30/2016				<0.1					
11/1/2016	0.17	<0.1	0.08 (J)						
11/2/2016						<0.1	0.04 (J)	<0.1	<0.1
11/3/2016				<0.1	0.04 (J)				
1/4/2017	0.23	<0.1	0.1						
1/5/2017				<0.1	0.04 (J)	<0.1	0.06 (J)	<0.1	<0.1
3/10/2017	0.21	<0.1	0.1						
3/11/2017				<0.1	<0.1	0.04 (J)	<0.1	<0.1	<0.1
5/11/2017	0.23	<0.1	0.1			0.04 (J)			
5/12/2017				<0.1	0.05 (J)		0.06 (J)	0.04 (J)	<0.1
10/12/2017	0.27	<0.1	0.12			0.04		<0.1	
10/13/2017				<0.1	0.05		0.04		<0.1
3/20/2018		<0.1	0.12						
3/21/2018	0.28			0.05 (J)		0.05 (J)		<0.1	
3/22/2018					0.07 (J)		0.04 (J)		<0.1
3/23/2018									
6/6/2018	0.19	0.04 (J)	0.12						
6/7/2018				<0.1	0.08 (J)		0.05 (J)		<0.1
6/8/2018						0.05 (J)		<0.1	
11/19/2018	0.12	0.04 (J)	0.13		0.08 (J)	0.04 (J)	0.04 (J)	<0.1	<0.1
11/20/2018				<0.1					
3/11/2019	0.08 (J)	0.04 (J)	0.12	0.05 (J)	0.11				<0.1
3/12/2019						0.05 (J)	0.24	<0.1	
5/28/2019	0.13	0.04 (J)	0.13						
5/29/2019				<0.1		0.05 (J)	0.04 (J)	<0.1	
5/30/2019					0.09 (J)				<0.1
11/18/2019	0.17	<0.1	0.14	<0.1		0.05 (I)			
11/19/2019					0.1		0.04 (I)	<0.1	<0.1
5/5/2020	0.09 (J)	0.05 (J)	0.15 (V)						
5/6/2020				<0.1		<0.1		<0.1	
5/7/2020					0.09 (J)		0.04 (J)		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-9	MW-10
2/22/2016		
2/23/2016	0.077 (J)	0.06 (J)
4/25/2016		
4/26/2016		0.04 (J)
4/27/2016	0.04 (J)	
6/27/2016		
6/28/2016	0.04 (J)	0.04 (J)
8/29/2016		
8/30/2016	0.04 (J)	0.04 (J)
11/1/2016		
11/2/2016		
11/3/2016	0.04 (J)	<0.1
1/4/2017		
1/5/2017	0.04 (J)	0.04 (J)
3/10/2017		
3/11/2017	<0.1	<0.1
5/11/2017		
5/12/2017	<0.1	<0.1
10/12/2017		
10/13/2017	0.04	<0.1
3/20/2018		
3/21/2018		
3/22/2018		<0.1
3/23/2018	<0.1	
6/6/2018		
6/7/2018	0.05 (J)	<0.1
6/8/2018		
11/19/2018		
11/20/2018	<0.1	<0.1
3/11/2019	0.04 (J)	<0.1
3/12/2019		
5/28/2019		
5/29/2019		
5/30/2019	0.05 (J)	0.05 (J)
11/18/2019		0.04 (I)
11/19/2019	0.04 (I)	
5/5/2020		
5/6/2020	0.04 (J)	0.04 (J)
5/7/2020		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-2 (bg)	MW-3 (bg)	MW-12 (bg)	MW-11	MW-14	MW-6	MW-13	MW-7	MW-8
2/22/2016	6.3	<5	<5	350					
2/23/2016					450	480	730	320	630
4/25/2016	6.1	1.4 (J)							
4/26/2016			<5	390		780		570	
4/27/2016					670		1200		1000
6/27/2016	6.6	<5	1.6 (J)						
6/28/2016				330	580	680	1200	580	910
8/29/2016	4.5 (J)	<5	<5		620	470 (J)	1300	630	970
8/30/2016				350					
11/1/2016	<5	<5	<5						
11/2/2016						530	31	570	580
11/3/2016				330	570				
1/4/2017	<5 (*)	<5 (*)	<5						
1/5/2017				350	650	490	1100	640	950
3/10/2017	2.3 (J)	<5	<5						
3/11/2017				320	690	660	1300	710	990
5/11/2017	<5	<5	<5			570			
5/12/2017				170 (J)	560		750	600	840
10/12/2017	<5	<5	<5			520		670	
10/13/2017				220	650		1000		910
3/20/2018		<5	1.8 (J)						
3/21/2018	<5			240		530		720	
3/22/2018					590		970		900
3/23/2018									
6/6/2018	4.8 (J)	<5	2.3 (J)						
6/7/2018				240	590		840		910
6/8/2018						560		750	
11/19/2018	4.4 (J)	7.473 (D)	2.2 (J)		720	520	810	910	960
11/20/2018				250					
3/11/2019	5.2	<5	1.5 (J)	310	640				920
3/12/2019						510	880	870	
5/28/2019	4.3 (J)	<5	3 (J)						
5/29/2019				350		460	830	870	
5/30/2019					550				940
11/18/2019	2.8 (I)	<5	<5	340		350			
11/19/2019					65 (I)		670	650	720
5/5/2020	4.4 (J)	<5	<5						
5/6/2020				270		320		550	
5/7/2020					490		530		760

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-9	MW-10
2/22/2016		
2/23/2016	570	590
4/25/2016		
4/26/2016		1000
4/27/2016	880	
6/27/2016		
6/28/2016	780	860
8/29/2016		
8/30/2016	820	910
11/1/2016		
11/2/2016		
11/3/2016	510	560
1/4/2017		
1/5/2017	830	900
3/10/2017		
3/11/2017	840	920
5/11/2017		
5/12/2017	670	770
10/12/2017		
10/13/2017	760	790
3/20/2018		
3/21/2018		
3/22/2018		810
3/23/2018	630	
6/6/2018		
6/7/2018	640	830
6/8/2018		
11/19/2018		
11/20/2018	580	830
3/11/2019	560	860
3/12/2019		
5/28/2019		
5/29/2019		
5/30/2019	550	800
11/18/2019		660
11/19/2019	1100 (I)	
5/5/2020		
5/6/2020	440	640
5/7/2020		

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-2 (bg)	MW-12 (bg)	MW-11	MW-6	MW-14	MW-7	MW-13	MW-8
2/22/2016	46	74	410	5200					
2/23/2016					7600	4900	3700	9200	7800
5/11/2016	42	200	410	5700	7500		3700	11000	
5/12/2016						5100			8100
6/27/2016	24	42	4200 (o)						
6/28/2016				5100	7600	5400	3700	5400	6900
8/29/2016	42	200	490		5100	4800	3300	11000	7900
8/30/2016				4600					
11/1/2016	64	220	540						
11/2/2016					6500		3800	11000	7400
11/3/2016				4400		5500			
1/4/2017	44	140	520						
1/5/2017				3800	5500	4700	3500	11000	7200
3/10/2017	16	160	490						
3/11/2017				4400	7000	5000	3500	8900	7200
5/11/2017	42	190	490		6000				
5/12/2017				3600		5600	3300	9600	6400
10/12/2017	30	150	470		5500		3000		
10/13/2017				3000		5000		9600	6400
3/20/2018	12		510						
3/21/2018		150		3600	5400		3400		
3/22/2018						4800		11000	8100
3/23/2018									
6/6/2018	46	160	460						
6/7/2018				3400		4200		8200	6000
6/8/2018					6100		3200		
11/19/2018	22	88 (D)	490		5500	4900	6500	8600	7300
11/20/2018				4100					
3/11/2019	12	72	440	6000		45500 (oD)			7300
3/12/2019					5400		6800	9600	
5/28/2019	110	140	540						
5/29/2019				5600	5800		8600	9200	
5/30/2019						4300			7700
11/18/2019	52	170	560	6900	6000				
11/19/2019						4200	8200	8500	9800
5/5/2020	34	54	430						
5/6/2020				5200	5000		6100		
5/7/2020						4400		9100	8100

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 8/3/2020 1:36 PM View: PL's Interwell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-9	MW-10
2/22/2016		
2/23/2016	5800	7100
5/11/2016		6600
5/12/2016	6100	
6/27/2016		
6/28/2016	5900	6900
8/29/2016		
8/30/2016	6400	6800
11/1/2016		
11/2/2016		
11/3/2016	5000	6900
1/4/2017		
1/5/2017	4900	5900
3/10/2017		
3/11/2017	5400	5700
5/11/2017		
5/12/2017	5200	6200
10/12/2017		
10/13/2017	5100	6400
3/20/2018		
3/21/2018		
3/22/2018		6800
3/23/2018	1700	
6/6/2018		
6/7/2018	4000	5800
6/8/2018		
11/19/2018		
11/20/2018	4400	6000
3/11/2019	5200	6400
3/12/2019		
5/28/2019		
5/29/2019		
5/30/2019	4600	5900
11/18/2019		6300
11/19/2019	5300	
5/5/2020		
5/6/2020	5000	5400
5/7/2020		

Prediction Limits - Intrawell

Intrawell Prediction Limit Summary - Significant Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 7/30/2020, 3:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	**MW-14**	**6.92**	**6.62**	**5/7/2020**	**7.02**	**Yes**	**12**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.02155**	**NP Intra (normality) 1 of 2**

Intrawell Prediction Limit Summary - All Results

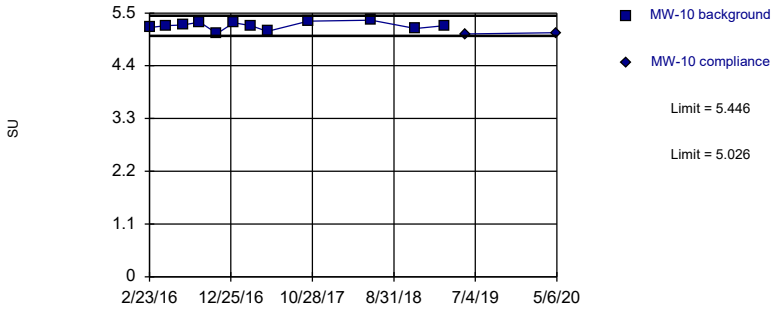
Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 7/30/2020, 3:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-10	5.446	5.026	5/6/2020	5.09	No	12	5.236	0.08372	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-11	6.916	6.023	5/6/2020	6.78	No	12	6.469	0.1777	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-12	6.26	5.841	5/5/2020	6.09	No	12	6.051	0.08339	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-13	7.467	6.618	5/7/2020	7.14	No	12	7.043	0.169	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	**MW-14**	**6.92**	**6.62**	**5/7/2020**	**7.02**	**Yes**	**12**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.02155**	**NP Intra (normality) 1 of 2**
pH (SU)	MW-2	7.639	5.067	5/5/2020	5.91	No	12	6.353	0.512	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-3	5.26	4.657	5/5/2020	5.04	No	12	4.958	0.1201	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-6	5.958	4.374	5/6/2020	5.61	No	12	5.166	0.3153	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-7	6.472	5.939	5/6/2020	6.41	No	12	6.206	0.1061	0	None	No	0.0004701	Param Intra 1 of 2
pH (SU)	MW-8	5.477	3.221	5/7/2020	4.66	No	12	20.19	3.906	0	None	x^2	0.0004701	Param Intra 1 of 2
pH (SU)	MW-9	7.317	4.082	5/6/2020	6.75	No	12	5.699	0.6438	0	None	No	0.0004701	Param Intra 1 of 2

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.236, Std. Dev.=0.08372, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9486, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

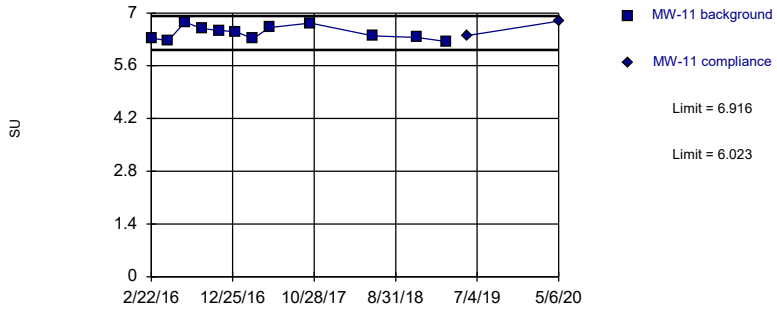
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.469, Std. Dev.=0.1777, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9283, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

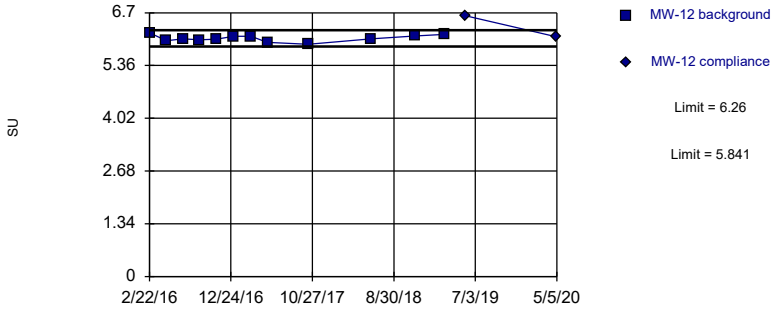
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.051, Std. Dev.=0.08339, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9827, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

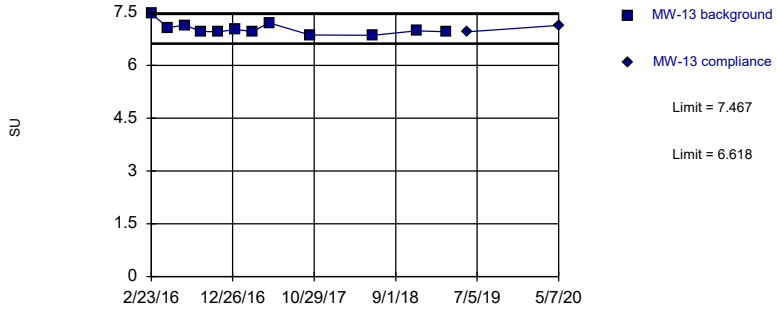
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.043, Std. Dev.=0.169, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8469, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

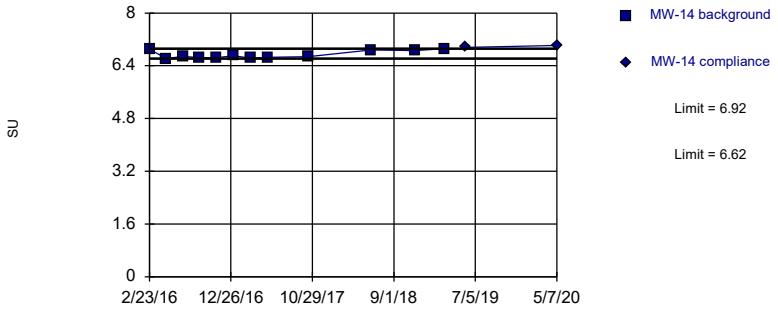
Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Exceeds 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). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

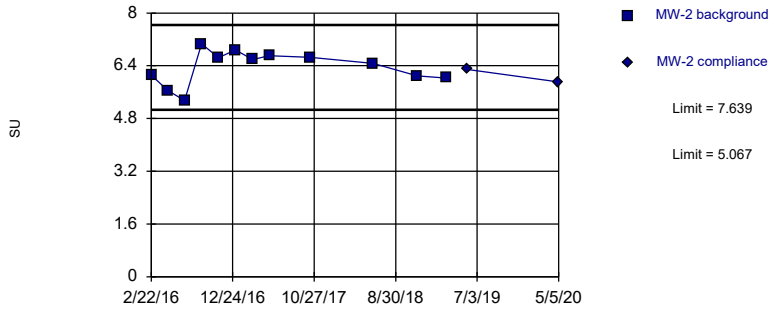
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.353, Std. Dev.=0.512, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.94, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

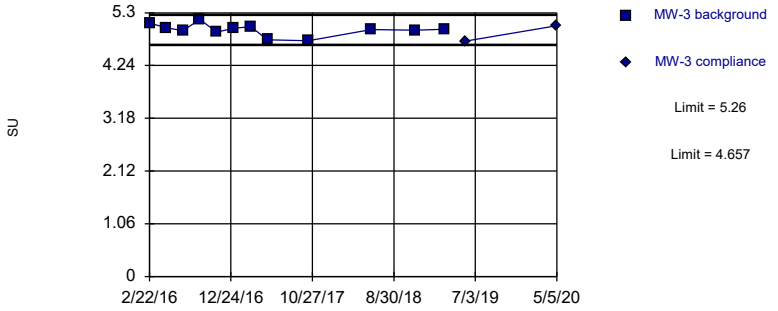
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.958, Std. Dev.=0.1201, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9322, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

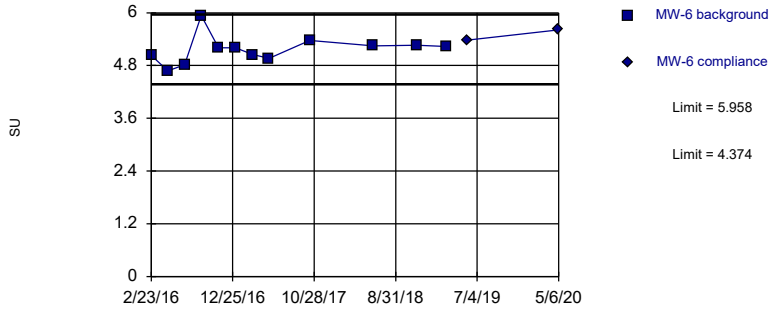
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.166, Std. Dev.=0.3153, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9049, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

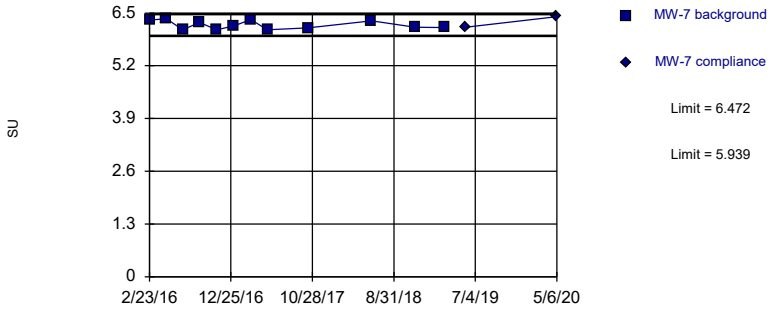
Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.206, Std. Dev.=0.1061, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8598, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

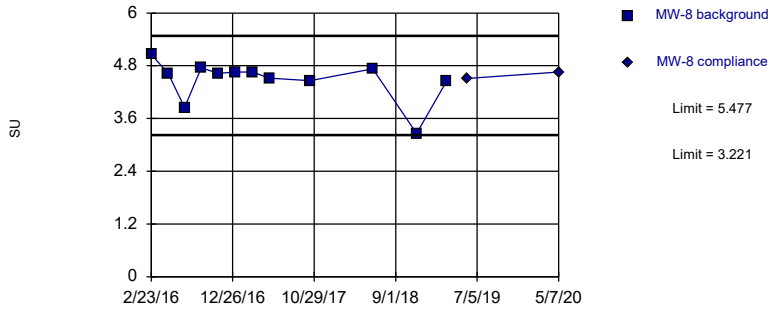
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=20.19, Std. Dev.=3.906, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8305, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

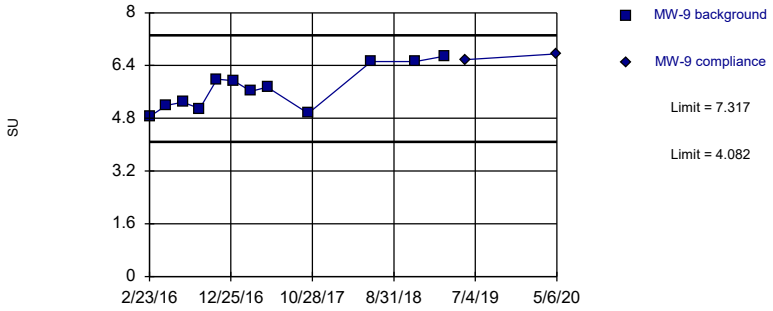
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.699, Std. Dev.=0.6438, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9266, critical = 0.805. Kappa = 2.512 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: pH Analysis Run 7/30/2020 3:16 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-10
2/23/2016	5.2 (B01)	
4/26/2016	5.24 (B02)	
6/28/2016	5.25 (B03)	
8/30/2016	5.31 (B04)	
11/3/2016	5.07 (B05)	
1/5/2017	5.3 (B06)	
3/11/2017	5.24 (B07)	
5/12/2017	5.12 (B08)	
10/13/2017	5.33	
6/7/2018	5.35	
11/20/2018	5.18	
3/11/2019	5.24	
5/30/2019		5.06
5/6/2020		5.09

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-11	MW-11
2/22/2016	6.33 (B01)	
4/26/2016	6.27 (B02)	
6/28/2016	6.76 (B03)	
8/30/2016	6.59 (B04)	
11/3/2016	6.54 (B05)	
1/5/2017	6.5 (B06)	
3/11/2017	6.32 (B07)	
5/12/2017	6.61 (B08)	
10/13/2017	6.73	
6/7/2018	6.39	
11/20/2018	6.35	
3/11/2019	6.24	
5/29/2019		6.4
5/6/2020		6.78

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-12	MW-12
2/22/2016	6.19 (B01)	
4/26/2016	5.99 (B02)	
6/27/2016	6.04 (B03)	
8/29/2016	6.01 (B04)	
11/1/2016	6.03 (B05)	
1/4/2017	6.1 (B06)	
3/10/2017	6.1 (B07)	
5/11/2017	5.95 (B08)	
10/12/2017	5.9	
6/6/2018	6.04	
11/19/2018	6.11	
3/11/2019	6.15	
5/28/2019		6.62
5/5/2020		6.09

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-13	MW-13
2/23/2016	7.47 (B01)	
4/27/2016	7.08 (B02)	
6/28/2016	7.15 (B03)	
8/29/2016	6.97 (B04)	
11/2/2016	6.96 (B05)	
1/5/2017	7.02 (B06)	
3/11/2017	6.97 (B07)	
5/12/2017	7.21 (B08)	
10/13/2017	6.87	
6/7/2018	6.86	
11/19/2018	6.99	
3/12/2019	6.96	
5/29/2019		6.96
5/7/2020		7.14

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-14	MW-14
2/23/2016	6.9 (B01)	
4/27/2016	6.62 (B02)	
6/28/2016	6.69 (B03)	
8/29/2016	6.65 (B04)	
11/2/2016	6.65 (B05)	
1/5/2017	6.7 (B06)	
3/11/2017	6.63 (B07)	
5/12/2017	6.66 (B08)	
10/13/2017	6.68	
6/7/2018	6.88	
11/19/2018	6.86	
3/11/2019	6.92	
5/30/2019		6.96
5/7/2020		7.02

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-2	MW-2
2/22/2016	6.11 (B01)	
4/25/2016	5.65 (B02)	
6/27/2016	5.35 (B03)	
8/29/2016	7.06 (B04)	
11/1/2016	6.65 (B05)	
1/4/2017	6.88 (B06)	
3/10/2017	6.59 (B07)	
5/11/2017	6.7 (B08)	
10/12/2017	6.66	
6/6/2018	6.47	
11/19/2018	6.09	
3/11/2019	6.03	
5/28/2019		6.29
5/5/2020		5.91

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3	MW-3
2/22/2016	5.09 (B01)	
4/25/2016	5 (B02)	
6/27/2016	4.94 (B03)	
8/29/2016	5.17 (B04)	
11/1/2016	4.91 (B05)	
1/4/2017	4.99 (B06)	
3/10/2017	5.02 (B07)	
5/11/2017	4.76 (B08)	
10/12/2017	4.74	
6/6/2018	4.96	
11/19/2018	4.95	
3/11/2019	4.97	
5/28/2019		4.73
5/5/2020		5.04

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-6	MW-6
2/23/2016	5.03 (B01)	
4/26/2016	4.68 (B02)	
6/28/2016	4.82 (B03)	
8/29/2016	5.94 (B04)	
11/2/2016	5.2 (B05)	
1/5/2017	5.2 (B06)	
3/11/2017	5.05 (B07)	
5/11/2017	4.96 (B08)	
10/12/2017	5.37	
6/8/2018	5.25	
11/19/2018	5.26	
3/12/2019	5.23	
5/29/2019		5.38
5/6/2020		5.61

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-7	MW-7
2/23/2016	6.32 (B01)	
4/26/2016	6.36 (B02)	
6/28/2016	6.09 (B03)	
8/29/2016	6.27 (B04)	
11/2/2016	6.09 (B05)	
1/5/2017	6.18 (B06)	
3/11/2017	6.34 (B07)	
5/12/2017	6.09 (B08)	
10/12/2017	6.13	
6/8/2018	6.31	
11/19/2018	6.15	
3/12/2019	6.14	
5/29/2019		6.15
5/6/2020		6.41

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-8	MW-8
2/23/2016	5.06 (B01)	
4/27/2016	4.62 (B02)	
6/28/2016	3.85 (B03)	
8/29/2016	4.75 (B04)	
11/2/2016	4.63 (B05)	
1/5/2017	4.66 (B06)	
3/11/2017	4.66 (B07)	
5/12/2017	4.52 (B08)	
10/13/2017	4.46	
6/7/2018	4.73	
11/19/2018	3.26	
3/11/2019	4.44	
5/30/2019		4.51
5/7/2020		4.66

Prediction Limit

Constituent: pH (SU) Analysis Run 7/30/2020 3:23 PM View: PL's intrawell

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-9	MW-9
2/23/2016	4.85 (B01)	
4/27/2016	5.19 (B02)	
6/28/2016	5.29 (B03)	
8/30/2016	5.09 (B04)	
11/3/2016	5.99 (B05)	
1/5/2017	5.94 (B06)	
3/11/2017	5.62 (B07)	
5/12/2017	5.74 (B08)	
10/13/2017	4.95	
6/7/2018	6.52	
11/20/2018	6.52	
3/11/2019	6.69	
5/30/2019		6.58
5/6/2020		6.75

Trend Tests - Prediction Limit Exceedances

Trend Test Summary - Significant Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:42 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-7**	**0.2899**	**92**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-10**	**-46.93**	**-92**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-13**	**-83.38**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-51.54**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-8**	**-37.48**	**-84**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-9**	**-56.83**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-10**	**-177.5**	**-83**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-14**	**-207.9**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.8881**	**72**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-264.9**	**-71**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-9**	**-201.7**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-7**	**87.82**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary - All Results

Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:42 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-10	0	1	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-11	-0.03246	-12	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-12 (bg)	-0.01221	-31	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	MW-13	-1.331	-55	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0.001086	35	58	No	16	50	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	-28	-58	No	16	81.25	n/a	n/a	0.01	NP
Boron (mg/L)	MW-6	-0.03269	-5	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-7**	**0.2899**	**92**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-8	-0.333	-30	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-9	-0.025	-8	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-10**	**-46.93**	**-92**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-11	0	4	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-12 (bg)	0.5582	20	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-13**	**-83.38**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-14	0	-3	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-1.441	-12	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	0.05204	44	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-6**	**-51.54**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	29.25	48	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-8**	**-37.48**	**-84**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-9**	**-56.83**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-10**	**-177.5**	**-83**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-11	0	-10	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	3.771	23	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-13	0	4	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-14**	**-207.9**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-2 (bg)	-0.804	-30	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.8881**	**72**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-264.9**	**-71**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	279.3	34	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-8	-78.63	-26	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-9**	**-201.7**	**-91**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	MW-12 (bg)	0.02483	21	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-14	0.08831	48	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-2 (bg)	-0.1354	-17	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	MW-3 (bg)	-0.02497	-23	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-10	-38.69	-26	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-11	-15.69	-30	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-19	-58	No	16	62.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-13	-131.4	-44	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-14	-18.07	-18	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.4075	-55	-58	No	16	31.25	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	58	No	16	87.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-6	-56.27	-52	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-7**	**87.82**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-8	-12.63	-13	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-9	-73.9	-38	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-10	-252.6	-54	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-11	-79.07	-5	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	5.017	11	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-13	-195.1	-30	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-14	-194.1	-43	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-14.96	-26	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	-2.002	-9	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-6	-427.8	-52	-58	No	16	0	n/a	n/a	0.01	NP

Trend Test Summary - All Results

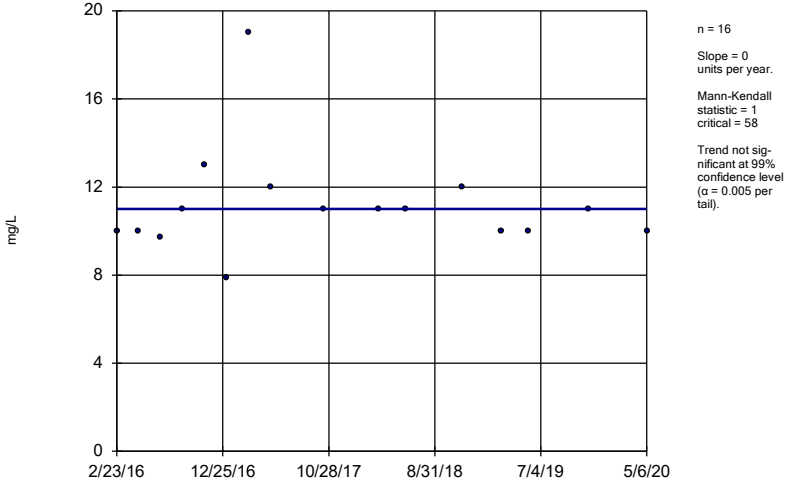
Plant Smith Client: Gulf Power Data: Plant Smith CCR Printed 8/3/2020, 1:42 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	MW-7	611.9	25	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-8	47.96	8	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-9	-312.6	-44	-58	No	16	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-10



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 1 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

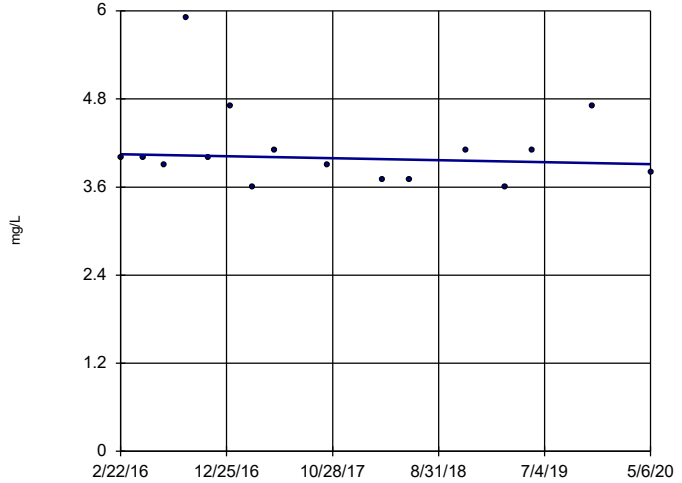
Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-11



n = 16

Slope = -0.03246 units per year.

Mann-Kendall statistic = -12 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

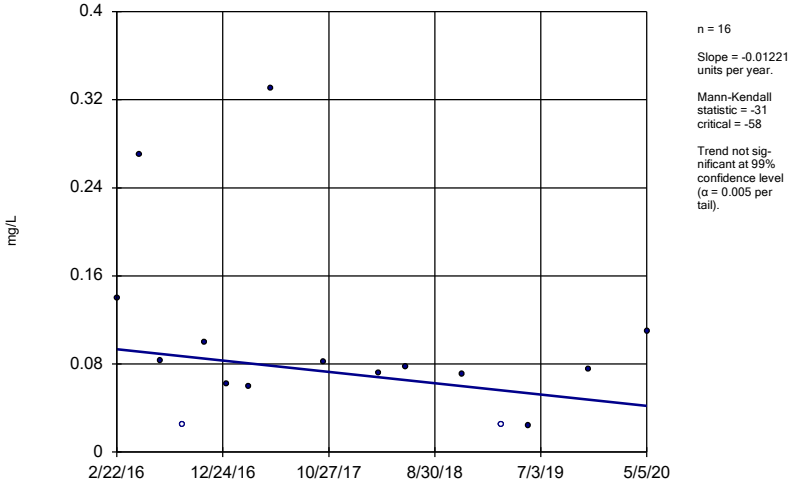
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-12 (bg)



n = 16

Slope = -0.01221 units per year.

Mann-Kendall statistic = -31 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

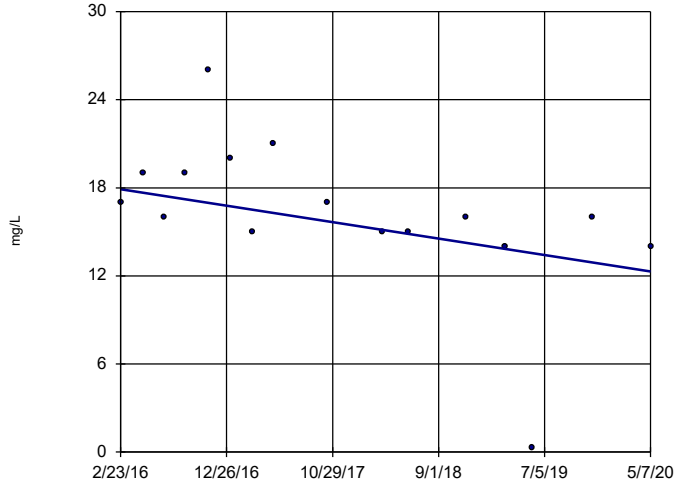
Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-13



n = 16

Slope = -1.331 units per year.

Mann-Kendall statistic = -55 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

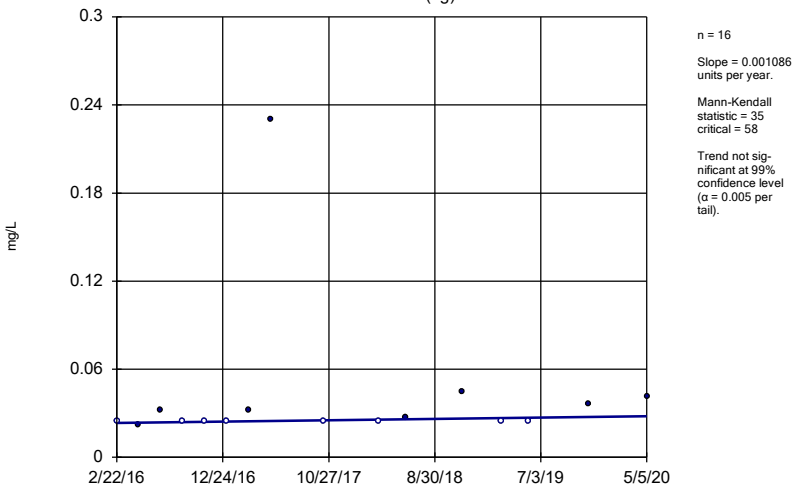
Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 16

Slope = 0.001086 units per year.

Mann-Kendall statistic = 35
critical = 58

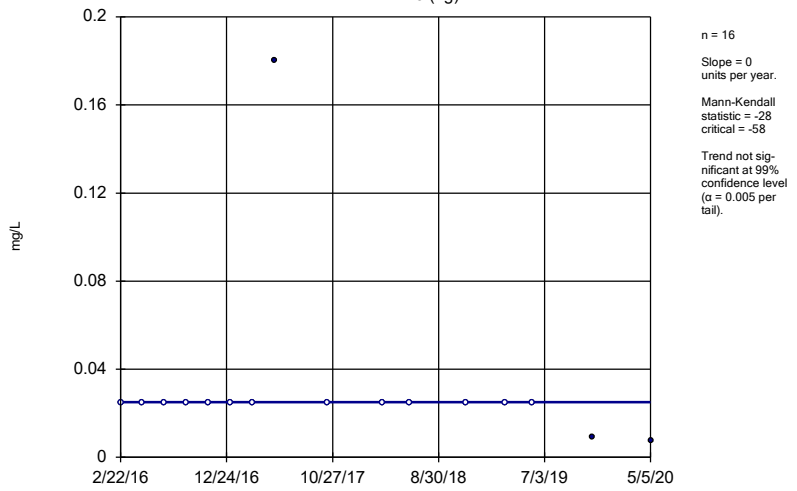
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -28
critical = -58

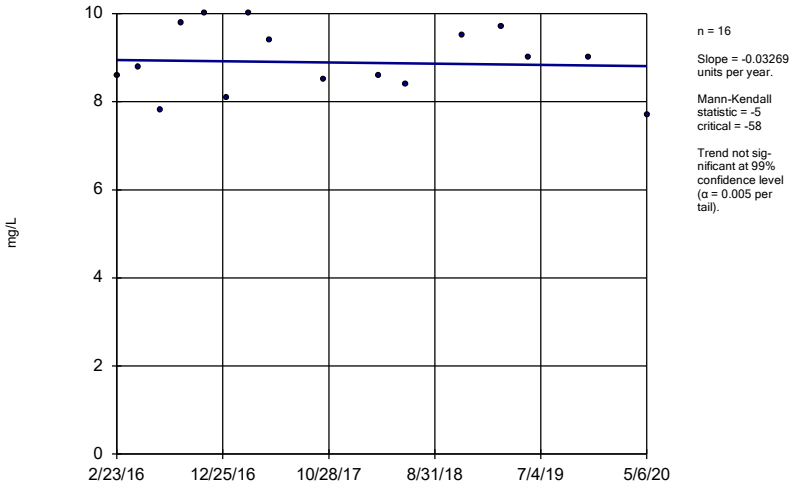
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 16

Slope = -0.03269 units per year.

Mann-Kendall statistic = -5
critical = -58

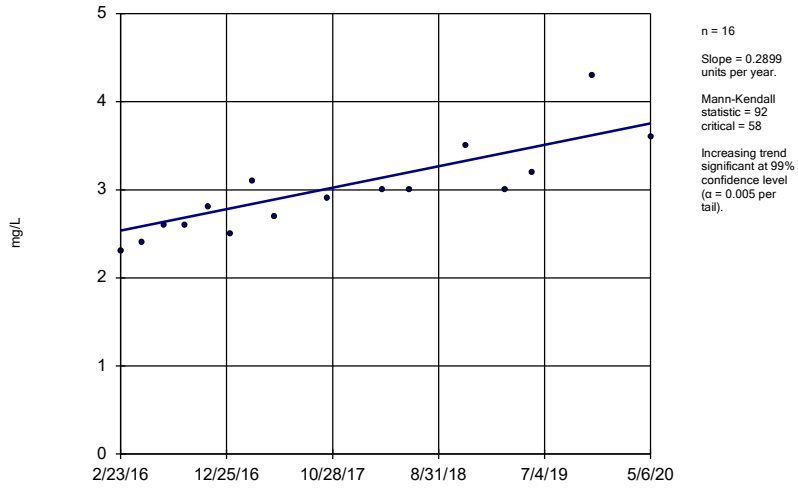
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 16

Slope = 0.2899 units per year.

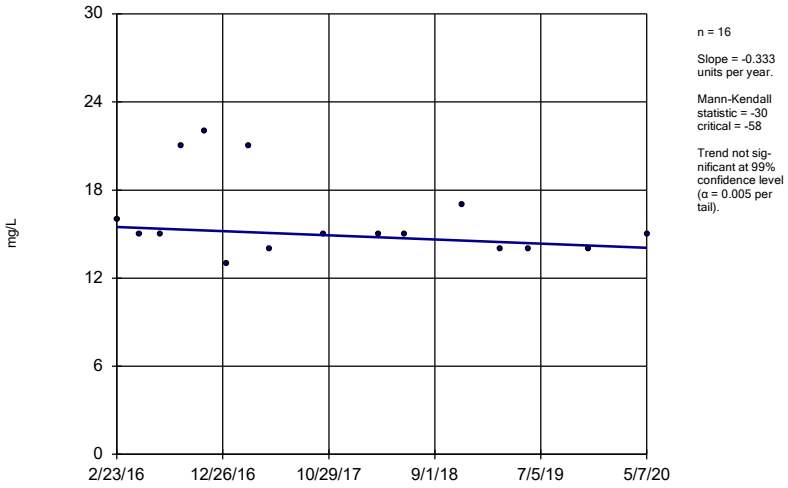
Mann-Kendall statistic = 92
critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-8



n = 16

Slope = -0.333 units per year.

Mann-Kendall statistic = -30 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

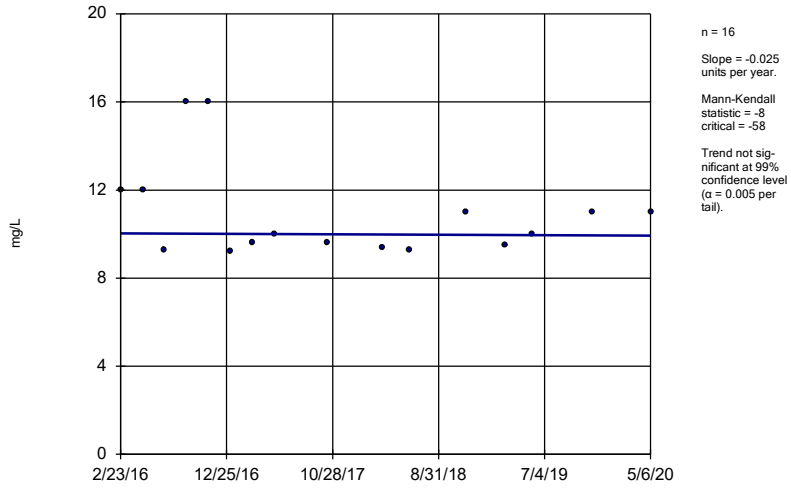
Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-9



n = 16

Slope = -0.025 units per year.

Mann-Kendall statistic = -8 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

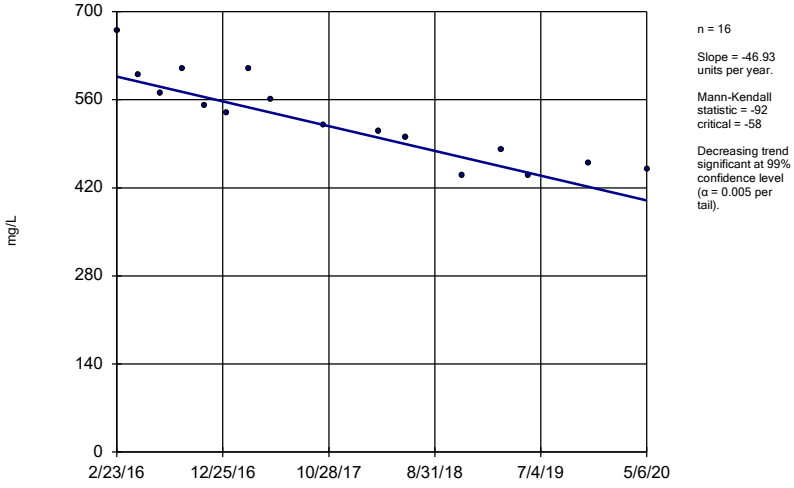
Constituent: Boron Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-10



n = 16

Slope = -46.93 units per year.

Mann-Kendall statistic = -92 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

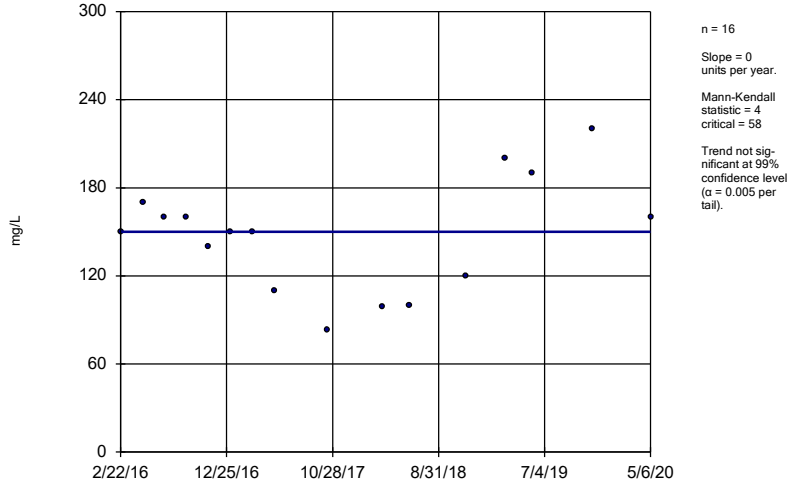
Constituent: Calcium Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-11



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 4 critical = 58

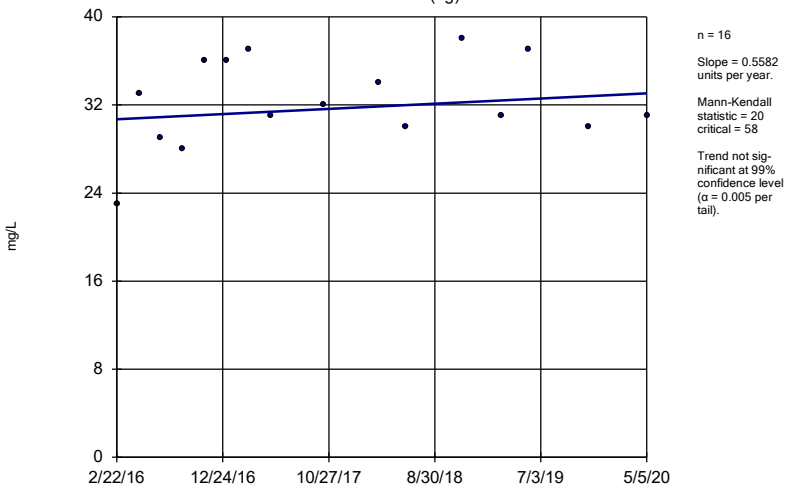
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-12 (bg)



n = 16

Slope = 0.5582 units per year.

Mann-Kendall statistic = 20 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

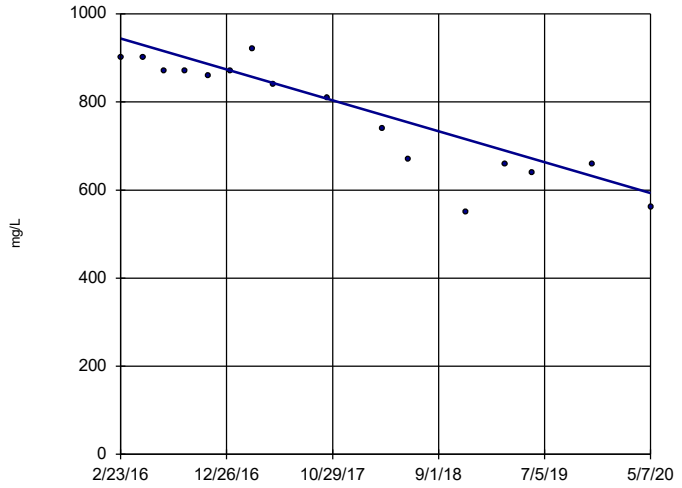
Constituent: Calcium Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-13



n = 16

Slope = -83.38 units per year.

Mann-Kendall statistic = -91 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

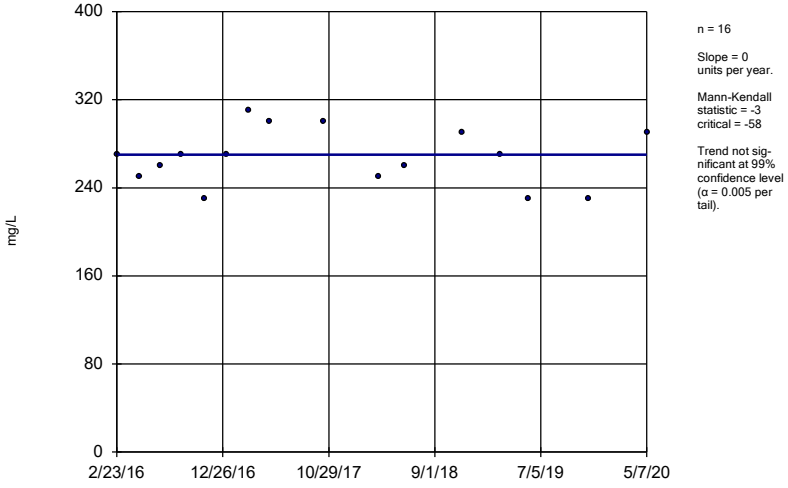
Constituent: Calcium Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -3 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

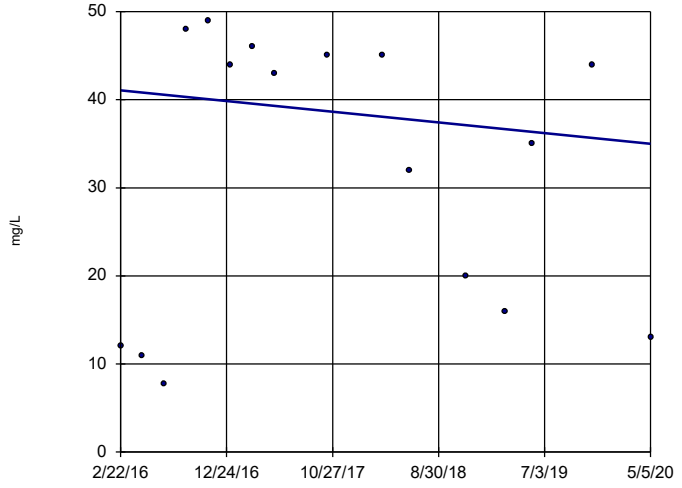
Constituent: Calcium Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 16

Slope = -1.441 units per year.

Mann-Kendall statistic = -12 critical = -58

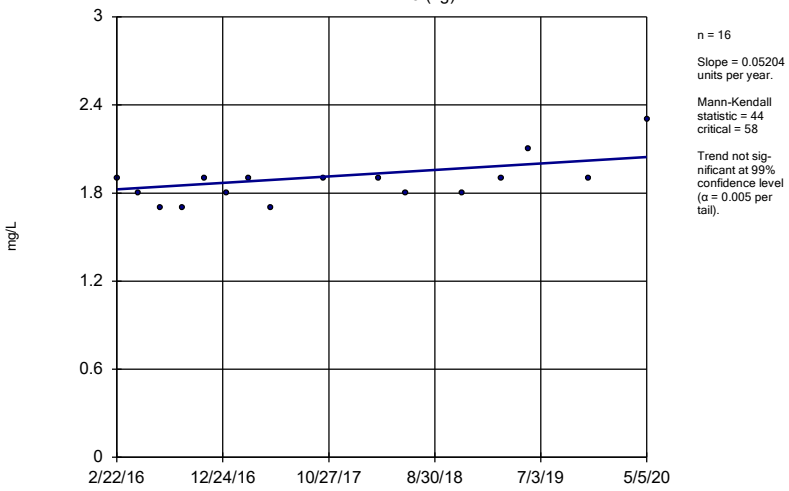
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 8/3/2020 1:39 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-3 (bg)



n = 16

Slope = 0.05204 units per year.

Mann-Kendall statistic = 44
critical = 58

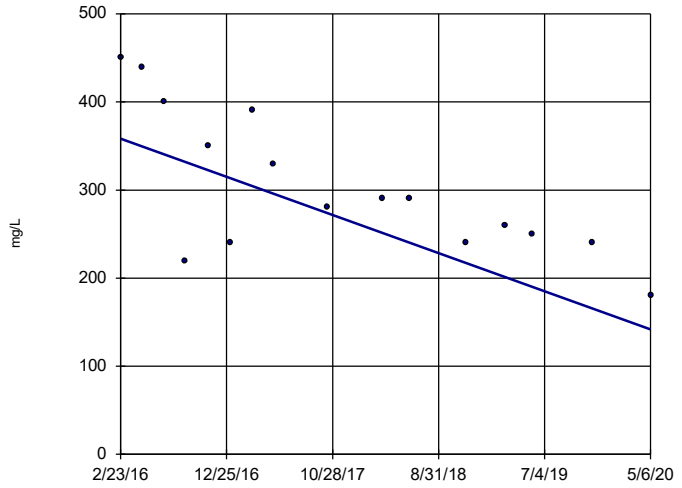
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 16

Slope = -51.54 units per year.

Mann-Kendall statistic = -70
critical = -58

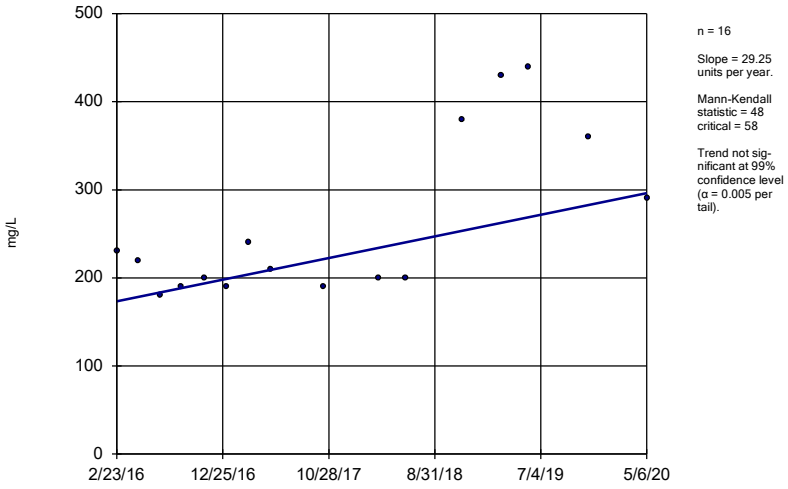
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 16

Slope = 29.25 units per year.

Mann-Kendall statistic = 48
critical = 58

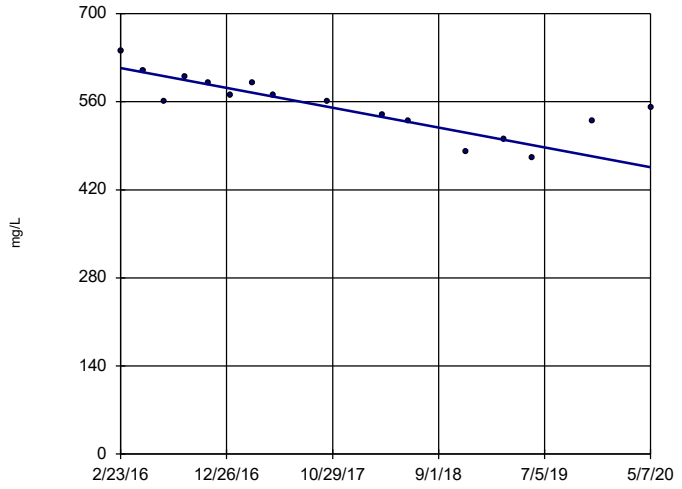
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-8



n = 16

Slope = -37.48 units per year.

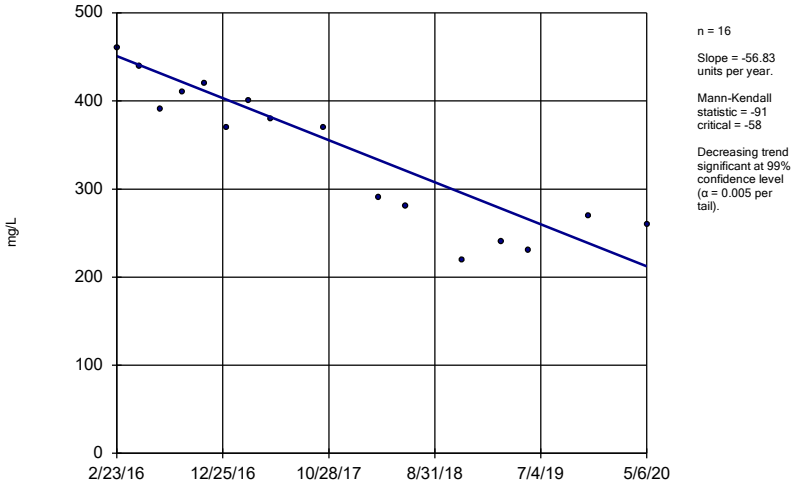
Mann-Kendall statistic = -84
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-9

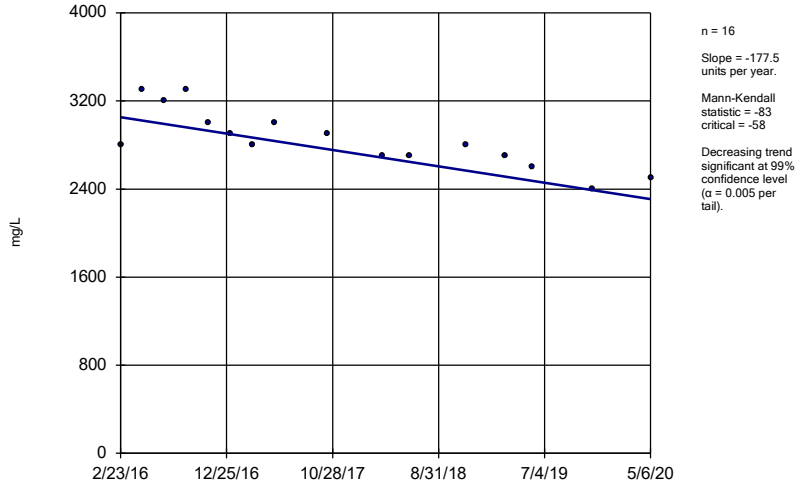


Constituent: Calcium Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-10

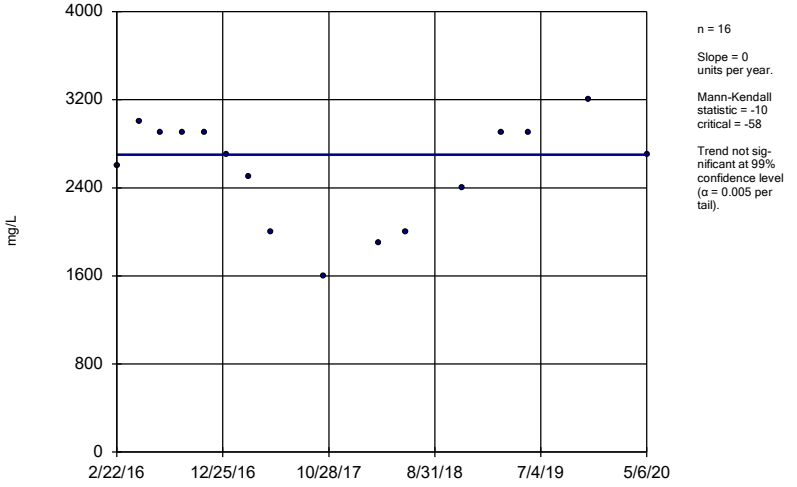


Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-11

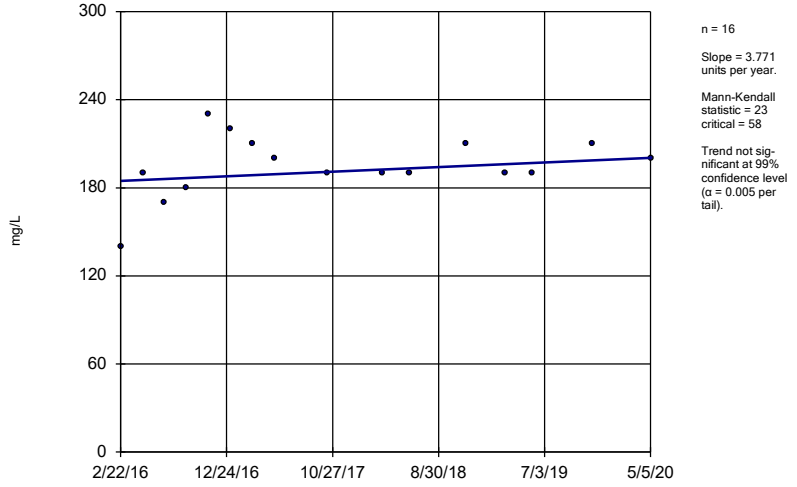


Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

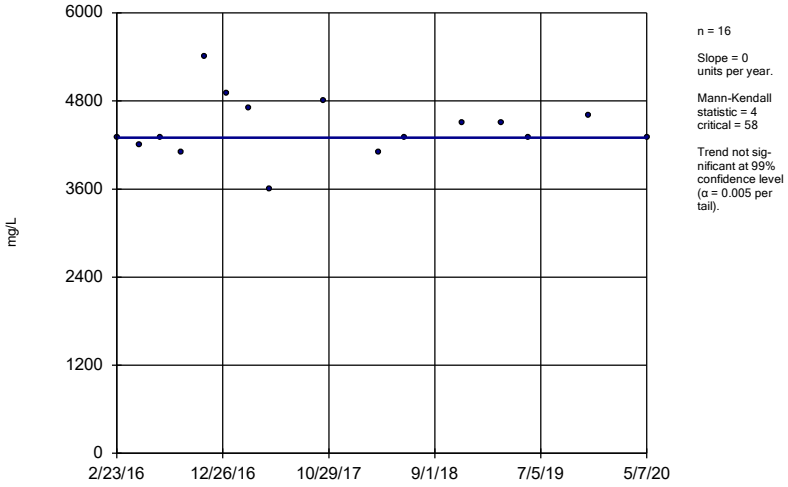
MW-12 (bg)



Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-13



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 4 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

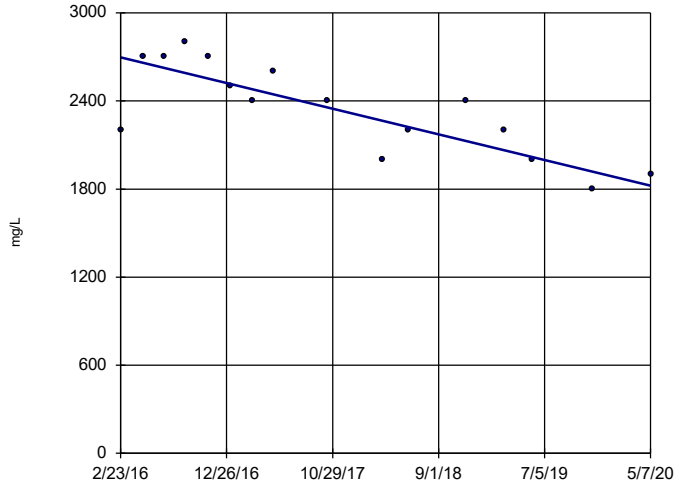
Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 16

Slope = -207.9 units per year.

Mann-Kendall statistic = -74 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

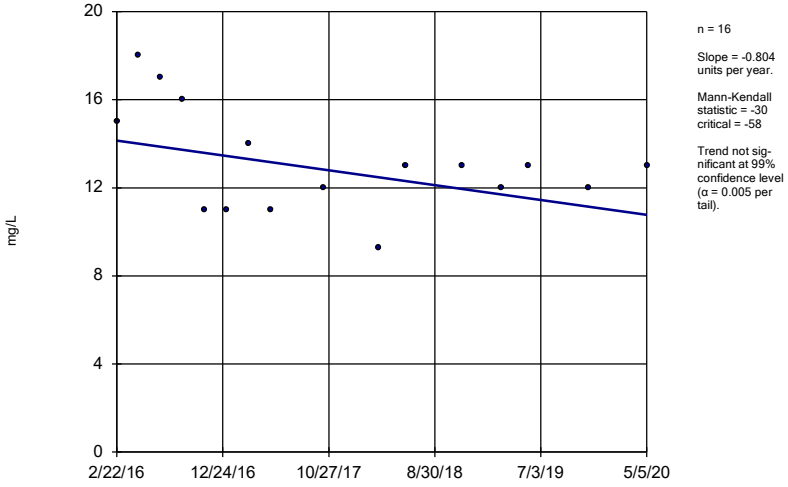
Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 16

Slope = -0.804 units per year.

Mann-Kendall statistic = -30 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

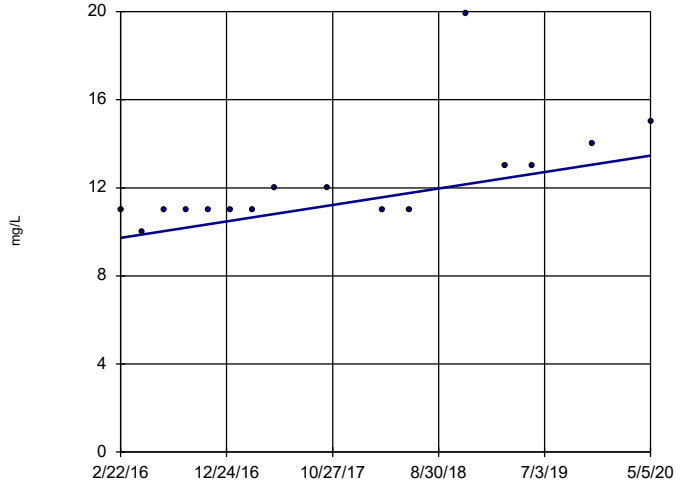
Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 16

Slope = 0.8881 units per year.

Mann-Kendall statistic = 72 critical = 58

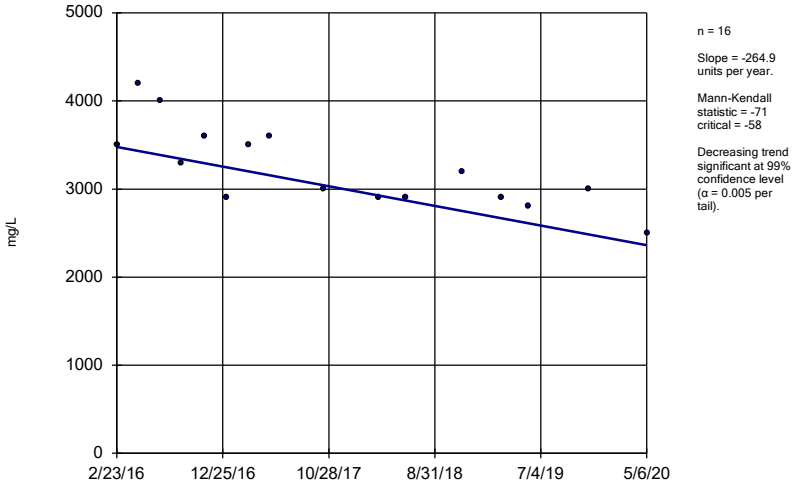
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-6



n = 16

Slope = -264.9 units per year.

Mann-Kendall statistic = -71
critical = -58

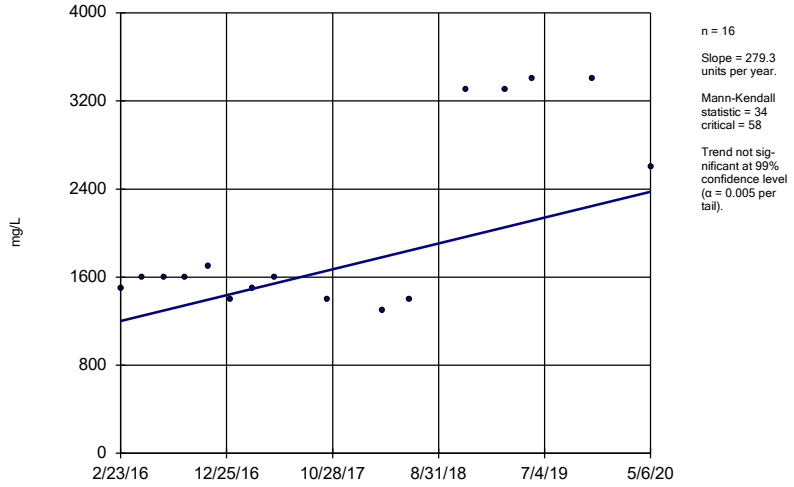
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 16

Slope = 279.3 units per year.

Mann-Kendall statistic = 34
critical = 58

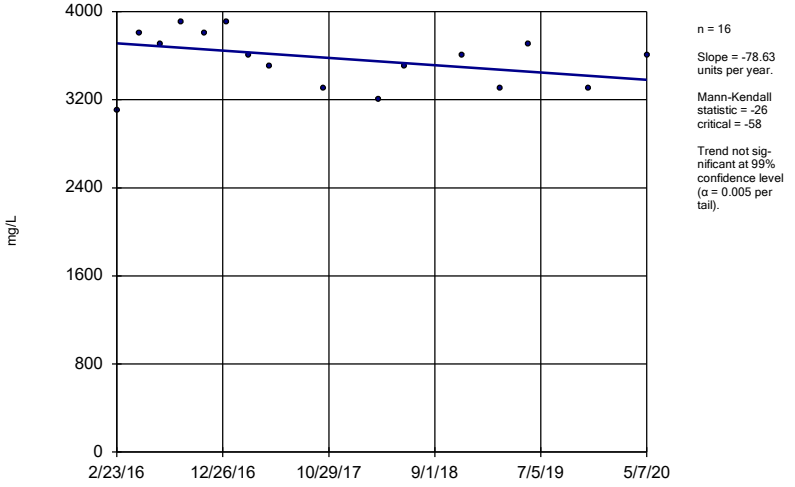
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-8



n = 16

Slope = -78.63 units per year.

Mann-Kendall statistic = -26
critical = -58

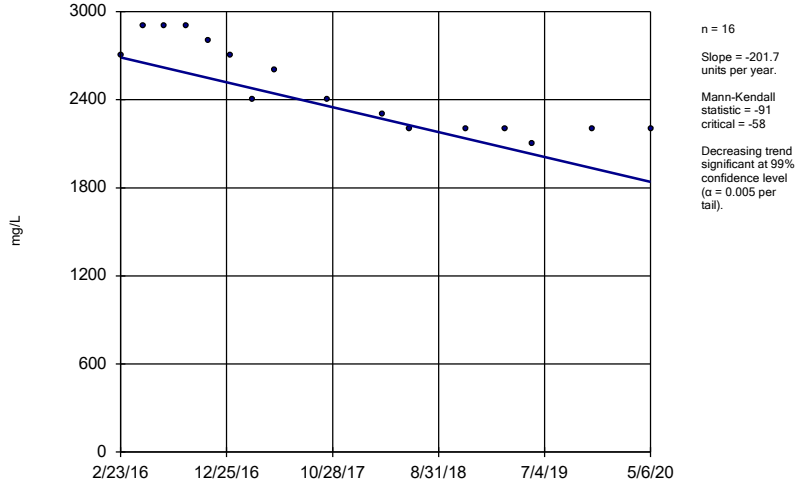
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-9



n = 16

Slope = -201.7 units per year.

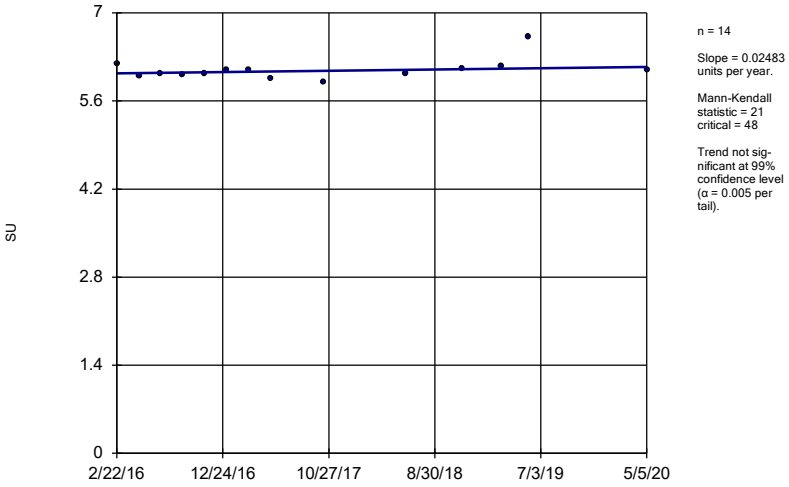
Mann-Kendall statistic = -91
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-12 (bg)



n = 14

Slope = 0.02483 units per year.

Mann-Kendall statistic = 21
critical = 48

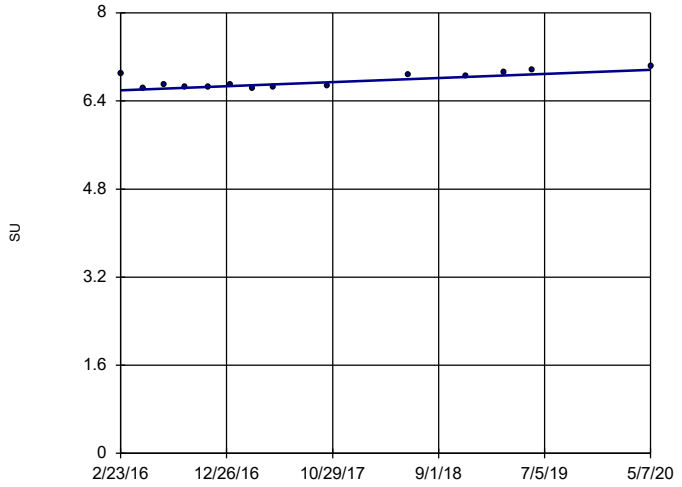
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 14

Slope = 0.08831 units per year.

Mann-Kendall statistic = 48
critical = 48

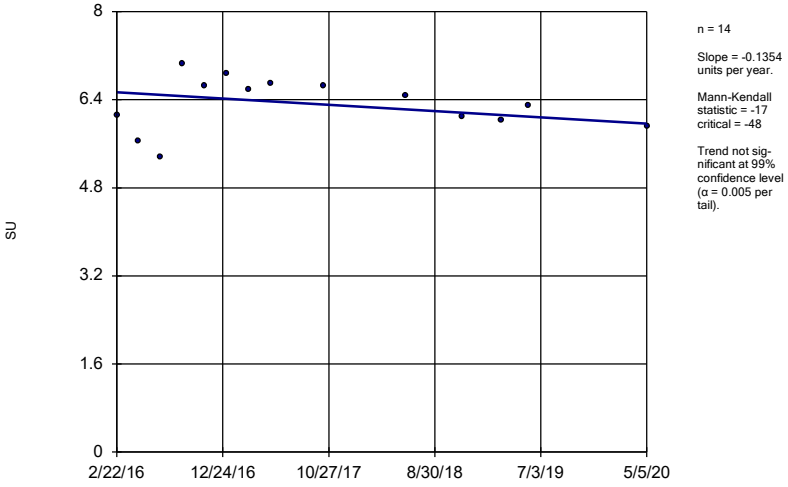
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 14

Slope = -0.1354 units per year.

Mann-Kendall statistic = -17
critical = -48

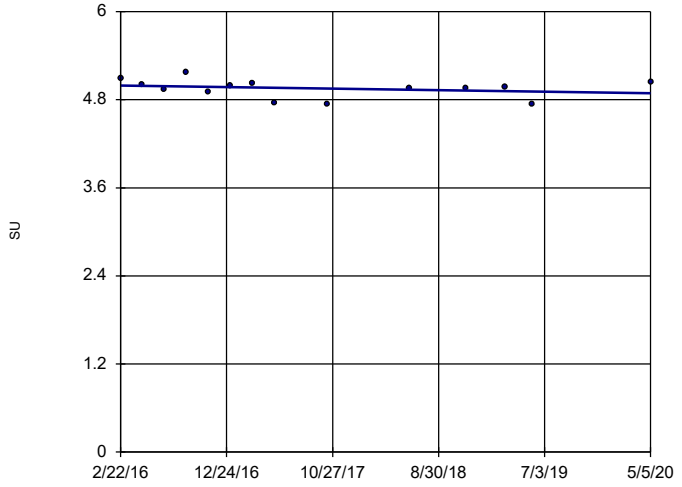
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 14

Slope = -0.02497 units per year.

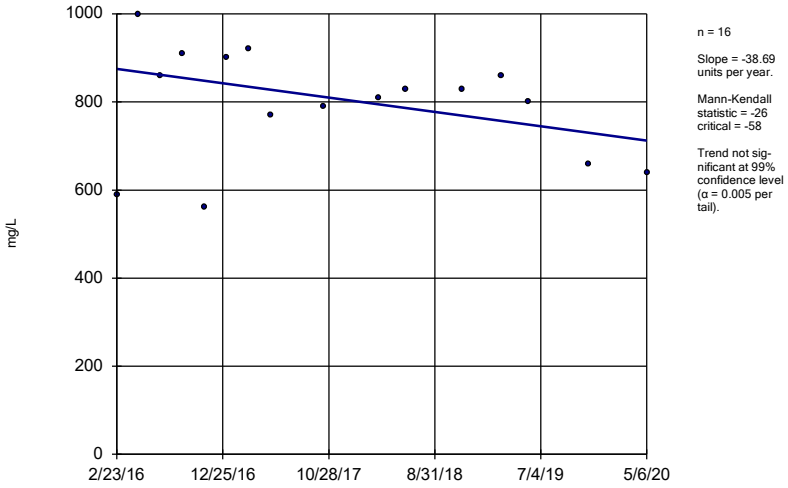
Mann-Kendall statistic = -23
critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-10



n = 16

Slope = -38.69 units per year.

Mann-Kendall statistic = -26 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

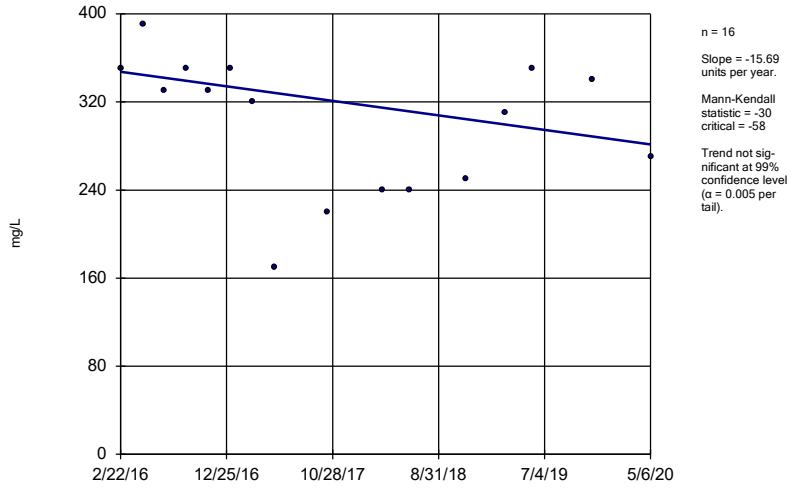
Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-11



n = 16

Slope = -15.69 units per year.

Mann-Kendall statistic = -30 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

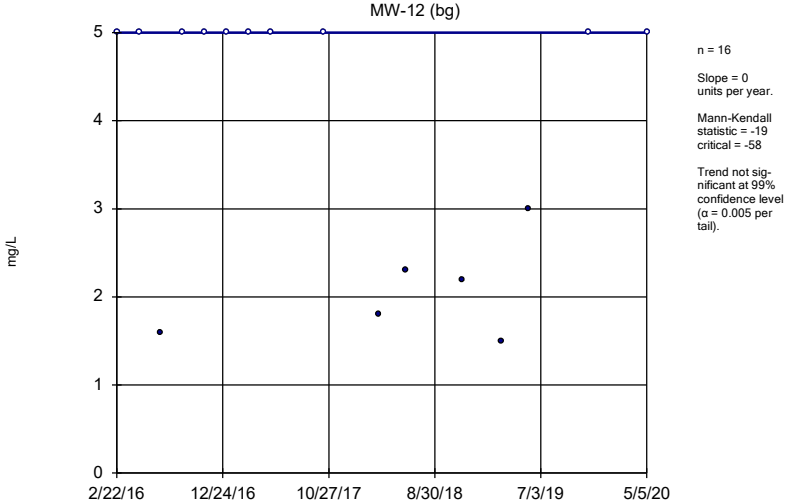
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-12 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -19 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

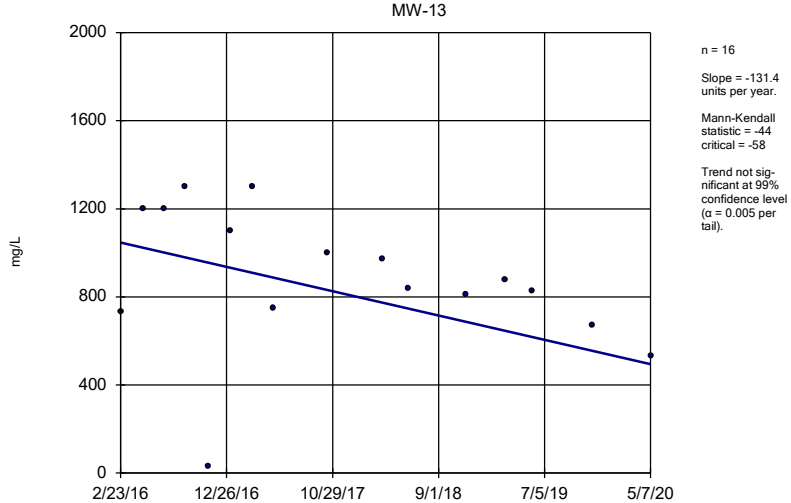
Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-13



n = 16

Slope = -131.4 units per year.

Mann-Kendall statistic = -44 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

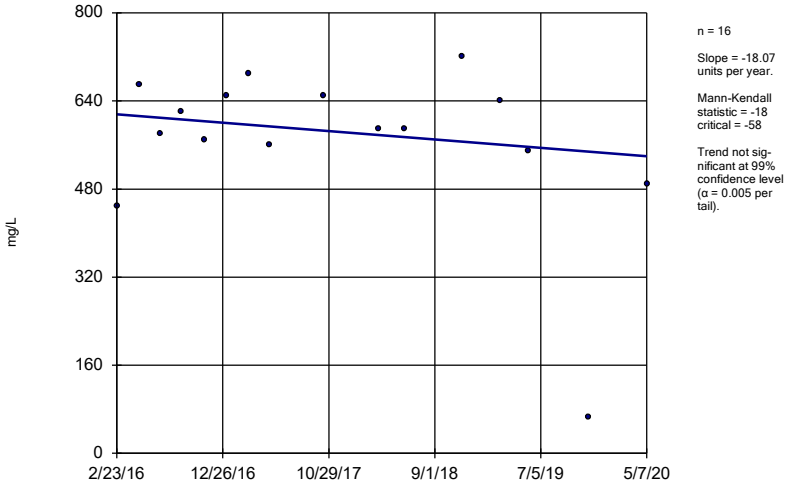
Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 16

Slope = -18.07 units per year.

Mann-Kendall statistic = -18
critical = -58

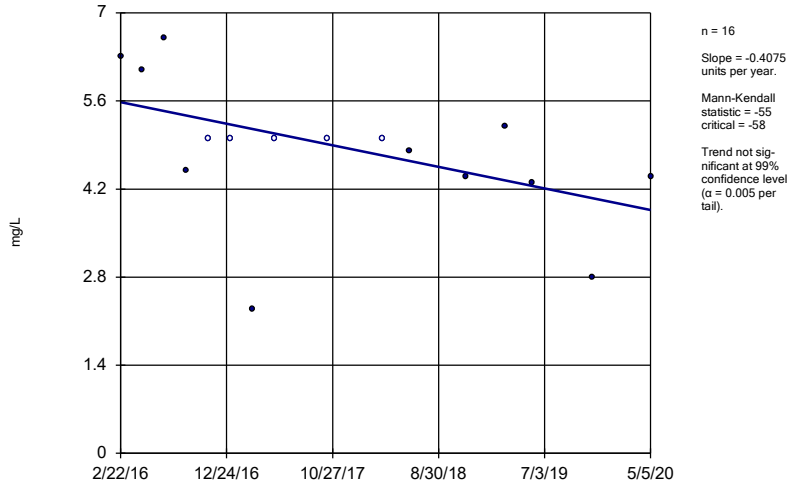
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 16

Slope = -0.4075 units per year.

Mann-Kendall statistic = -55
critical = -58

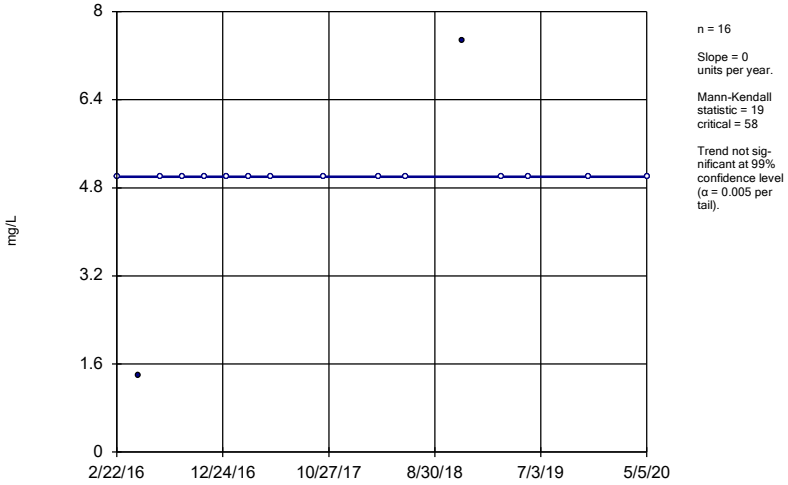
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 19
critical = 58

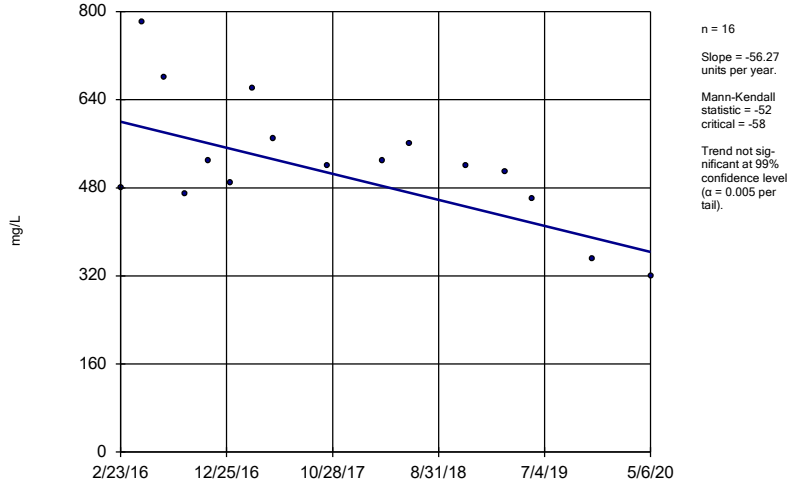
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 16

Slope = -56.27 units per year.

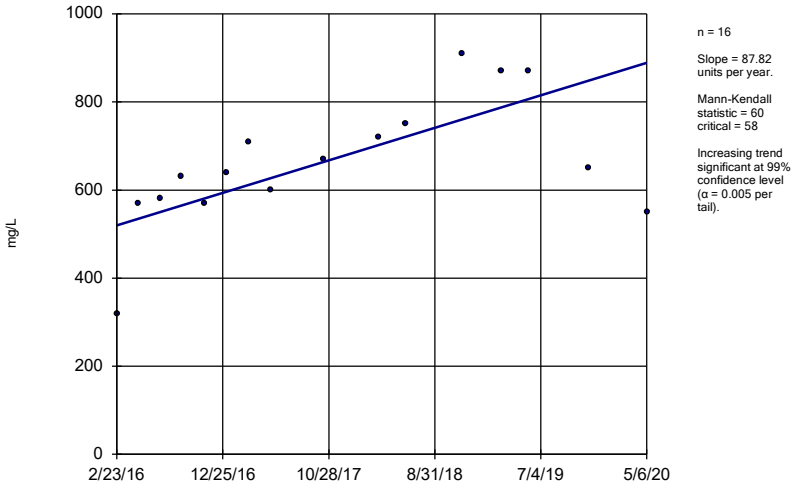
Mann-Kendall statistic = -52
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-7



n = 16

Slope = 87.82 units per year.

Mann-Kendall statistic = 60 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

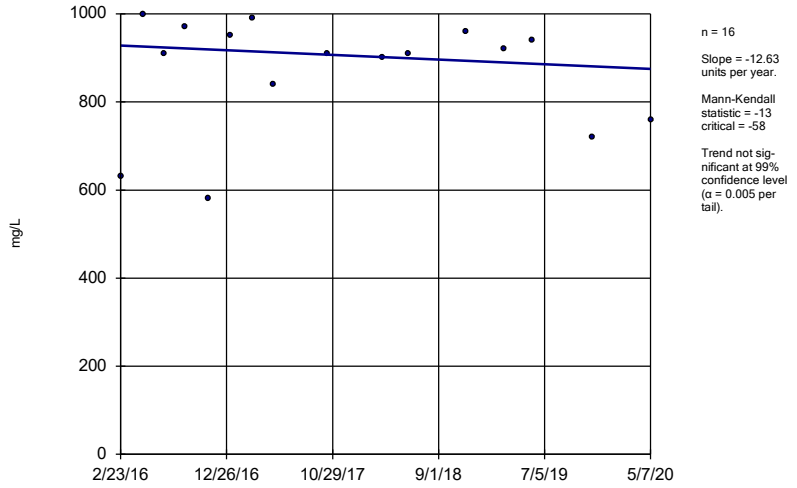
Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-8



n = 16

Slope = -12.63 units per year.

Mann-Kendall statistic = -13 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

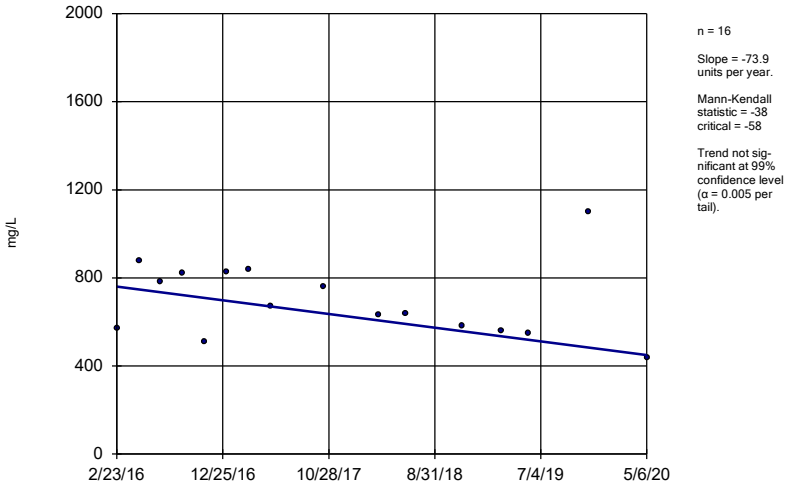
Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-9



n = 16

Slope = -73.9 units per year.

Mann-Kendall statistic = -38 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

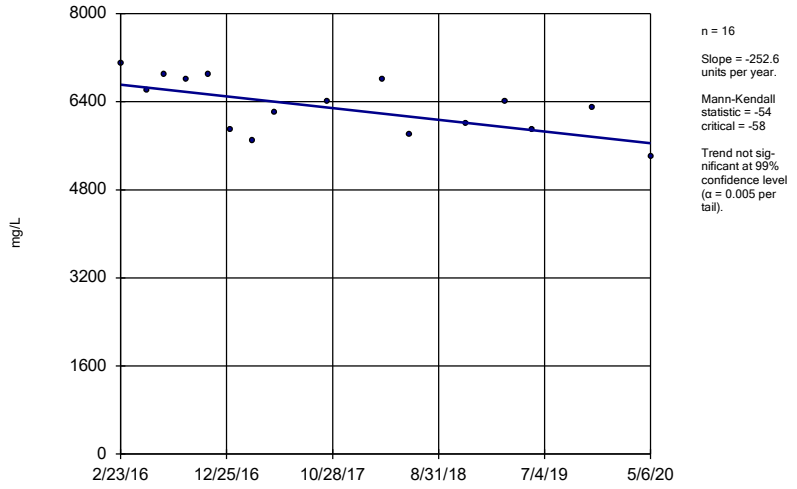
Constituent: Sulfate Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-10



n = 16

Slope = -252.6 units per year.

Mann-Kendall statistic = -54 critical = -58

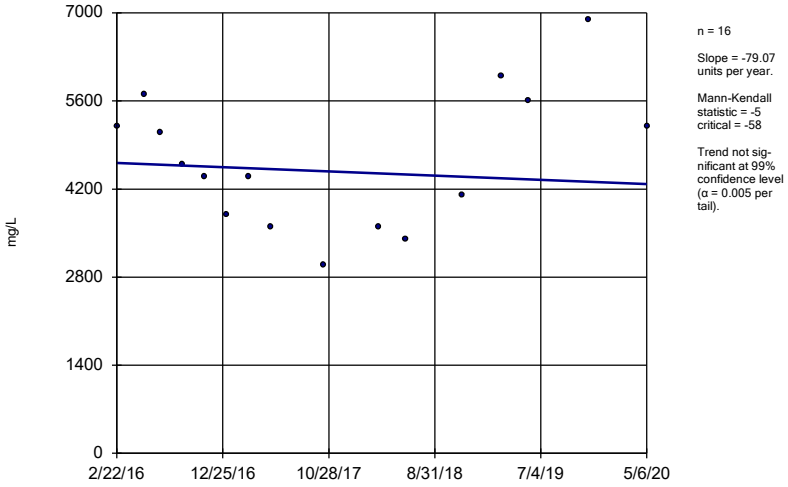
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-11



n = 16

Slope = -79.07 units per year.

Mann-Kendall statistic = -5 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

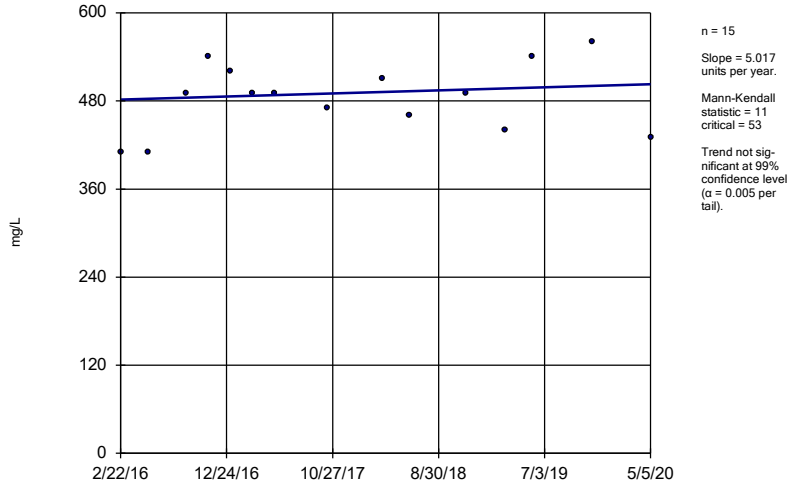
Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 15

Slope = 5.017 units per year.

Mann-Kendall statistic = 11 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

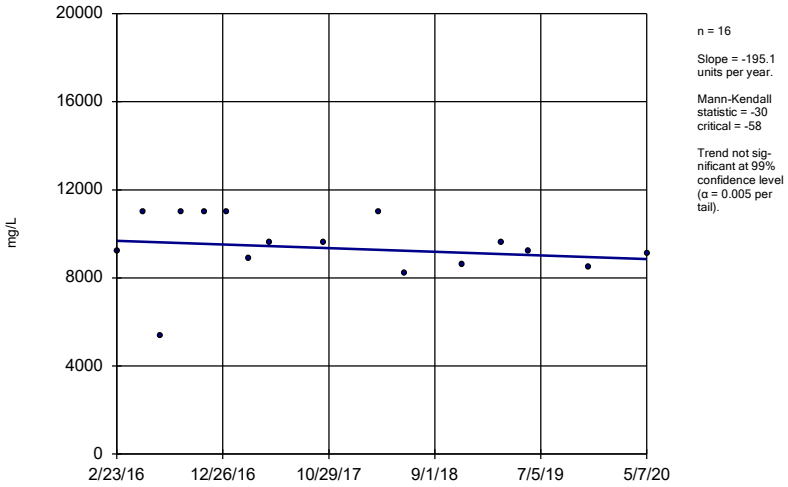
Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-13



n = 16

Slope = -195.1 units per year.

Mann-Kendall statistic = -30 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

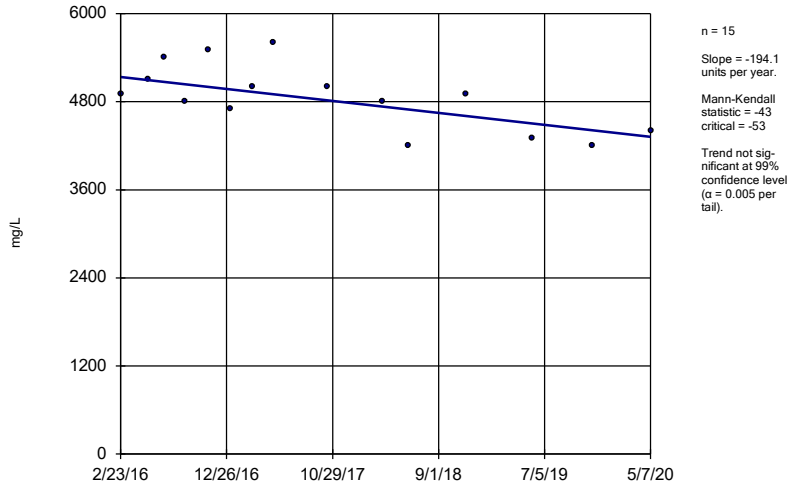
Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-14



n = 15

Slope = -194.1 units per year.

Mann-Kendall statistic = -43 critical = -53

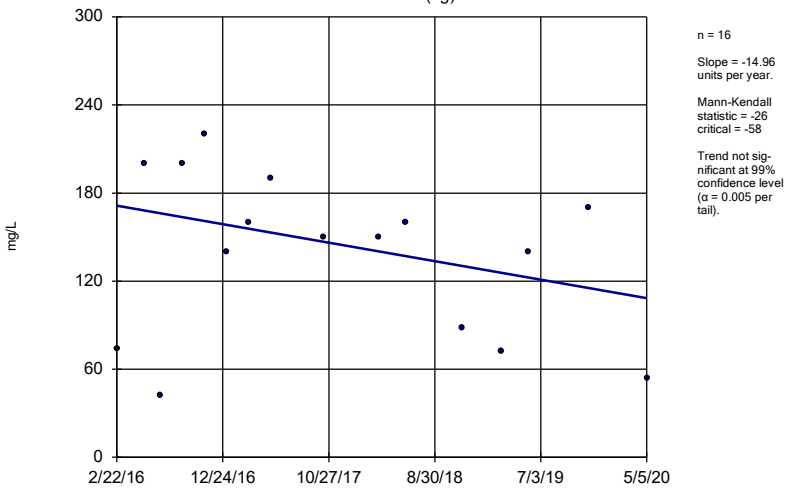
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-2 (bg)



n = 16

Slope = -14.96 units per year.

Mann-Kendall statistic = -26 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

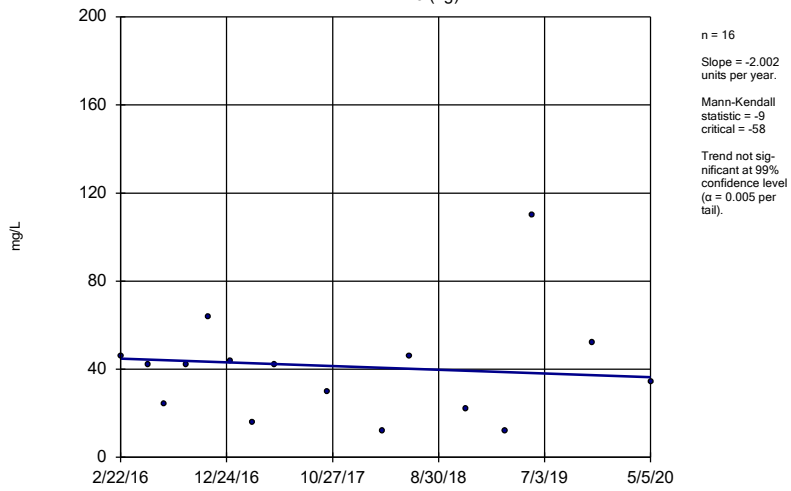
Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 16

Slope = -2.002 units per year.

Mann-Kendall statistic = -9 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

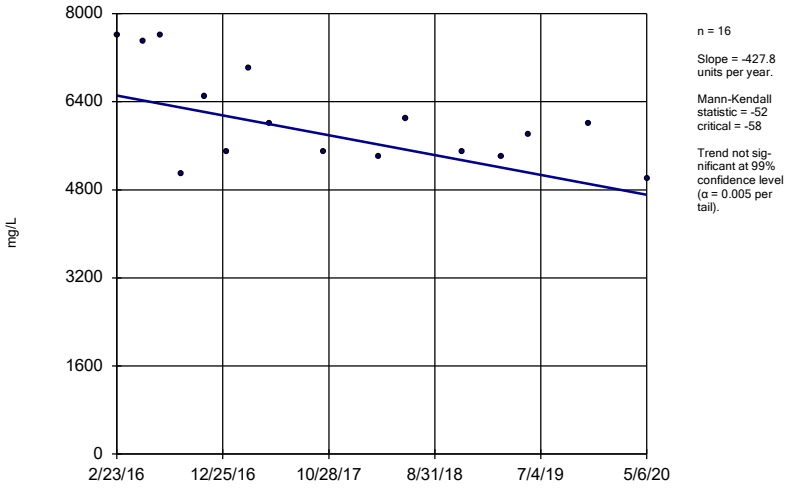
Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 16

Slope = -427.8 units per year.

Mann-Kendall statistic = -52 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

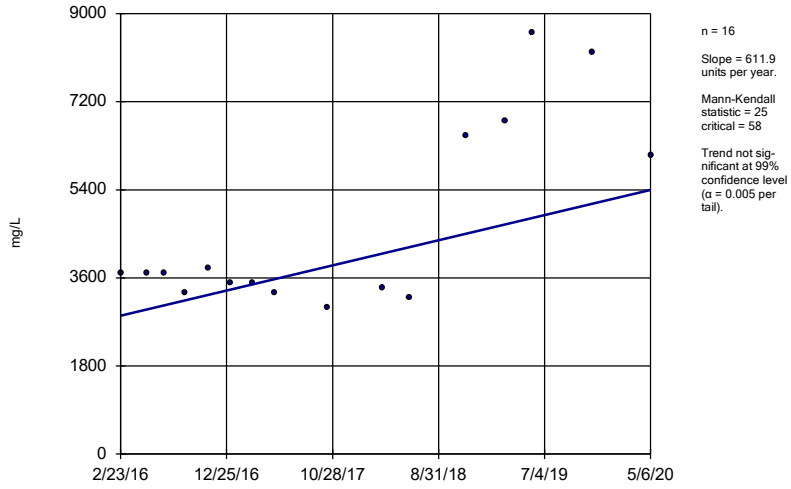
Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 16

Slope = 611.9 units per year.

Mann-Kendall statistic = 25 critical = 58

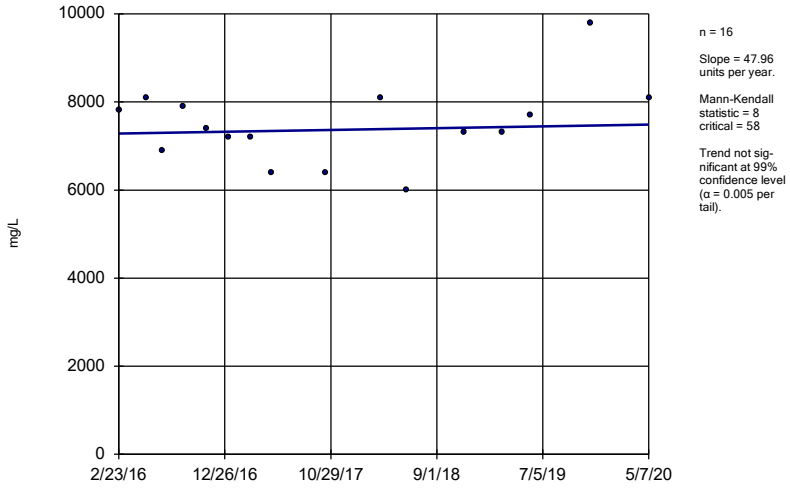
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sen's Slope Estimator

MW-8



n = 16

Slope = 47.96 units per year.

Mann-Kendall statistic = 8 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

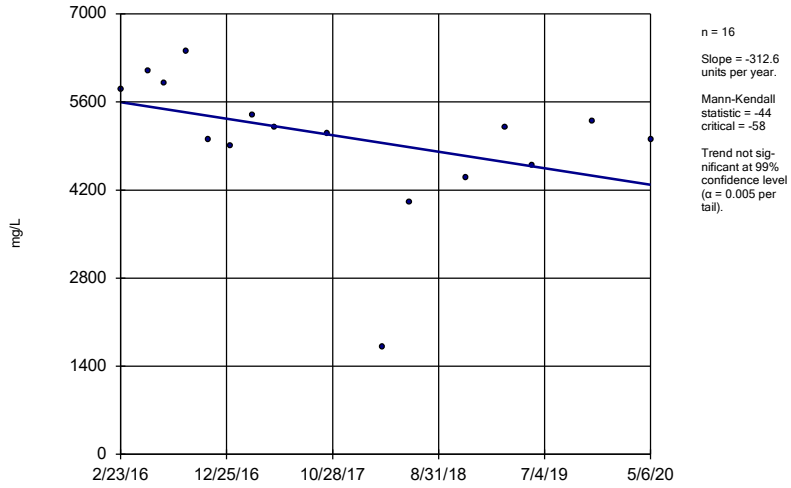
Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-9



n = 16

Slope = -312.6 units per year.

Mann-Kendall statistic = -44 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:40 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Gulf Power Data: Plant Smith CCR

Confidence Intervals

Confidence Interval - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 7/30/2020, 6:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**MW-11**	**0.02645**	**0.01608**	**0.01**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-10**	**24.64**	**19.13**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-11**	**35.41**	**26.08**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-13**	**15.96**	**11.31**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-14**	**8.694**	**5.395**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**31.99**	**23.85**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**37.06**	**23.8**	**5**	**Yes**	**15**	**0**	**ln(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-8**	**41.06**	**33.86**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-9**	**30**	**11**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**NP (normality)**
Lithium (mg/L)	**MW-13**	**0.2216**	**0.1728**	**0.04**	**Yes**	**15**	**0**	**sqrt(x)**	**0.01**	**Param.**

Confidence Interval - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 7/30/2020, 6:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	MW-11	0.0016	0.0005	0.006	No	11	63.64	No	0.006	NP (NDs)
Arsenic (mg/L)	MW-10	0.003353	0.002327	0.01	No	15	13.33	No	0.01	Param.
Arsenic (mg/L)	**MW-11**	**0.02645**	**0.01608**	**0.01**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	MW-13	0.002256	0.0006443	0.01	No	15	20	sqrt(x)	0.01	Param.
Arsenic (mg/L)	MW-14	0.00525	0.002777	0.01	No	15	0	No	0.01	Param.
Arsenic (mg/L)	MW-6	0.001857	0.0007128	0.01	No	15	26.67	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.002154	0.001124	0.01	No	15	26.67	x^(1/3)	0.01	Param.
Arsenic (mg/L)	MW-8	0.002099	0.001072	0.01	No	15	20	ln(x)	0.01	Param.
Arsenic (mg/L)	MW-9	0.003661	0.002406	0.01	No	15	13.33	No	0.01	Param.
Barium (mg/L)	MW-10	0.1166	0.1014	2	No	15	0	No	0.01	Param.
Barium (mg/L)	MW-11	0.1447	0.09459	2	No	15	6.667	No	0.01	Param.
Barium (mg/L)	MW-13	0.131	0.08998	2	No	15	0	No	0.01	Param.
Barium (mg/L)	MW-14	0.05861	0.04972	2	No	15	6.667	No	0.01	Param.
Barium (mg/L)	MW-6	0.07091	0.05938	2	No	15	6.667	x^2	0.01	Param.
Barium (mg/L)	MW-7	0.14	0.059	2	No	15	6.667	No	0.01	NP (normality)
Barium (mg/L)	MW-8	0.07091	0.05729	2	No	15	6.667	No	0.01	Param.
Barium (mg/L)	MW-9	0.1006	0.07563	2	No	15	6.667	No	0.01	Param.
Beryllium (mg/L)	MW-10	0.00063	0.00037	0.004	No	14	14.29	No	0.01	NP (normality)
Beryllium (mg/L)	MW-11	0.0025	0.00078	0.004	No	14	42.86	No	0.01	NP (normality)
Beryllium (mg/L)	MW-6	0.001761	0.0009193	0.004	No	14	7.143	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	14	85.71	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-8	0.0016	0.0011	0.004	No	14	7.143	No	0.01	NP (normality)
Beryllium (mg/L)	MW-9	0.0025	0.00043	0.004	No	14	57.14	No	0.01	NP (NDs)
Chromium (mg/L)	MW-10	0.005	0.003	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	MW-11	0.0087	0.0029	0.1	No	15	20	No	0.01	NP (normality)
Chromium (mg/L)	MW-13	0.005	0.0024	0.1	No	15	93.33	No	0.01	NP (NDs)
Chromium (mg/L)	MW-14	0.005	0.0017	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0012	0.1	No	15	46.67	No	0.01	NP (normality)
Cobalt (mg/L)	MW-11	0.0025	0.00046	0.006	No	13	84.62	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-7	0.0025	0.00029	0.006	No	13	92.31	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-9	0.0025	0.00018	0.006	No	13	92.31	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-10**	**24.64**	**19.13**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-11**	**35.41**	**26.08**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-13**	**15.96**	**11.31**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-14**	**8.694**	**5.395**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**31.99**	**23.85**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**37.06**	**23.8**	**5**	**Yes**	**15**	**0**	**ln(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-8**	**41.06**	**33.86**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-9**	**30**	**11**	**5**	**Yes**	**15**	**0**	**No**	**0.01**	**NP (normality)**
Fluoride (mg/L)	MW-10	0.1	0.04	4	No	16	50	No	0.01	NP (normality)
Fluoride (mg/L)	MW-11	0.1	0.05	4	No	16	81.25	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-13	0.1	0.04	4	No	16	6.25	No	0.01	NP (normality)
Fluoride (mg/L)	MW-14	0.08471	0.05254	4	No	16	6.25	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	16	25	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.047	4	No	16	75	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-9	0.1	0.04	4	No	16	25	No	0.01	NP (normality)
Lead (mg/L)	MW-10	0.0093	0.00025	0.015	No	13	92.31	No	0.01	NP (NDs)
Lead (mg/L)	MW-11	0.0013	0.00025	0.015	No	13	92.31	No	0.01	NP (NDs)
Lithium (mg/L)	MW-10	0.00606	0.003715	0.04	No	15	20	x^2	0.01	Param.
Lithium (mg/L)	MW-11	0.0058	0.001	0.04	No	15	60	No	0.01	NP (NDs)
Lithium (mg/L)	**MW-13**	**0.2216**	**0.1728**	**0.04**	**Yes**	**15**	**0**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	MW-14	0.002	0.001	0.04	No	15	73.33	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.02125	0.01051	0.04	No	15	6.667	No	0.01	Param.
Lithium (mg/L)	MW-7	0.002	0.001	0.04	No	15	60	No	0.01	NP (NDs)
Lithium (mg/L)	MW-8	0.009374	0.004228	0.04	No	15	20	No	0.01	Param.
Lithium (mg/L)	MW-9	0.006724	0.002307	0.04	No	15	13.33	sqrt(x)	0.01	Param.
Mercury (mg/L)	MW-10	0.0002	0.0002	0.002	No	11	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	MW-10	0.0031	0.0018	0.1	No	15	46.67	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-11	0.01813	0.008435	0.1	No	15	6.667	No	0.01	Param.
Molybdenum (mg/L)	MW-13	0.02734	0.01123	0.1	No	15	6.667	No	0.01	Param.
Molybdenum (mg/L)	MW-14	0.019	0.014	0.1	No	15	0	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-6	0.003	0.0011	0.1	No	15	93.33	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.006514	0.003595	0.1	No	15	33.33	ln(x)	0.01	Param.
Molybdenum (mg/L)	MW-9	0.0036	0.0023	0.1	No	15	60	No	0.01	NP (NDs)
Selenium (mg/L)	MW-10	0.00041	0.00025	0.05	No	13	84.62	No	0.01	NP (NDs)
Selenium (mg/L)	MW-11	0.0006	0.00025	0.05	No	13	61.54	No	0.01	NP (NDs)
Selenium (mg/L)	MW-13	0.00044	0.00025	0.05	No	13	76.92	No	0.01	NP (NDs)
Selenium (mg/L)	MW-14	0.00041	0.00024	0.05	No	13	84.62	No	0.01	NP (NDs)

Confidence Interval - All Results

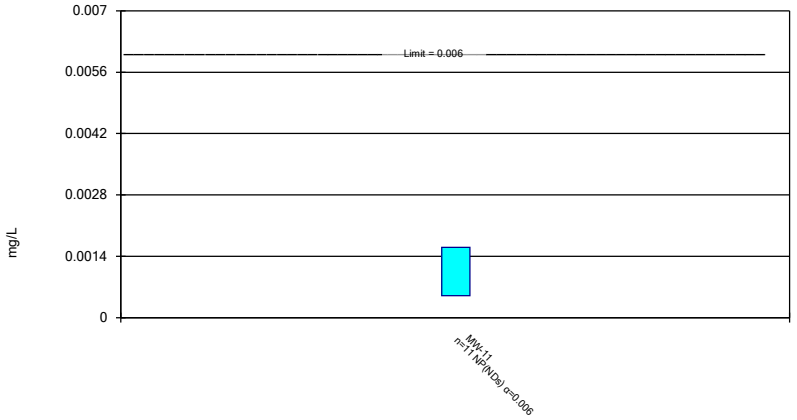
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 7/30/2020, 6:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	MW-6	0.00037	0.00025	0.05	No	13	69.23	No	0.01	NP (NDs)
Selenium (mg/L)	MW-7	0.0003	0.00025	0.05	No	13	69.23	No	0.01	NP (NDs)
Selenium (mg/L)	MW-8	0.00064	0.00025	0.05	No	13	69.23	No	0.01	NP (NDs)
Selenium (mg/L)	MW-9	0.00033	0.00025	0.05	No	13	84.62	No	0.01	NP (NDs)

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



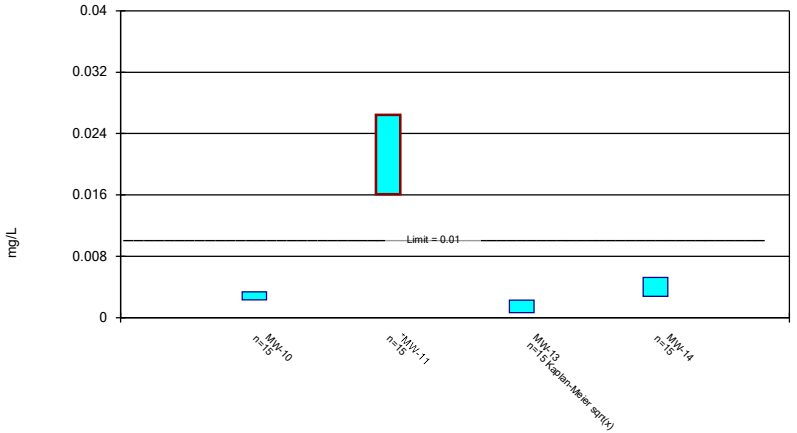
Constituent: Antimony Analysis Run 7/30/2020 6:16 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



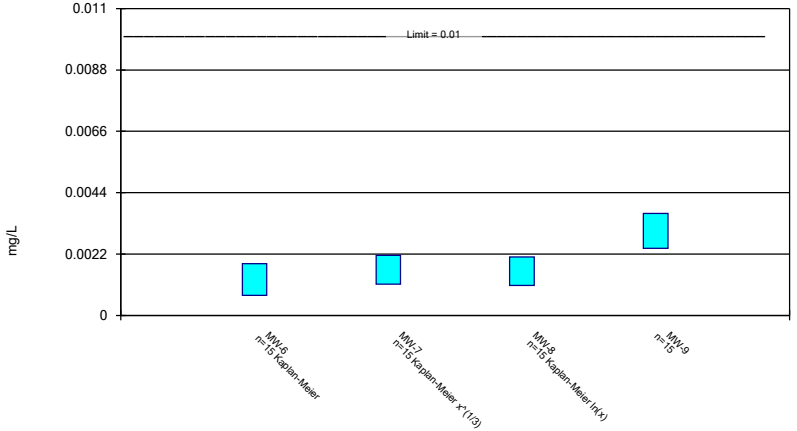
Constituent: Arsenic Analysis Run 7/30/2020 6:16 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



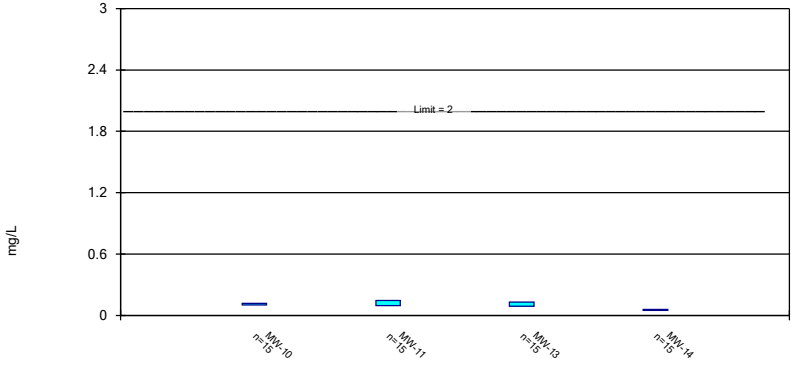
Constituent: Arsenic Analysis Run 7/30/2020 6:16 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



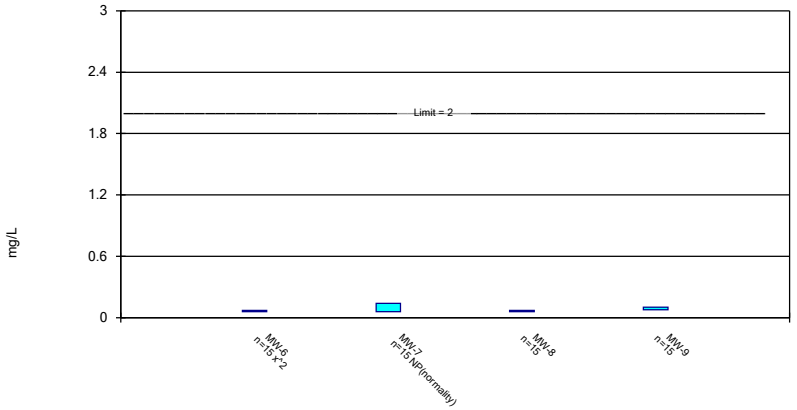
Constituent: Barium Analysis Run 7/30/2020 6:16 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



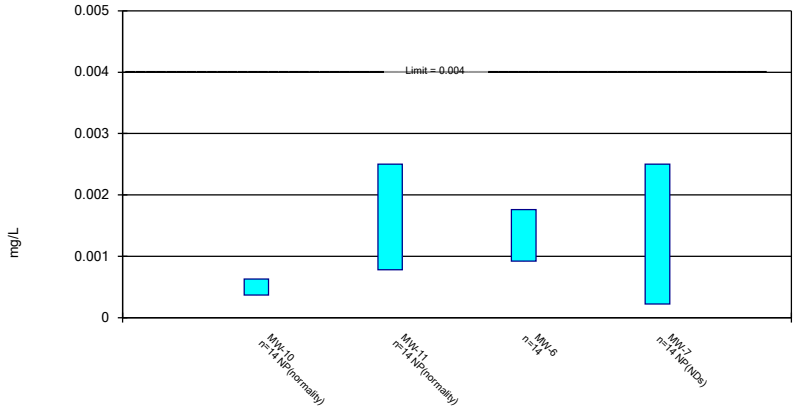
Constituent: Barium Analysis Run 7/30/2020 6:16 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



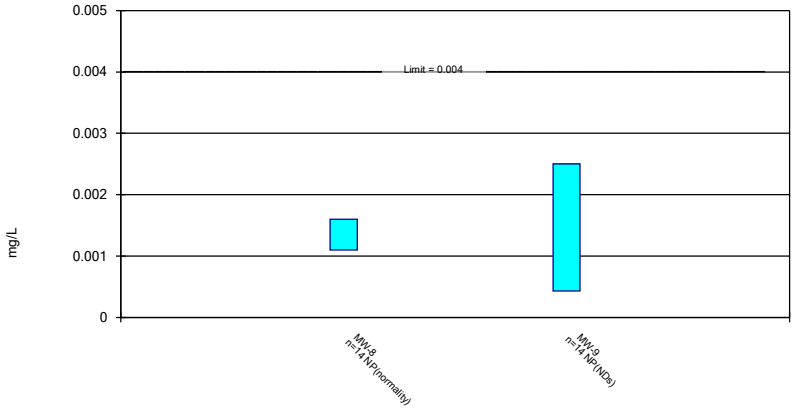
Constituent: Beryllium Analysis Run 7/30/2020 6:16 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



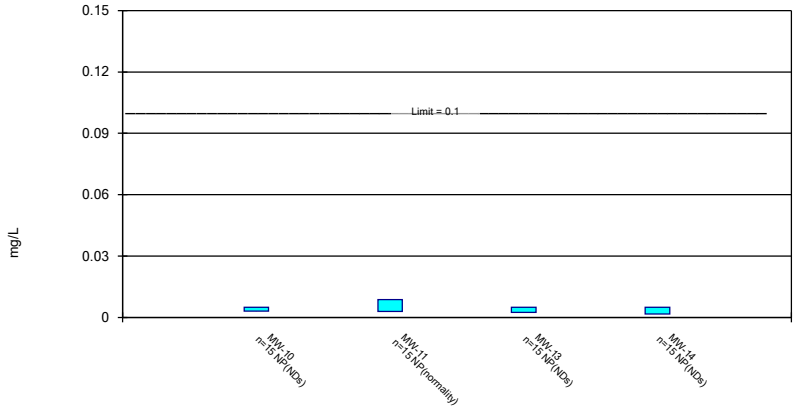
Constituent: Beryllium Analysis Run 7/30/2020 6:16 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



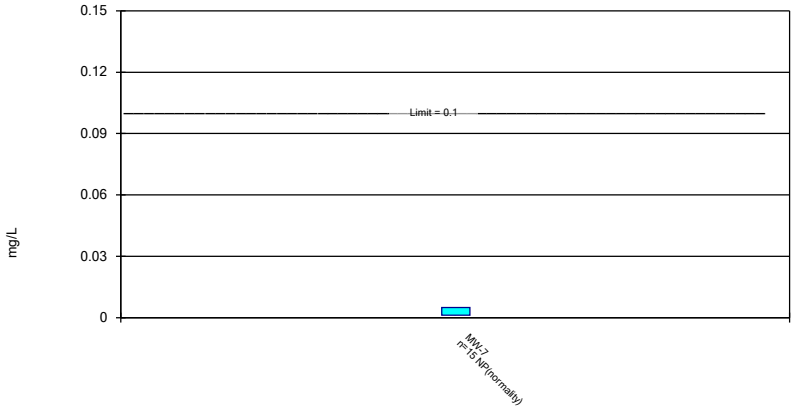
Constituent: Chromium Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



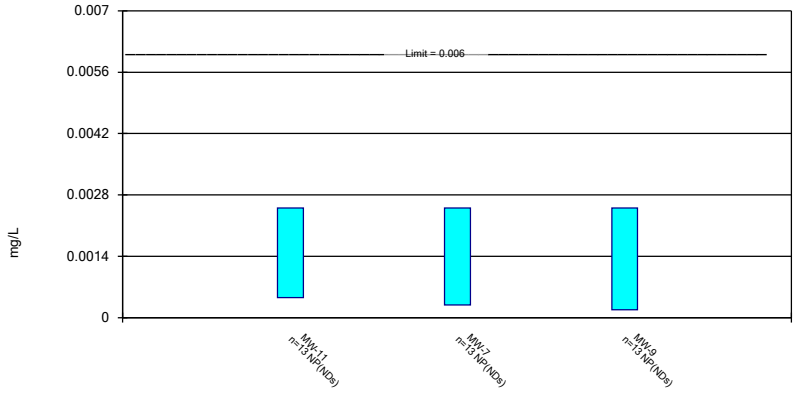
Constituent: Chromium Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



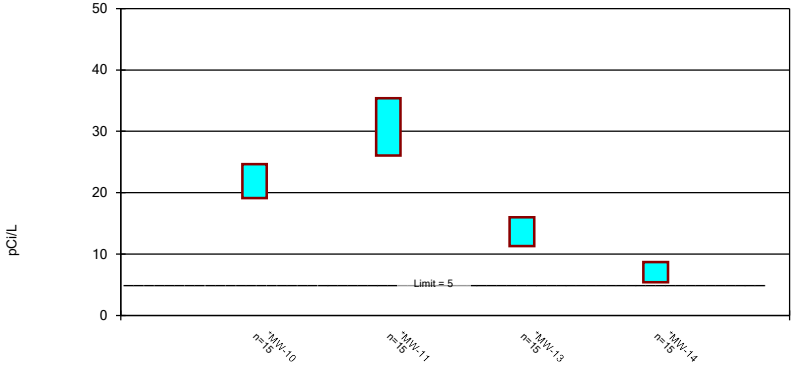
Constituent: Cobalt Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



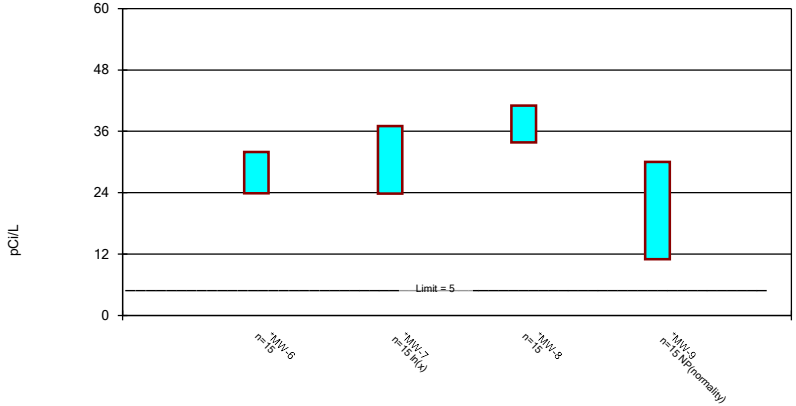
Constituent: Combined Radium 226 + 228 Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



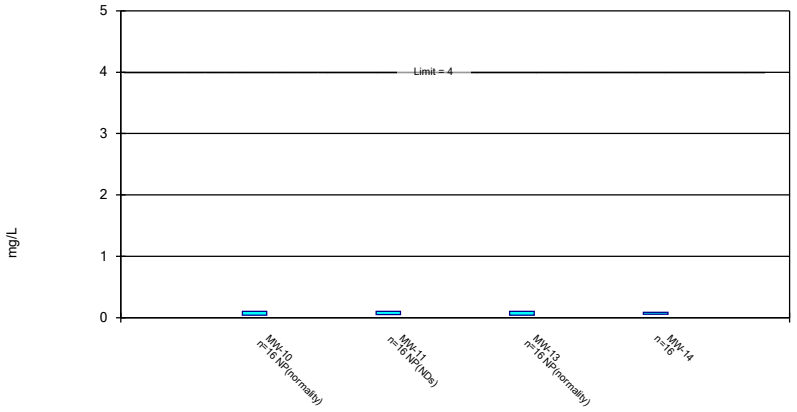
Constituent: Combined Radium 226 + 228 Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



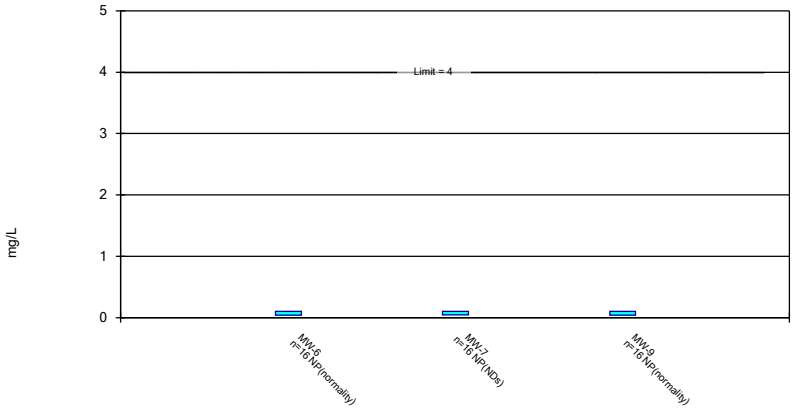
Constituent: Fluoride Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



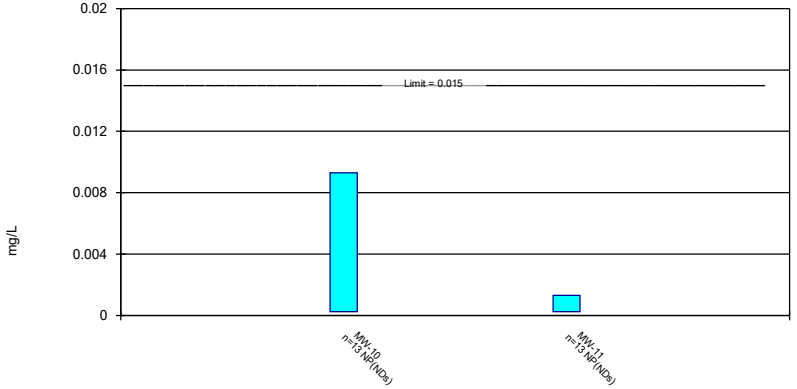
Constituent: Fluoride Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



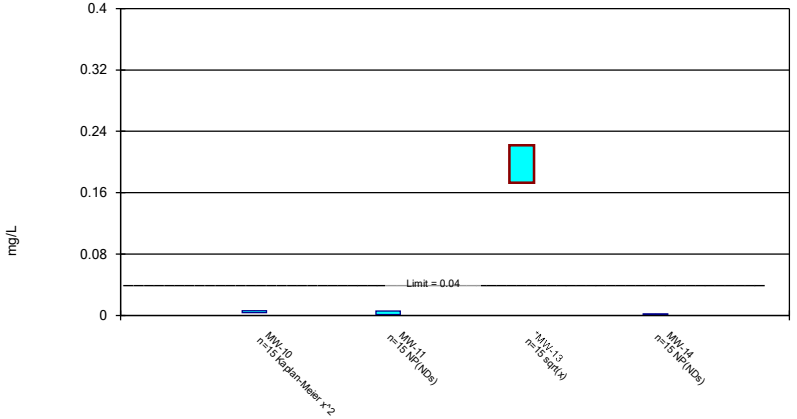
Constituent: Lead Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



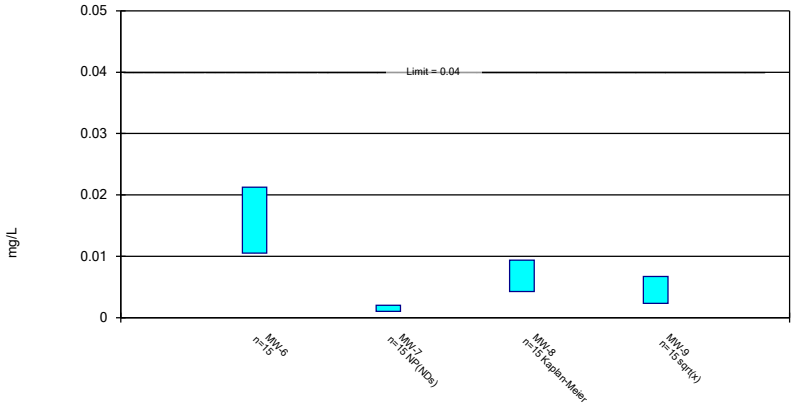
Constituent: Lithium Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



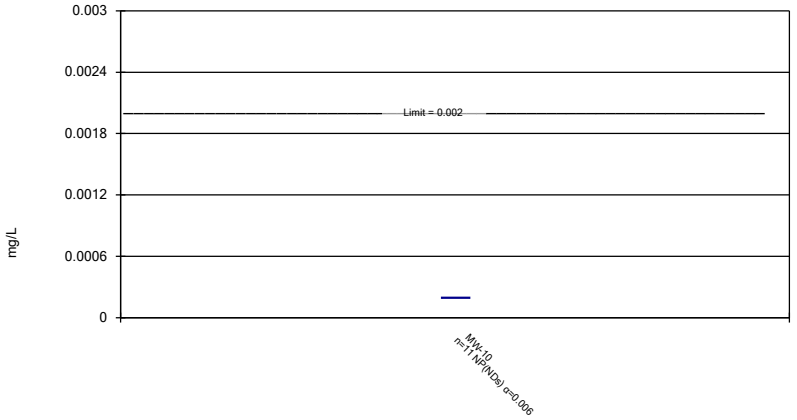
Constituent: Lithium Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



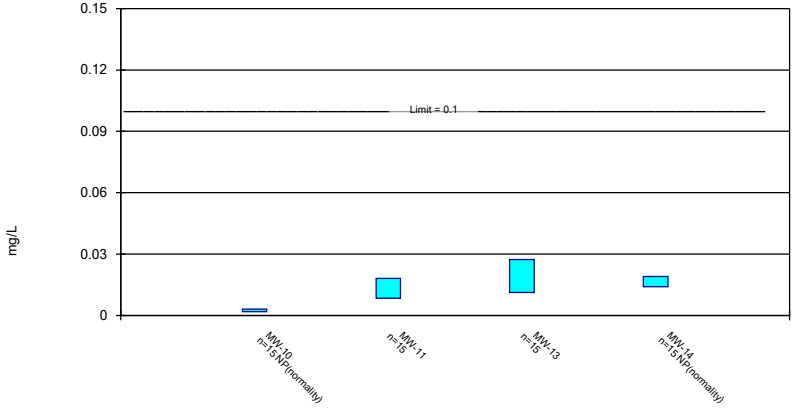
Constituent: Mercury Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



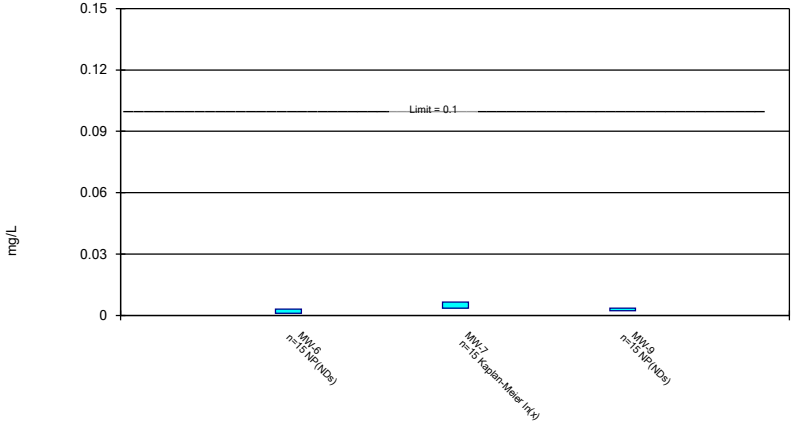
Constituent: Molybdenum Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

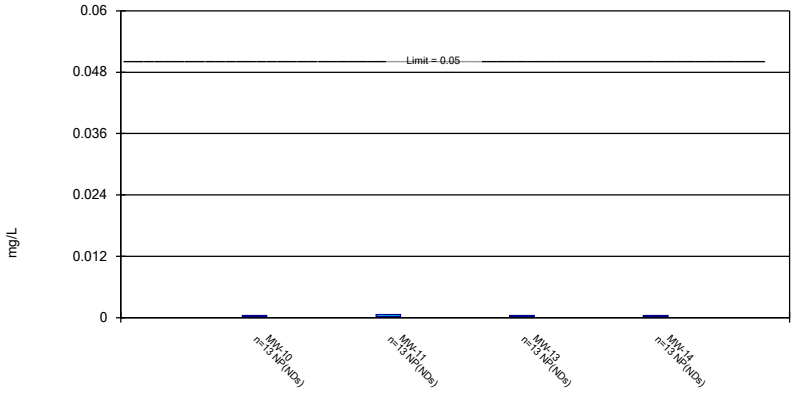


Constituent: Molybdenum Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



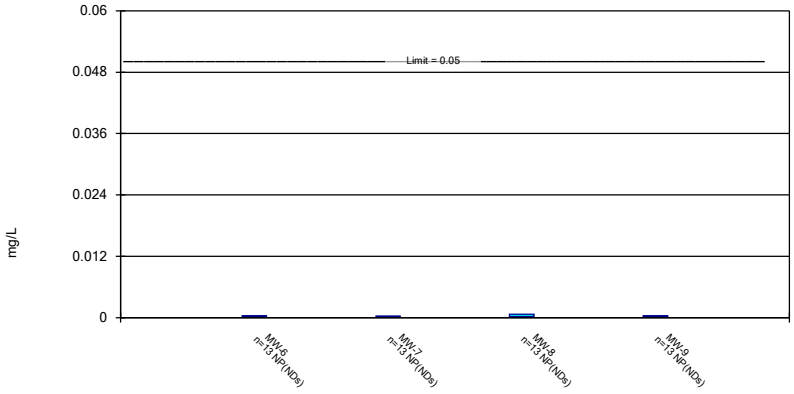
Constituent: Selenium Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



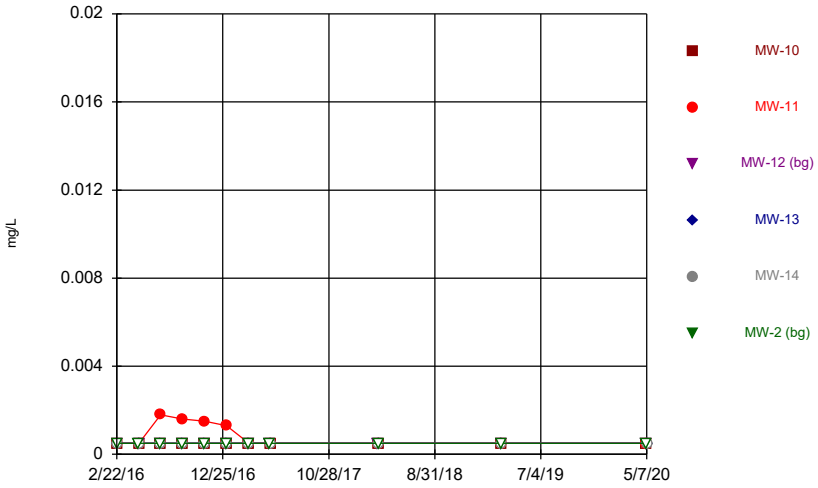
Constituent: Selenium Analysis Run 7/30/2020 6:17 AM View: AIV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

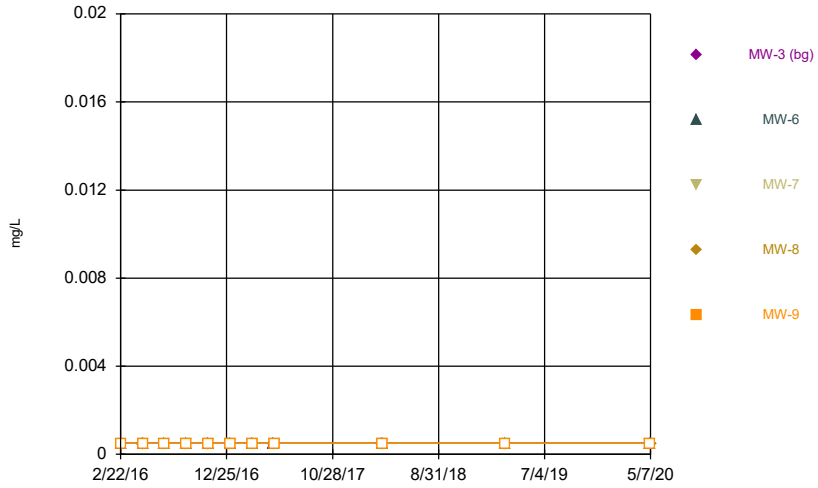
Time Series



Constituent: Antimony Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

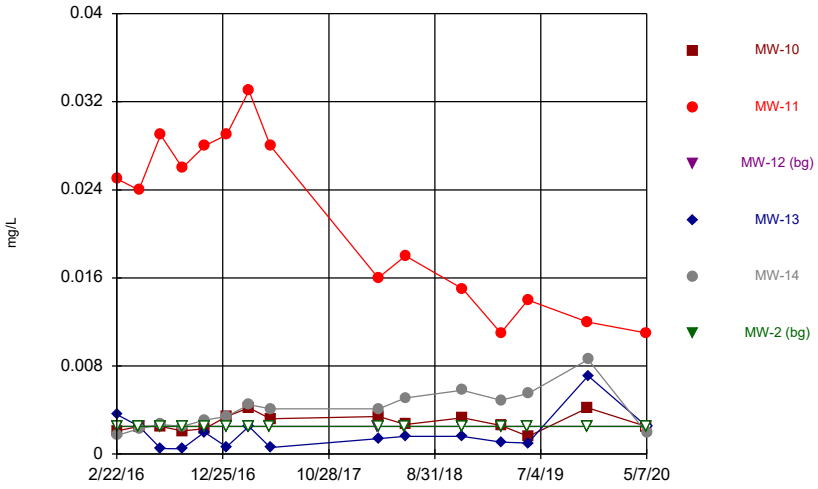
Time Series



Constituent: Antimony Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

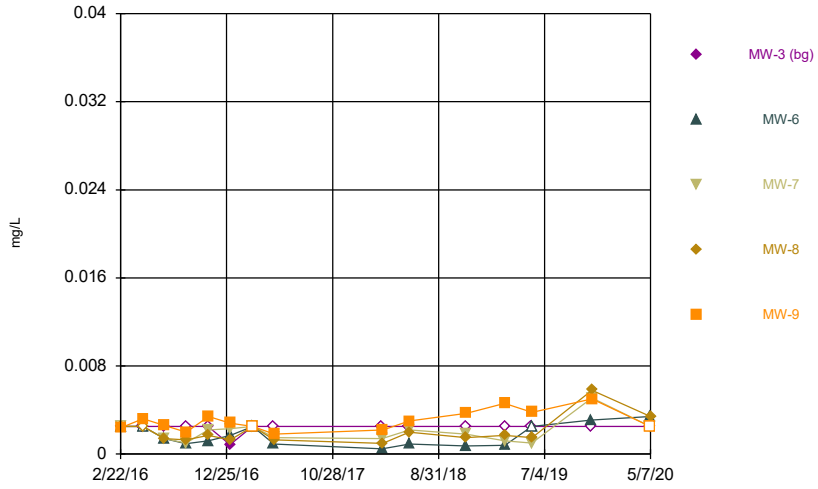
Time Series



Constituent: Arsenic Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

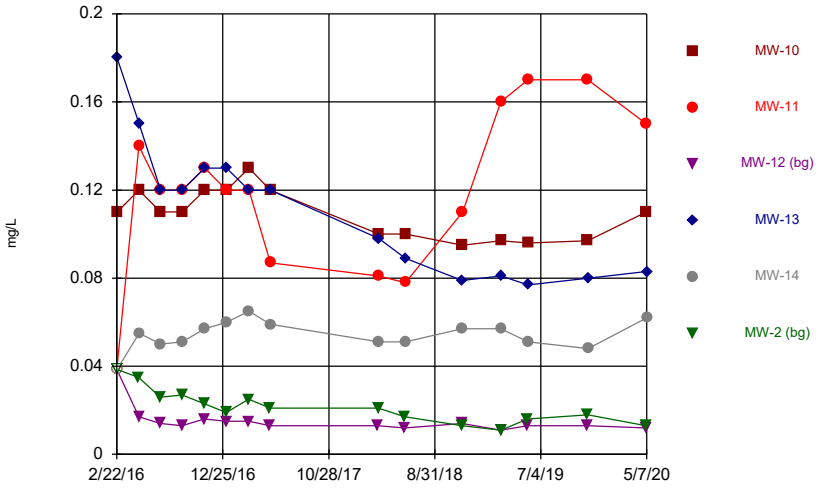
Time Series



Constituent: Arsenic Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

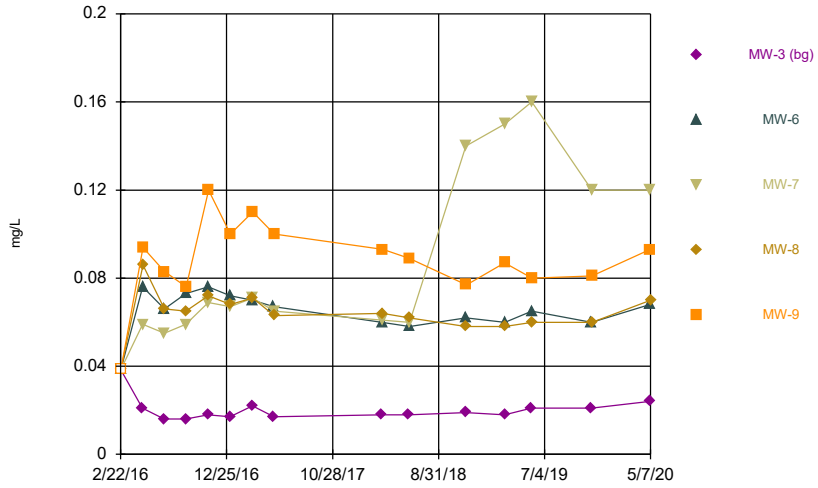
Time Series



Constituent: Barium Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

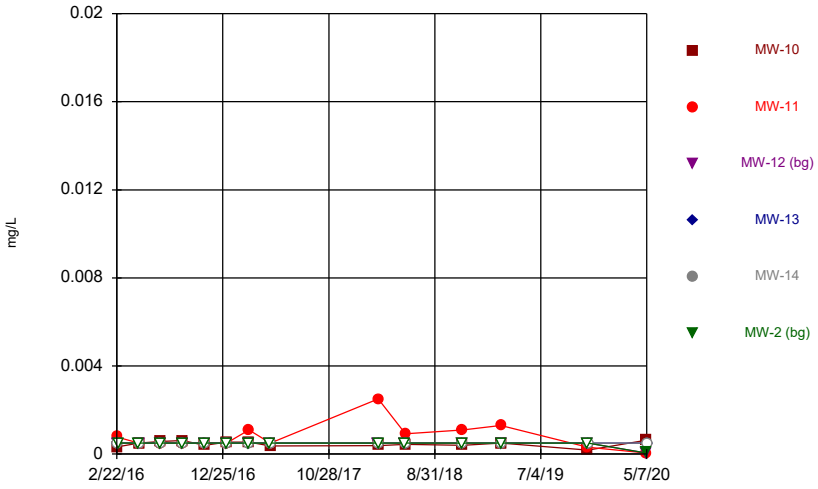
Time Series



Constituent: Barium Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

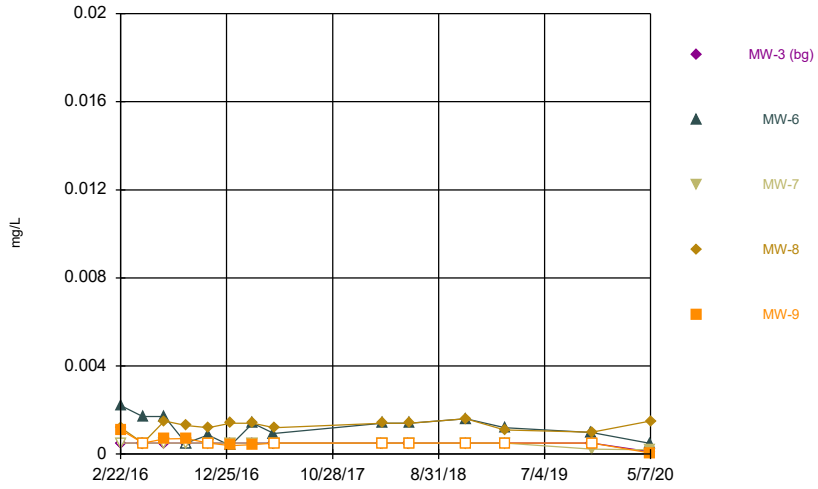
Time Series



Constituent: Beryllium Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

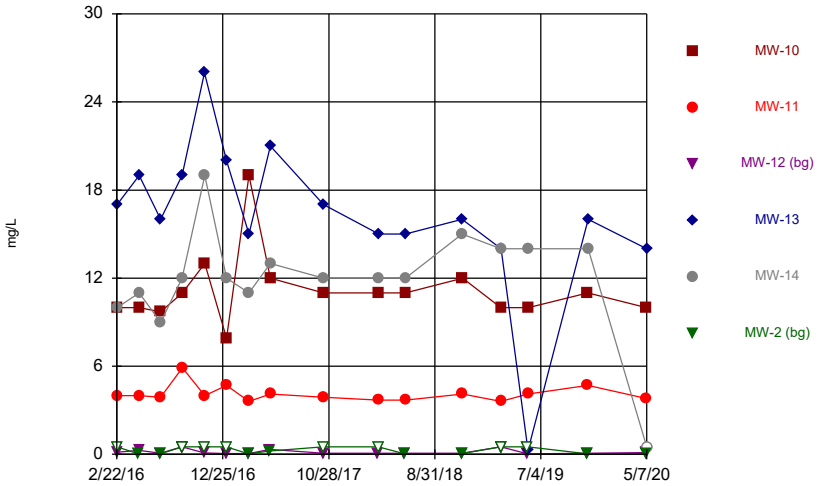
Time Series



Constituent: Beryllium Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

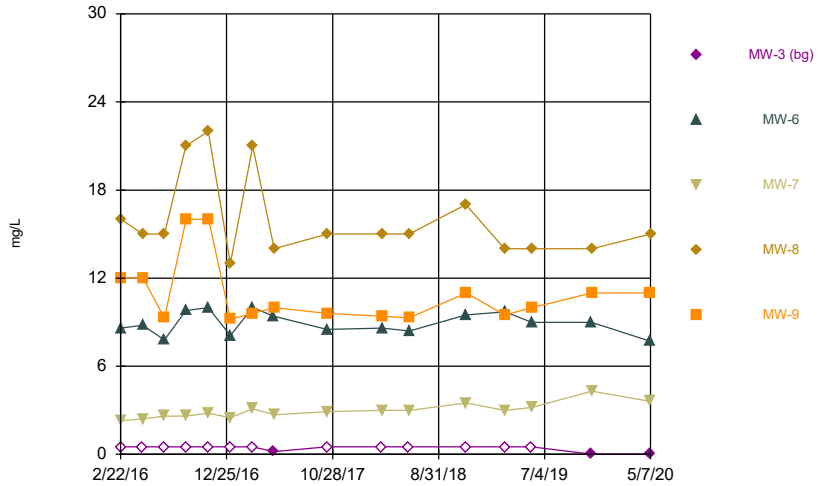
Time Series



Constituent: Boron Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

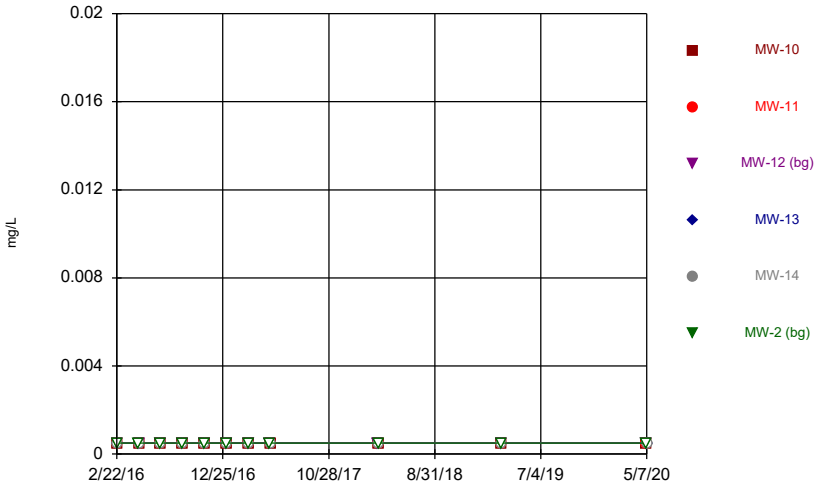
Time Series



Constituent: Boron Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

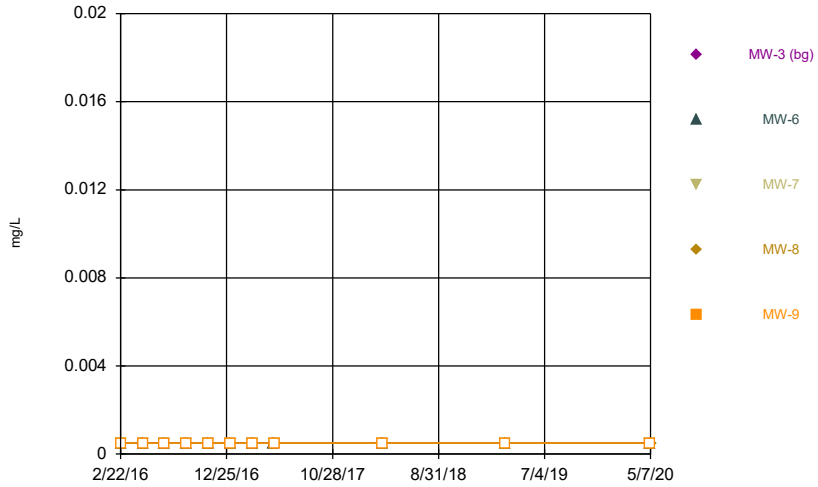
Time Series



Constituent: Cadmium Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

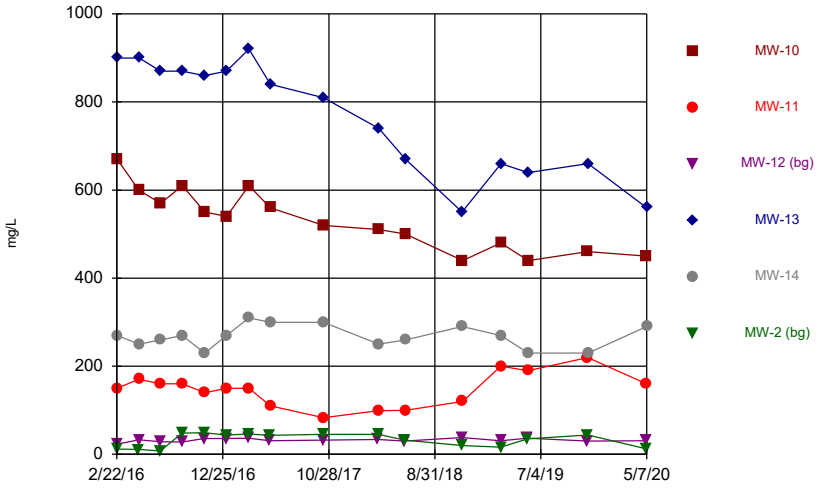
Time Series



Constituent: Cadmium Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

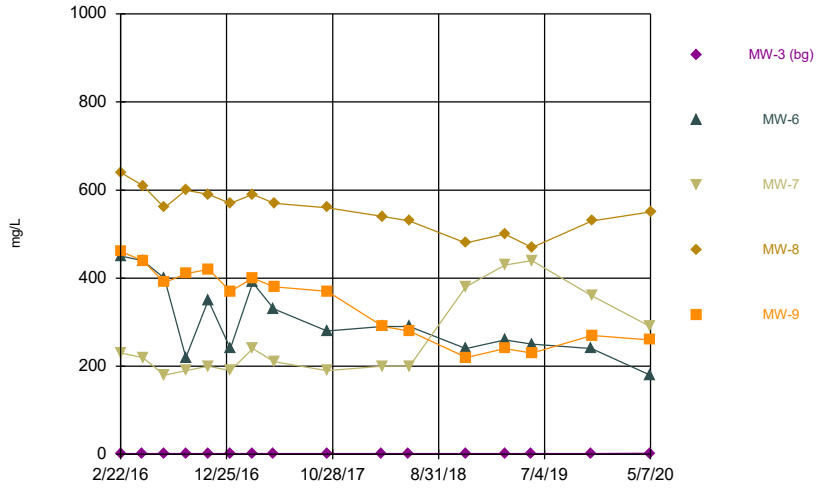
Time Series



Constituent: Calcium Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

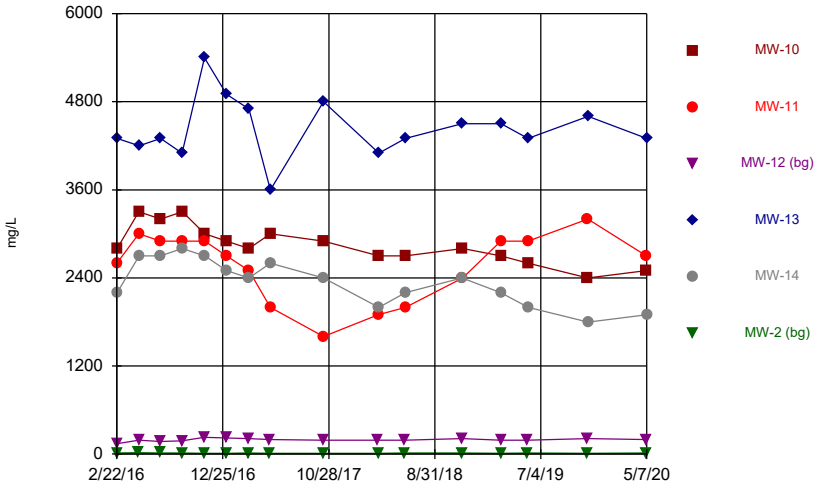
Time Series



Constituent: Calcium Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

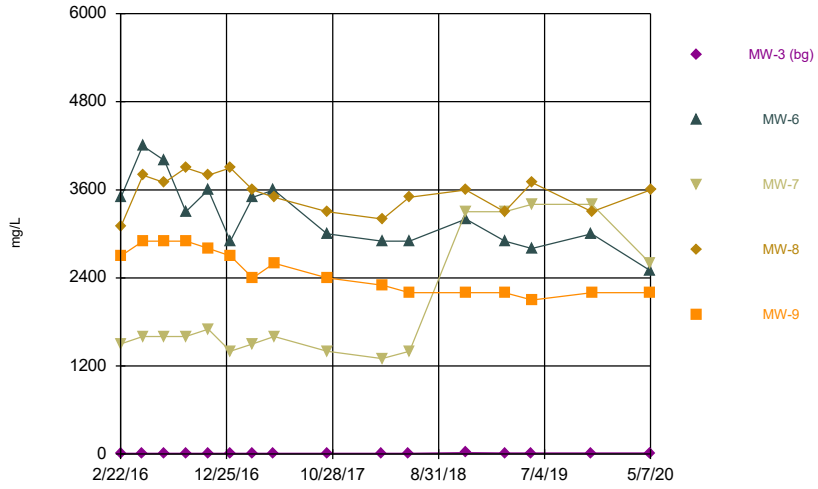
Time Series



Constituent: Chloride Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

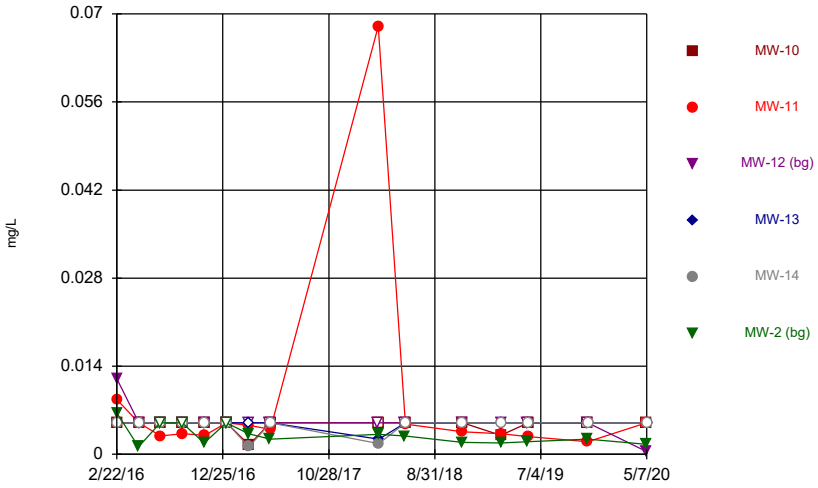
Time Series



Constituent: Chloride Analysis Run 8/3/2020 1:20 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

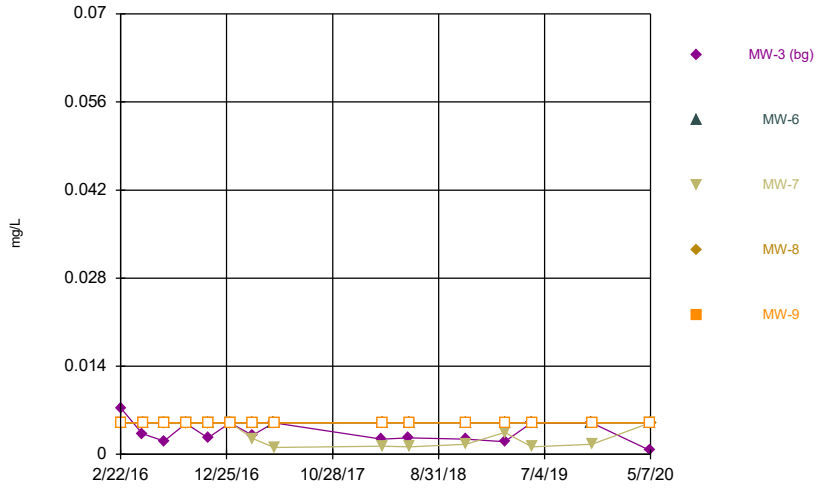
Time Series



Constituent: Chromium Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

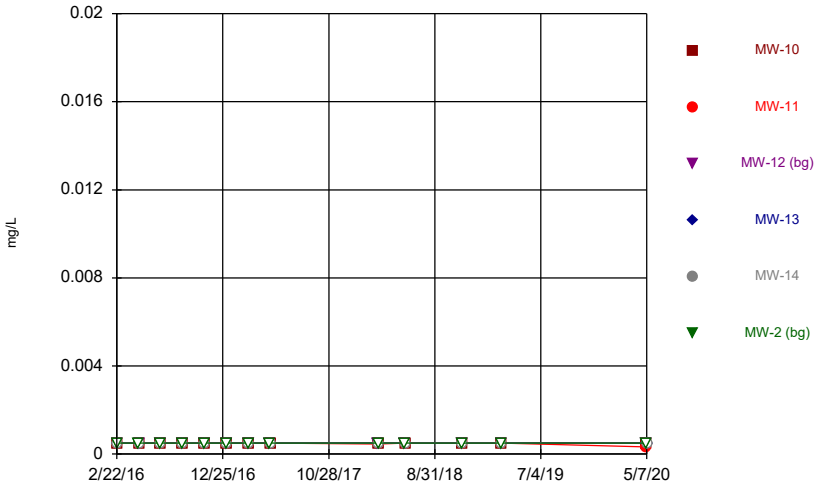
Time Series



Constituent: Chromium Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

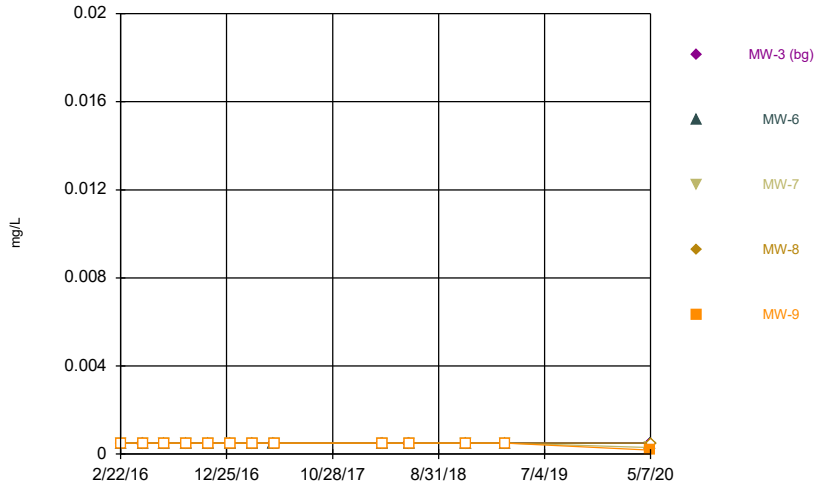
Time Series



Constituent: Cobalt Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

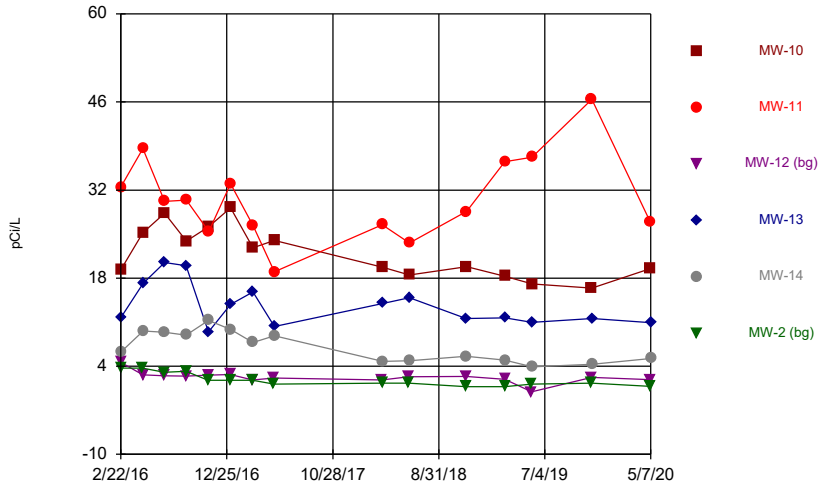
Time Series



Constituent: Cobalt Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

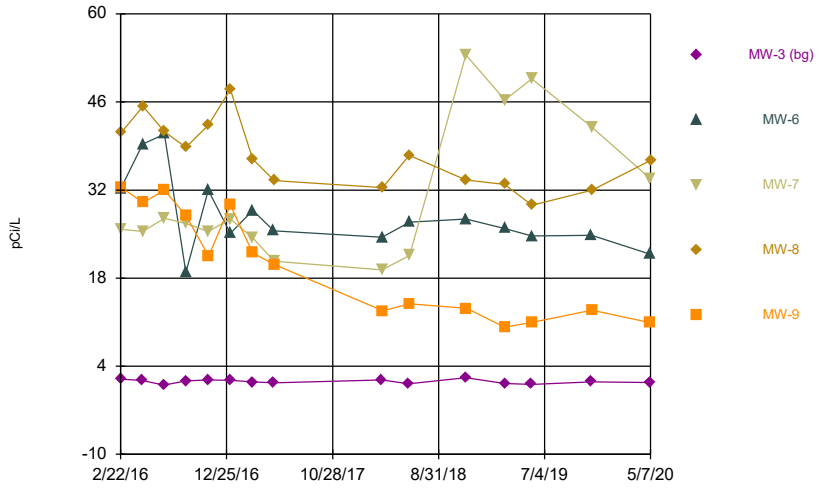
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

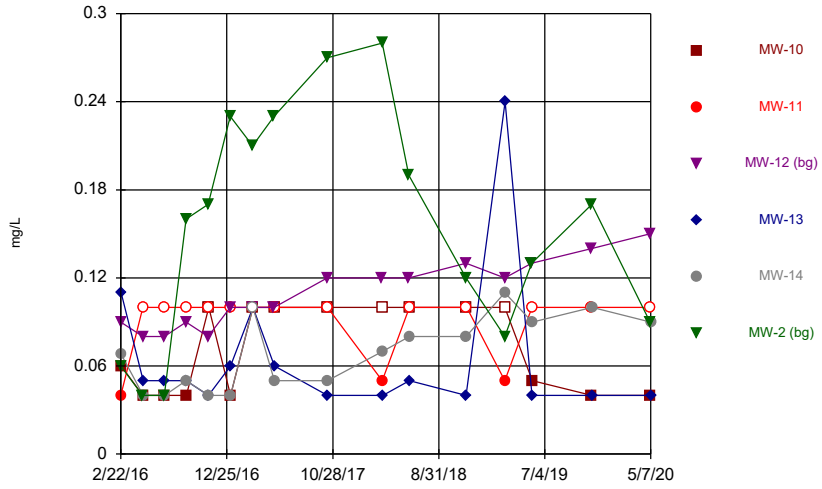
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

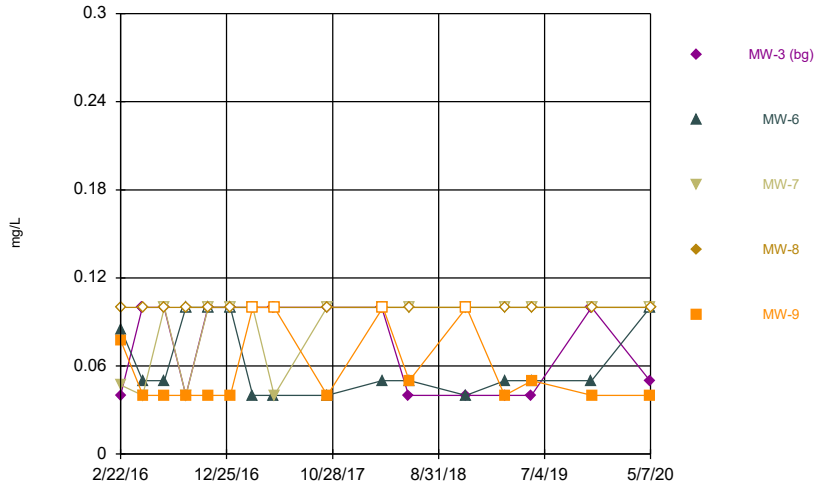
Time Series



Constituent: Fluoride Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

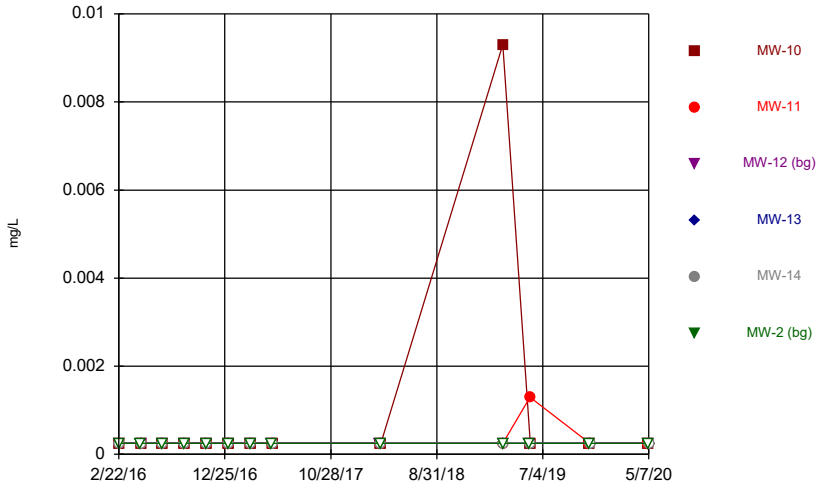
Time Series



Constituent: Fluoride Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

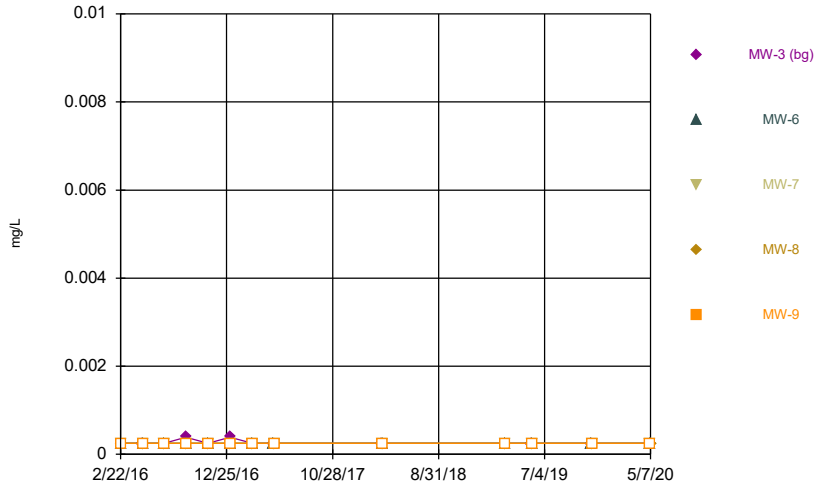
Time Series



Constituent: Lead Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

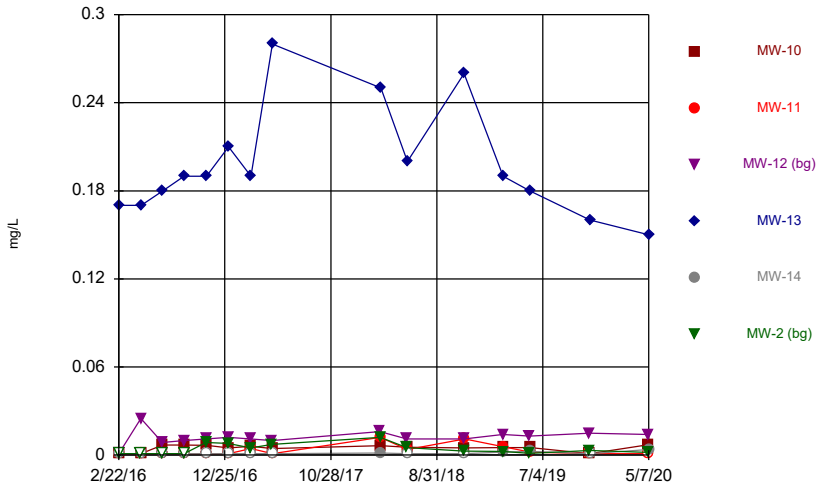
Time Series



Constituent: Lead Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

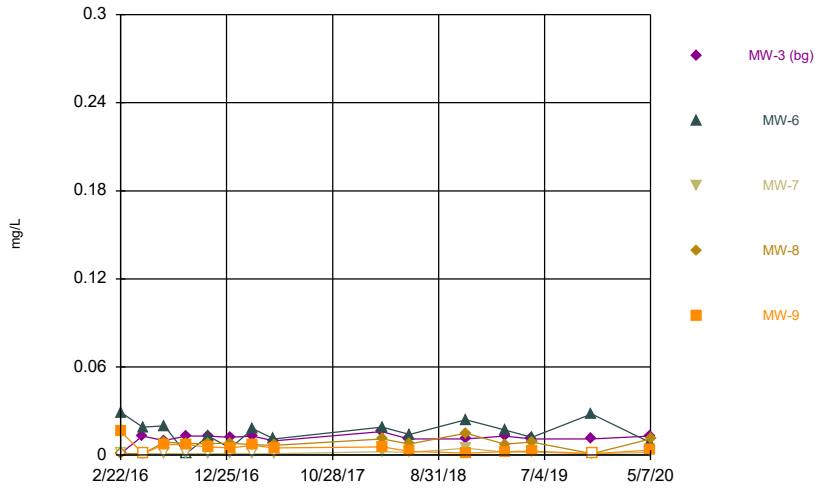
Time Series



Constituent: Lithium Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

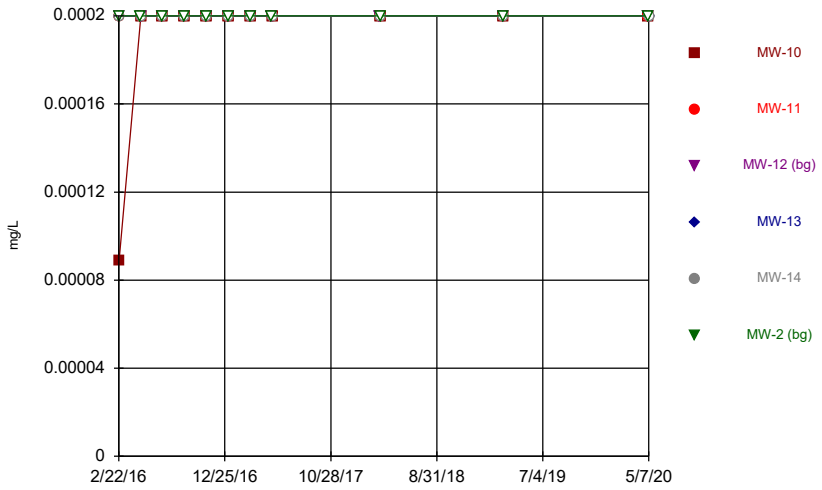
Time Series



Constituent: Lithium Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

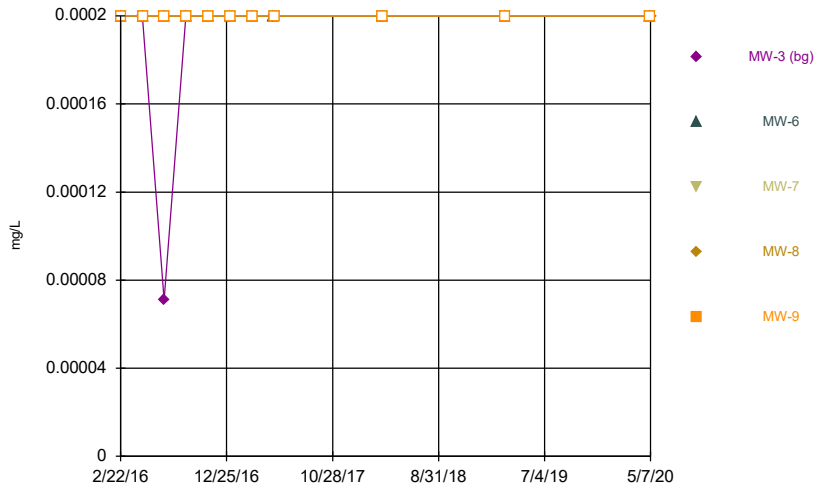
Time Series



Constituent: Mercury Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

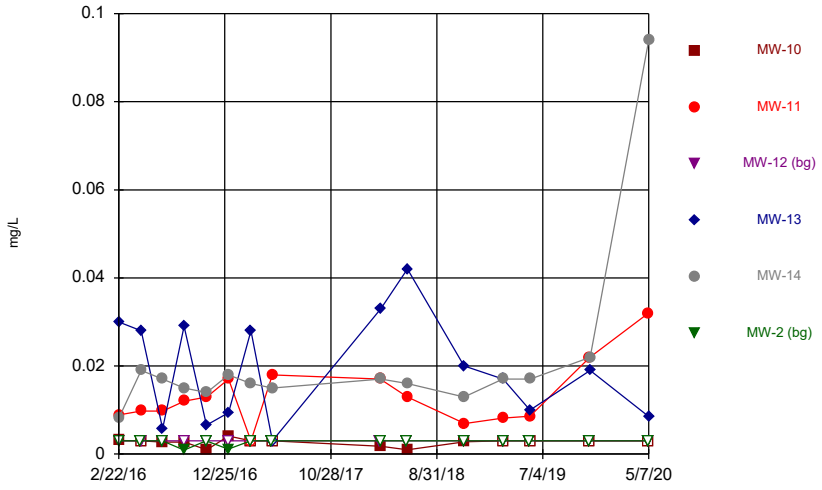
Time Series



Constituent: Mercury Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

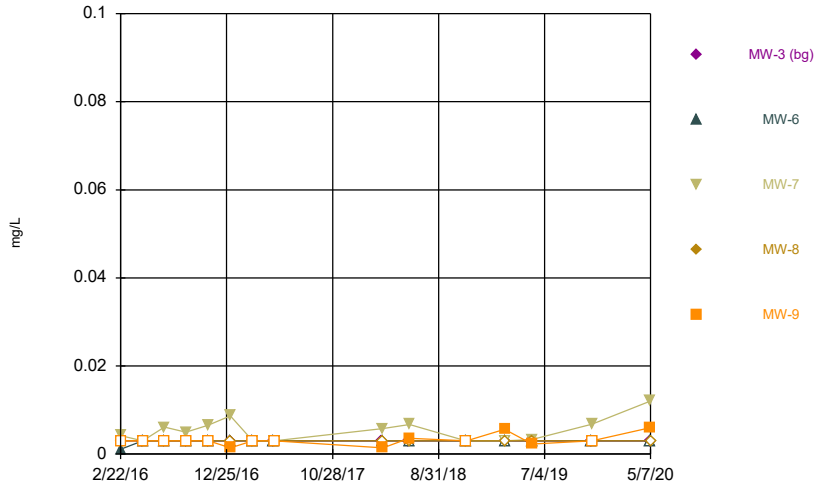
Time Series



Constituent: Molybdenum Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

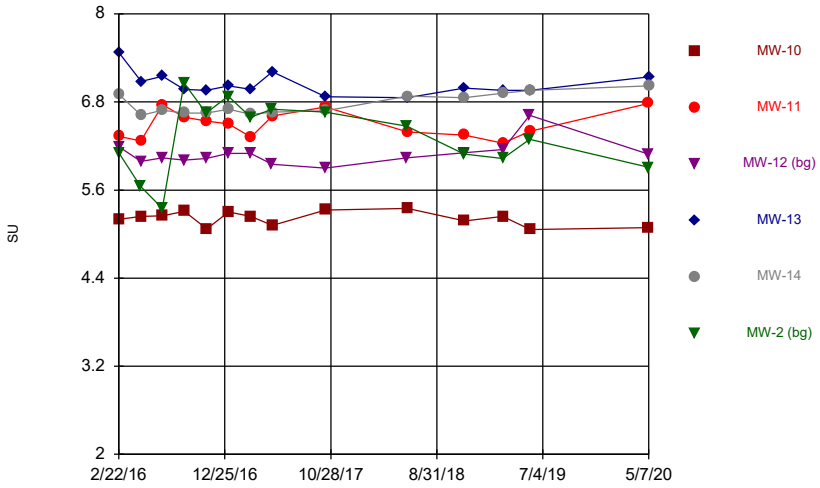
Time Series



Constituent: Molybdenum Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

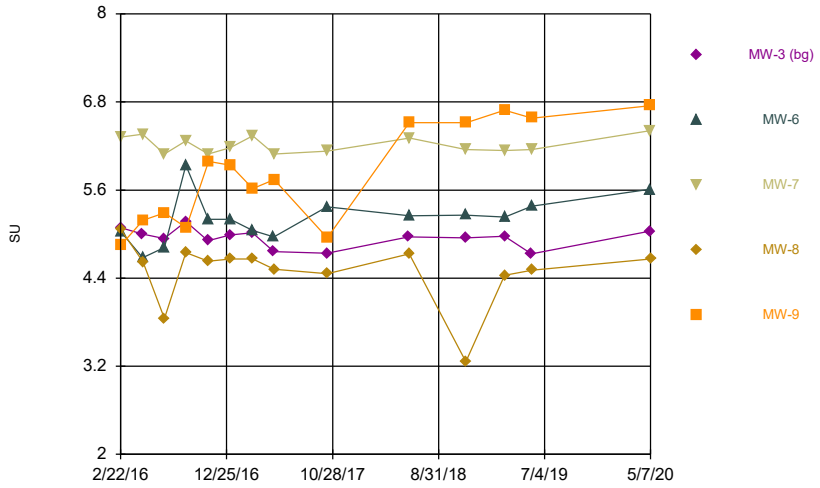
Time Series



Constituent: pH Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

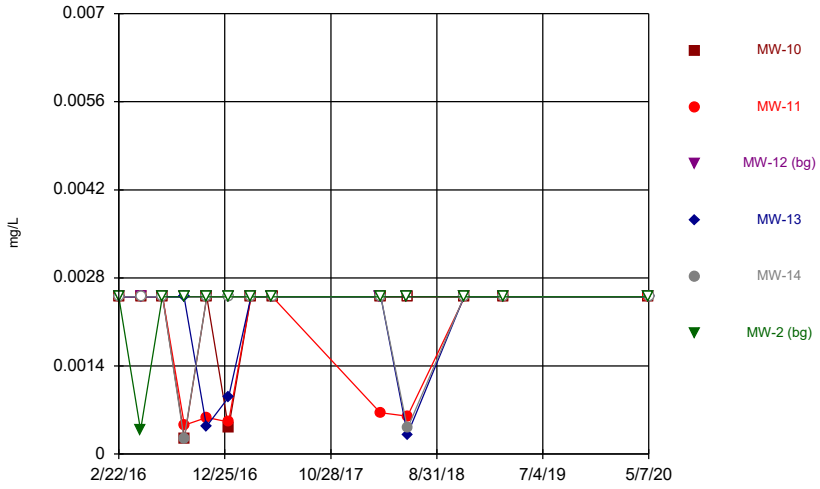
Time Series



Constituent: pH Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

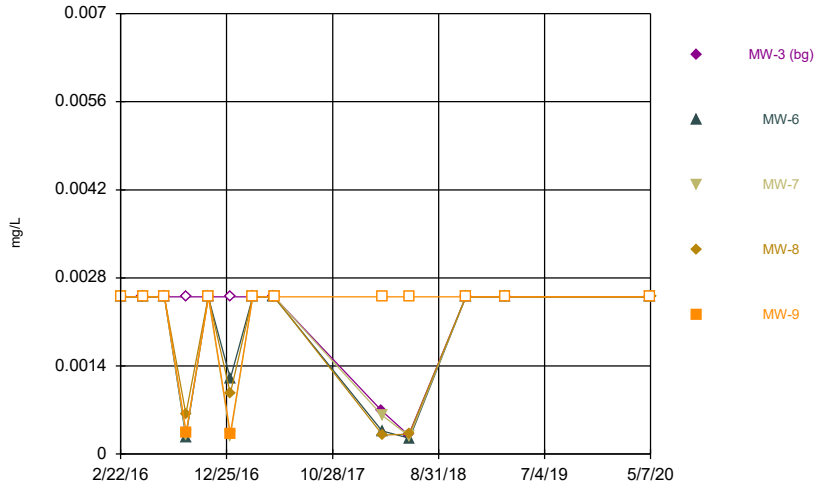
Time Series



Constituent: Selenium Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

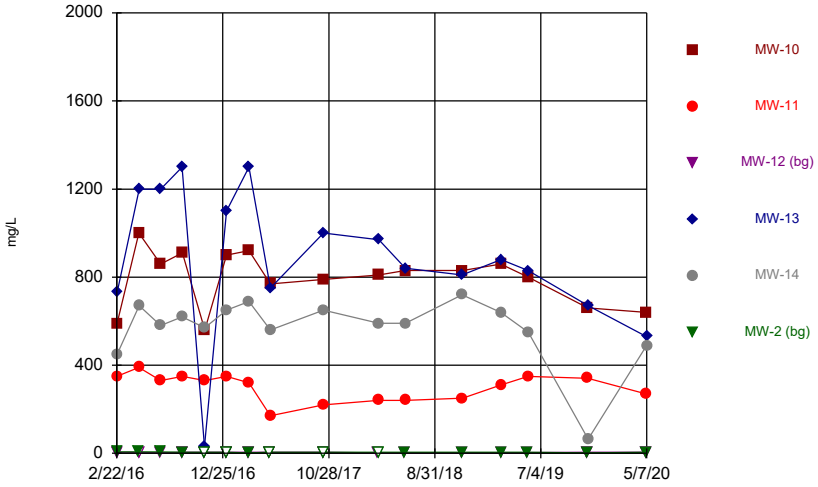
Time Series



Constituent: Selenium Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

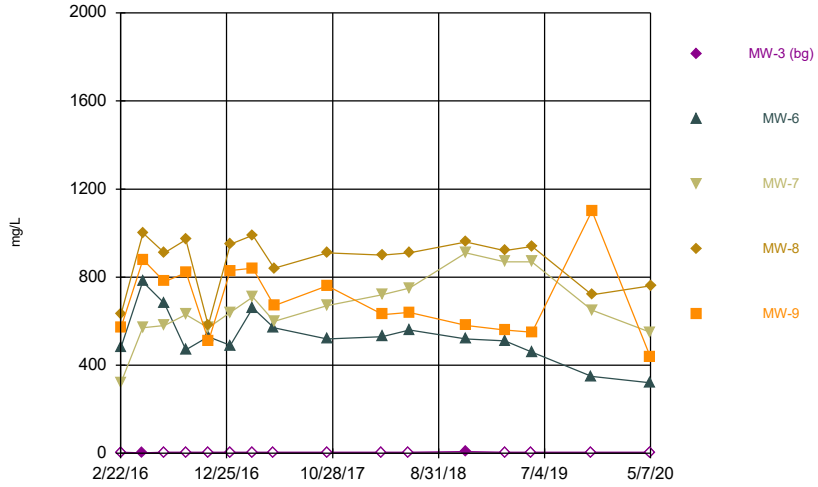
Time Series



Constituent: Sulfate Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

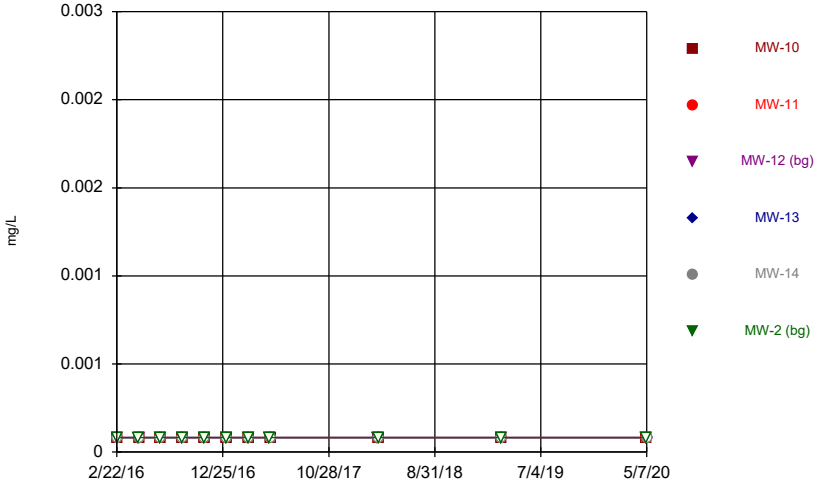
Time Series



Constituent: Sulfate Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

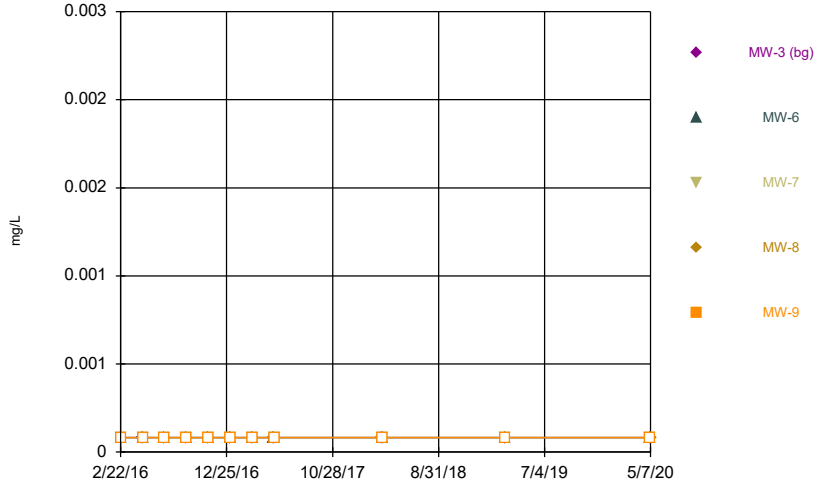
Time Series



Constituent: Thallium Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

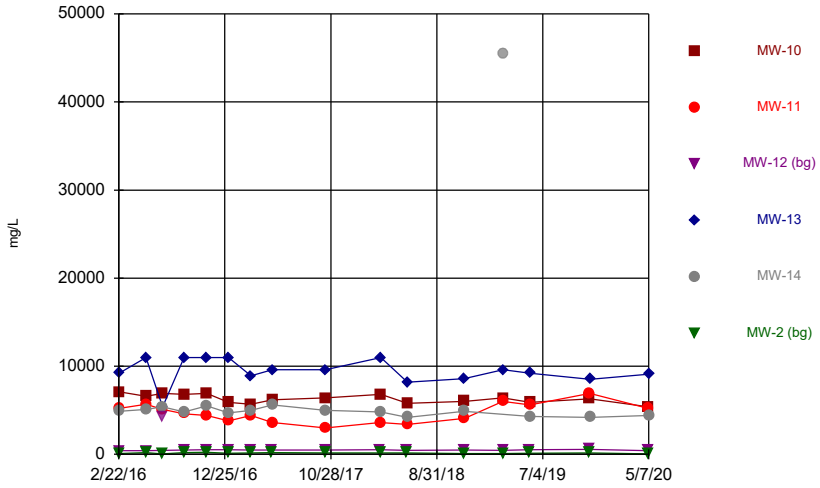
Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

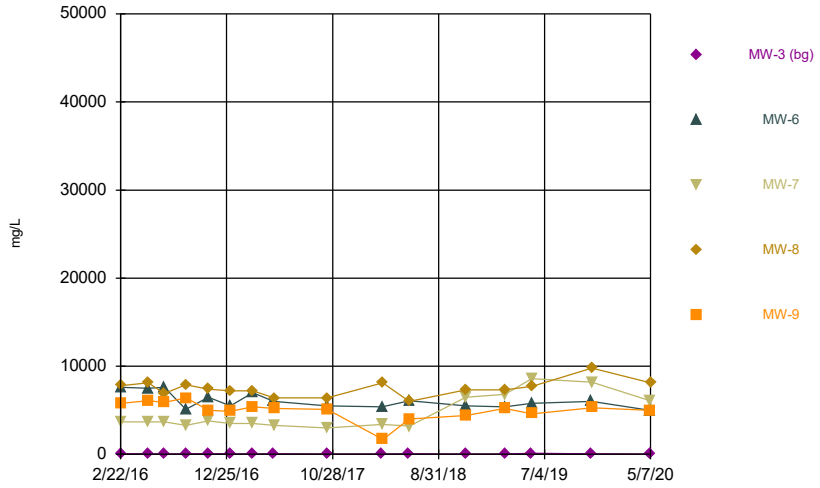
Time Series



Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:21 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0005	<0.0005			<0.0005
2/23/2016	<0.0005			<0.0005	<0.0005	
4/25/2016						<0.0005
4/26/2016	<0.0005	<0.0005	<0.0005			
4/27/2016				<0.0005	<0.0005	
6/27/2016			<0.0005			<0.0005
6/28/2016	<0.0005	0.0018 (J)		<0.0005	<0.0005	
8/29/2016			<0.0005	<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005	0.0016 (J)				
11/1/2016			<0.0005			<0.0005
11/2/2016				<0.0005		
11/3/2016	<0.0005	0.0015 (J)			<0.0005	
1/4/2017			<0.0005			<0.0005
1/5/2017	<0.0005	0.0013 (J)		<0.0005	<0.0005	
3/10/2017			<0.0005			<0.0005
3/11/2017	<0.0005	<0.0005 (*)		<0.0005	<0.0005	
5/11/2017			<0.0005			<0.0005
5/12/2017	<0.0005	<0.0005		<0.0005	<0.0005	
3/20/2018			<0.0005			
3/21/2018		<0.0005				<0.0005
3/22/2018	<0.0005			<0.0005	<0.0005	
3/11/2019	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
3/12/2019				<0.0005		
5/5/2020			<0.0005			<0.0005
5/6/2020	<0.0005	<0.0005				
5/7/2020				<0.0005	<0.0005	

Time Series

Constituent: Antimony (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0005				
2/23/2016		<0.0005	<0.0005	<0.0005	<0.0005
4/25/2016	<0.0005				
4/26/2016		<0.0005	<0.0005		
4/27/2016				<0.0005	<0.0005
6/27/2016	<0.0005				
6/28/2016		<0.0005	<0.0005	<0.0005	<0.0005
8/29/2016	<0.0005	<0.0005	<0.0005	<0.0005	
8/30/2016					<0.0005
11/1/2016	<0.0005				
11/2/2016		<0.0005	<0.0005	<0.0005	
11/3/2016					<0.0005
1/4/2017	<0.0005				
1/5/2017		<0.0005	<0.0005	<0.0005	<0.0005
3/10/2017	<0.0005				
3/11/2017		<0.0005	<0.0005	<0.0005	<0.0005
5/11/2017	<0.0005	<0.0005			
5/12/2017			<0.0005	<0.0005	<0.0005
3/20/2018	<0.0005				
3/21/2018		<0.0005	<0.0005		
3/22/2018				<0.0005	
3/23/2018					<0.0005
3/11/2019	<0.0005			<0.0005	<0.0005
3/12/2019		<0.0005	<0.0005		
5/5/2020	<0.0005				
5/6/2020		<0.0005	<0.0005		<0.0005
5/7/2020				<0.0005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.025	<0.0025			<0.0025
2/23/2016	0.0021 (J)			0.0036 (J)	0.0017 (J)	
4/25/2016						<0.0025
4/26/2016	<0.0025	0.024	<0.0025			
4/27/2016				<0.0025	0.0023 (J)	
6/27/2016			<0.0025			<0.0025
6/28/2016	0.0025	0.029		0.00051 (J)	0.0027	
8/29/2016			<0.0025	0.00047 (J)	0.0025	<0.0025
8/30/2016	0.0021	0.026				
11/1/2016			<0.0025			<0.0025
11/2/2016				0.002		
11/3/2016	0.0023	0.028			0.0031	
1/4/2017			<0.0025			<0.0025
1/5/2017	0.0034	0.029		0.00066 (J)	0.0034	
3/10/2017			<0.0025			<0.0025 (*)
3/11/2017	0.0042	0.033		<0.0025 (*)	0.0045	
5/11/2017			<0.0025			<0.0025
5/12/2017	0.0032	0.028		0.0006 (J)	0.0041	
3/20/2018			<0.0025			
3/21/2018		0.016				<0.0025
3/22/2018	0.0034			0.0014	0.0041	
6/6/2018			<0.0025			<0.0025
6/7/2018	0.0027	0.018		0.0016	0.0051	
11/19/2018			<0.0025	0.0016	0.0058	<0.0025
11/20/2018	0.0033	0.015				
3/11/2019	0.0026	0.011	<0.0025		0.0049	<0.0025
3/12/2019				0.0011 (J)		
5/28/2019			<0.0025			<0.0025
5/29/2019		0.014		0.001 (J)		
5/30/2019	0.0016				0.0055	
11/18/2019	0.0042	0.012	<0.0025			<0.0025
11/19/2019				0.0071	0.0086	
5/5/2020			<0.0025			<0.0025
5/6/2020	<0.0025	0.011				
5/7/2020				<0.0025	0.0019 (J)	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0025				
2/23/2016		<0.0025	<0.0025	<0.0025	0.0024 (J)
4/25/2016	<0.0025				
4/26/2016		<0.0025	<0.0025		
4/27/2016				<0.0025	0.0032 (J)
6/27/2016	<0.0025				
6/28/2016		0.0014	0.0014	0.0014	0.0026
8/29/2016	<0.0025	0.00095 (J)	0.001 (J)	0.0013	
8/30/2016					0.002
11/1/2016	<0.0025				
11/2/2016		0.0012 (J)	0.0022	0.0017	
11/3/2016					0.0034
1/4/2017	0.00085 (J)				
1/5/2017		0.0017	0.0023	0.0013	0.0028
3/10/2017	<0.0025				
3/11/2017		<0.0025 (*)	<0.0025 (*)	<0.0025 (*)	<0.0025 (*)
5/11/2017	<0.0025	0.0009 (J)			
5/12/2017			0.0015	0.0013	0.0018
3/20/2018	<0.0025				
3/21/2018		0.00048 (J)	0.0014		
3/22/2018				0.00097 (J)	
3/23/2018					0.0022
6/6/2018	<0.0025				
6/7/2018				0.002	0.003
6/8/2018		0.0009 (J)	0.0022		
11/19/2018	<0.0025	0.00075 (J)	0.0018	0.0015	
11/20/2018					0.0037
3/11/2019	<0.0025			0.0017	0.0046
3/12/2019		0.00079 (J)	0.0012 (J)		
5/28/2019	<0.0025				
5/29/2019		<0.0025	0.00099 (J)		
5/30/2019				0.0015	0.0038
11/18/2019	<0.0025	0.0031			
11/19/2019			0.0051	0.0058	0.005
5/5/2020	<0.0025				
5/6/2020		0.0034	<0.0025		<0.0025
5/7/2020				0.0034	

Time Series

Constituent: Barium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.077 (*)	<0.077 (*)			<0.077 (*)
2/23/2016	0.11			0.18	<0.077 (*)	
4/25/2016						0.035
4/26/2016	0.12	0.14	0.017			
4/27/2016				0.15	0.055	
6/27/2016			0.014			0.026
6/28/2016	0.11	0.12		0.12	0.05	
8/29/2016			0.013	0.12	0.051	0.027
8/30/2016	0.11	0.12				
11/1/2016			0.016			0.023
11/2/2016				0.13		
11/3/2016	0.12	0.13			0.057	
1/4/2017			0.015			0.019
1/5/2017	0.12	0.12		0.13	0.06	
3/10/2017			0.015			0.025
3/11/2017	0.13	0.12		0.12	0.065	
5/11/2017			0.013			0.021
5/12/2017	0.12	0.087		0.12	0.059	
3/20/2018			0.013			
3/21/2018		0.081				0.021
3/22/2018	0.1			0.098	0.051	
6/6/2018			0.012			0.017
6/7/2018	0.1	0.078		0.089	0.051	
11/19/2018			0.014	0.079	0.057	0.013
11/20/2018	0.095	0.11				
3/11/2019	0.097	0.16	0.011		0.057	0.011
3/12/2019				0.081		
5/28/2019			0.013			0.016
5/29/2019		0.17		0.077		
5/30/2019	0.096				0.051	
11/18/2019	0.097	0.17	0.013			0.018
11/19/2019				0.08	0.048	
5/5/2020			0.012			0.013
5/6/2020	0.11	0.15				
5/7/2020				0.083	0.062	

Time Series

Constituent: Barium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.077 (*)				
2/23/2016		<0.077 (*)	<0.077 (*)	<0.077 (*)	<0.077 (*)
4/25/2016	0.021				
4/26/2016		0.076	0.059		
4/27/2016				0.086	0.094
6/27/2016	0.016				
6/28/2016		0.066	0.055	0.066	0.083
8/29/2016	0.016	0.073	0.059	0.065	
8/30/2016					0.076
11/1/2016	0.018				
11/2/2016		0.076	0.069	0.072	
11/3/2016					0.12
1/4/2017	0.017				
1/5/2017		0.072	0.067	0.068	0.1
3/10/2017	0.022				
3/11/2017		0.07	0.071	0.071	0.11
5/11/2017	0.017	0.067			
5/12/2017			0.065	0.063	0.1
3/20/2018	0.018				
3/21/2018		0.06	0.061		
3/22/2018				0.064	
3/23/2018					0.093
6/6/2018	0.018				
6/7/2018				0.062	0.089
6/8/2018		0.058	0.06		
11/19/2018	0.019	0.062	0.14	0.058	
11/20/2018					0.077
3/11/2019	0.018			0.058	0.087
3/12/2019		0.06	0.15		
5/28/2019	0.021				
5/29/2019		0.065	0.16		
5/30/2019				0.06	0.08
11/18/2019	0.021	0.06			
11/19/2019			0.12	0.06	0.081
5/5/2020	0.024				
5/6/2020		0.068	0.12		0.093
5/7/2020				0.07	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.00078 (J)	<0.0005			
2/23/2016	0.00033 (J)			<0.0005	<0.0005	
2/26/2016						<0.0005
4/25/2016						<0.0005
4/26/2016	<0.0005	<0.0005	<0.0005			
4/27/2016				<0.0005	<0.0005	
6/27/2016			<0.0005			<0.0005
6/28/2016	0.00057 (J)	<0.0005		<0.0005	<0.0005	
8/29/2016			<0.0005	<0.0005	<0.0005	<0.0005
8/30/2016	0.00061 (J)	<0.0005				
11/1/2016			<0.0005			<0.0005
11/2/2016				<0.0005		
11/3/2016	0.0004 (J)	<0.0005			<0.0005	
1/4/2017			<0.0005			<0.0005
1/5/2017	0.00055 (J)	<0.0005		<0.0005	<0.0005	
3/10/2017			<0.0005			<0.0005
3/11/2017	0.00054 (J)	0.0011 (J)		<0.0005	<0.0005	
5/11/2017			<0.0005			<0.0005
5/12/2017	0.00037 (J)	<0.0005		<0.0005	<0.0005	
3/20/2018			<0.0005			
3/21/2018		0.0025				<0.0005
3/22/2018	0.00039 (J)			<0.0005	<0.0005	
6/6/2018			<0.0005			<0.0005
6/7/2018	0.00044 (J)	0.00092 (J)		<0.0005	<0.0005	
11/19/2018			<0.0005	<0.0005	<0.0005	<0.0005
11/20/2018	0.0004 (J)	0.0011 (J)				
3/11/2019	<0.0005	0.0013 (J)	<0.0005		<0.0005	<0.0005
3/12/2019				<0.0005		
11/18/2019	0.00018 (J)	0.00031 (J)	<0.0005			<0.0005
11/19/2019				<0.0005	<0.0005	
5/5/2020			4.3E-05 (J)			5.7E-05 (J)
5/6/2020	0.00063	5.2E-05 (J)				
5/7/2020				<0.0005	<0.0005	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0005				
2/23/2016		0.0022 (J)	<0.0005	0.0012 (J)	0.0011 (J)
4/25/2016	<0.0005				
4/26/2016		0.0017 (J)	<0.0005		
4/27/2016				<0.0005	<0.0005
6/27/2016	<0.0005				
6/28/2016		0.0017 (J)	<0.0005	0.0015 (J)	0.00069 (J)
8/29/2016	<0.0005	<0.0005	<0.0005	0.0013 (J)	
8/30/2016					0.0007 (J)
11/1/2016	<0.0005				
11/2/2016		0.00087 (J)	<0.0005	0.0012 (J)	
11/3/2016					<0.0005
1/4/2017	<0.0005				
1/5/2017		0.00039 (J)	<0.0005	0.0014 (J)	0.00039 (J)
3/10/2017	<0.0005				
3/11/2017		0.0014 (J)	<0.0005	0.0014 (J)	0.00043 (J)
5/11/2017	<0.0005	0.00093 (J)			
5/12/2017			<0.0005	0.0012 (J)	<0.0005
3/20/2018	<0.0005				
3/21/2018		0.0014 (J)	<0.0005		
3/22/2018				0.0014 (J)	
3/23/2018					<0.0005
6/6/2018	<0.0005				
6/7/2018				0.0014 (J)	<0.0005
6/8/2018		0.0014 (J)	<0.0005		
11/19/2018	<0.0005	0.0016 (J)	<0.0005	0.0016 (J)	
11/20/2018					<0.0005
3/11/2019	<0.0005			0.0011 (J)	<0.0005
3/12/2019		0.0012 (J)	<0.0005		
11/18/2019	<0.0005	0.00098 (J)			
11/19/2019			0.00022 (J)	0.001 (J)	<0.0005
5/5/2020	0.00011 (J)				
5/6/2020		0.00049 (J)	0.0002 (J)		5.3E-05 (J)
5/7/2020				0.0015	

Time Series

Constituent: Boron (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		4	0.14 (J)			<1
2/23/2016	10			17	10	
4/25/2016						0.022 (J)
4/26/2016	10	4	0.27			
4/27/2016				19	11	
6/27/2016			0.083			0.032 (J)
6/28/2016	9.7	3.9		16	9	
8/29/2016			<1 (*)	19	12	<1 (*)
8/30/2016	11	5.9				
11/1/2016			0.1			<1
11/2/2016				26		
11/3/2016	13	4			19	
1/4/2017			0.062			<1
1/5/2017	7.9	4.7		20	12	
3/10/2017			0.06			0.032 (J)
3/11/2017	19	3.6		15	11	
5/11/2017			0.33			0.23
5/12/2017	12	4.1		21	13	
10/12/2017			0.082			<1
10/13/2017	11	3.9		17	12	
3/20/2018			0.072			
3/21/2018		3.7				<1
3/22/2018	11			15	12	
6/6/2018			0.077			0.027 (J)
6/7/2018	11	3.7		15	12	
11/19/2018			0.071	16	15	0.045 (J)
11/20/2018	12	4.1				
3/11/2019	10	3.6	<1		14	<1
3/12/2019				14		
5/28/2019			0.024 (J)			<1
5/29/2019		4.1		0.28		
5/30/2019	10				14	
11/18/2019	11 (J3)	4.7 (J3)	0.075			0.036 (V)
11/19/2019				16 (J3)	14 (J3)	
5/5/2020			0.11			0.041
5/6/2020	10	3.8				
5/7/2020				14	<1	

Time Series

Constituent: Boron (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<1				
2/23/2016		8.6	2.3	16	12
4/25/2016	<1				
4/26/2016		8.8	2.4		
4/27/2016				15	12
6/27/2016	<1				
6/28/2016		7.8	2.6	15	9.3
8/29/2016	<1	9.8	2.6	21	
8/30/2016					16
11/1/2016	<1				
11/2/2016		10	2.8	22	
11/3/2016					16
1/4/2017	<1				
1/5/2017		8.1	2.5	13	9.2
3/10/2017	<1				
3/11/2017		10	3.1	21	9.6
5/11/2017	0.18	9.4			
5/12/2017			2.7	14	10
10/12/2017	<1	8.5	2.9		
10/13/2017				15	9.6
3/20/2018	<1				
3/21/2018		8.6	3		
3/22/2018				15	
3/23/2018					9.4
6/6/2018	<1				
6/7/2018				15	9.3
6/8/2018		8.4	3		
11/19/2018	<1	9.5	3.5	17	
11/20/2018					11
3/11/2019	<1			14	9.5
3/12/2019		9.7	3		
5/28/2019	<1				
5/29/2019		9	3.2		
5/30/2019				14	10
11/18/2019	0.0094 (IV)	9 (J3)			
11/19/2019			4.3 (J3)	14 (J3)	11 (J3)
5/5/2020	0.0073 (J)				
5/6/2020		7.7	3.6		11
5/7/2020				15	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0005	<0.0005			<0.0005
2/23/2016	<0.0005			<0.0005	<0.0005	
4/25/2016						<0.0005
4/26/2016	<0.0005	<0.0005	<0.0005			
4/27/2016				<0.0005	<0.0005	
6/27/2016			<0.0005			<0.0005
6/28/2016	<0.0005	<0.0005		<0.0005	<0.0005	
8/29/2016			<0.0005	<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005	<0.0005				
11/1/2016			<0.0005			<0.0005
11/2/2016				<0.0005		
11/3/2016	<0.0005	<0.0005			<0.0005	
1/4/2017			<0.0005			<0.0005
1/5/2017	<0.0005	<0.0005		<0.0005	<0.0005	
3/10/2017			<0.0005			<0.0005
3/11/2017	<0.0005	<0.0005		<0.0005	<0.0005	
5/11/2017			<0.0005			<0.0005
5/12/2017	<0.0005	<0.0005		<0.0005	<0.0005	
3/20/2018			<0.0005			
3/21/2018		<0.0005				<0.0005
3/22/2018	<0.0005			<0.0005	<0.0005	
3/11/2019	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
3/12/2019				<0.0005		
5/5/2020			<0.0005			<0.0005
5/6/2020	<0.0005	<0.0005				
5/7/2020				<0.0005	<0.0005	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0005				
2/23/2016		<0.0005	<0.0005	<0.0005	<0.0005
4/25/2016	<0.0005				
4/26/2016		<0.0005	<0.0005		
4/27/2016				<0.0005	<0.0005
6/27/2016	<0.0005				
6/28/2016		<0.0005	<0.0005	<0.0005	<0.0005
8/29/2016	<0.0005	<0.0005	<0.0005	<0.0005	
8/30/2016					<0.0005
11/1/2016	<0.0005				
11/2/2016		<0.0005	<0.0005	<0.0005	
11/3/2016					<0.0005
1/4/2017	<0.0005				
1/5/2017		<0.0005	<0.0005	<0.0005	<0.0005
3/10/2017	<0.0005				
3/11/2017		<0.0005	<0.0005	<0.0005	<0.0005
5/11/2017	<0.0005	<0.0005			
5/12/2017			<0.0005	<0.0005	<0.0005
3/20/2018	<0.0005				
3/21/2018		<0.0005	<0.0005		
3/22/2018				<0.0005	
3/23/2018					<0.0005
3/11/2019	<0.0005			<0.0005	<0.0005
3/12/2019		<0.0005	<0.0005		
5/5/2020	<0.0005				
5/6/2020		<0.0005	<0.0005		<0.0005
5/7/2020				<0.0005	

Time Series

Constituent: Calcium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		150	23			12
2/23/2016	670			900	270	
4/25/2016						11
4/26/2016	600	170	33			
4/27/2016				900	250	
6/27/2016			29			7.7
6/28/2016	570	160		870	260	
8/29/2016			28	870	270	48
8/30/2016	610	160				
11/1/2016			36			49
11/2/2016				860		
11/3/2016	550	140			230	
1/4/2017			36			44
1/5/2017	540	150		870	270	
3/10/2017			37			46
3/11/2017	610	150		920	310	
5/11/2017			31			43
5/12/2017	560	110		840	300	
10/12/2017			32			45
10/13/2017	520	83		810	300	
3/20/2018			34			
3/21/2018		99				45
3/22/2018	510			740	250	
6/6/2018			30			32
6/7/2018	500	100		670	260	
11/19/2018			38	550	290	20
11/20/2018	440	120				
3/11/2019	480	200	31		270	16
3/12/2019				660		
5/28/2019			37			35
5/29/2019		190		640		
5/30/2019	440				230	
11/18/2019	460	220	30			44
11/19/2019				660	230	
5/5/2020			31			13
5/6/2020	450	160				
5/7/2020				560	290	

Time Series

Constituent: Calcium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	1.9				
2/23/2016		450	230	640	460
4/25/2016	1.8				
4/26/2016		440	220		
4/27/2016				610	440
6/27/2016	1.7				
6/28/2016		400	180	560	390
8/29/2016	1.7	220	190	600	
8/30/2016					410
11/1/2016	1.9				
11/2/2016		350	200	590	
11/3/2016					420
1/4/2017	1.8				
1/5/2017		240	190	570	370
3/10/2017	1.9				
3/11/2017		390	240	590	400
5/11/2017	1.7	330			
5/12/2017			210	570	380
10/12/2017	1.9	280	190		
10/13/2017				560	370
3/20/2018	1.9				
3/21/2018		290	200		
3/22/2018				540	
3/23/2018					290
6/6/2018	1.8				
6/7/2018				530	280
6/8/2018		290	200		
11/19/2018	1.8	240	380	480	
11/20/2018					220
3/11/2019	1.9			500	240
3/12/2019		260	430		
5/28/2019	2.1				
5/29/2019		250	440		
5/30/2019				470	230
11/18/2019	1.9	240			
11/19/2019			360	530	270
5/5/2020	2.3				
5/6/2020		180	290		260
5/7/2020				550	

Time Series

Constituent: Chloride (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		2600	140			15
2/23/2016	2800			4300	2200	
4/25/2016						18
4/26/2016	3300	3000	190			
4/27/2016				4200	2700	
6/27/2016			170			17
6/28/2016	3200	2900		4300	2700	
8/29/2016			180	4100	2800	16
8/30/2016	3300	2900				
11/1/2016			230			11
11/2/2016				5400		
11/3/2016	3000	2900			2700	
1/4/2017			220			11
1/5/2017	2900	2700		4900	2500	
3/10/2017			210			14
3/11/2017	2800	2500		4700	2400	
5/11/2017			200			11
5/12/2017	3000	2000		3600	2600	
10/12/2017			190			12
10/13/2017	2900	1600		4800	2400	
3/20/2018			190			
3/21/2018		1900				9.3
3/22/2018	2700			4100	2000	
6/6/2018			190			13
6/7/2018	2700	2000		4300	2200	
11/19/2018			210	4500	2400	13
11/20/2018	2800	2400				
3/11/2019	2700	2900	190		2200	12
3/12/2019				4500		
5/28/2019			190			13
5/29/2019		2900		4300		
5/30/2019	2600				2000	
11/18/2019	2400	3200	210			12
11/19/2019				4600	1800	
5/5/2020			200			13
5/6/2020	2500	2700				
5/7/2020				4300	1900	

Time Series

Constituent: Chloride (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	11				
2/23/2016		3500	1500	3100	2700
4/25/2016	10				
4/26/2016		4200	1600		
4/27/2016				3800	2900
6/27/2016	11				
6/28/2016		4000	1600	3700	2900
8/29/2016	11	3300	1600	3900	
8/30/2016					2900
11/1/2016	11				
11/2/2016		3600	1700	3800	
11/3/2016					2800
1/4/2017	11				
1/5/2017		2900	1400	3900	2700
3/10/2017	11				
3/11/2017		3500	1500	3600	2400
5/11/2017	12	3600			
5/12/2017			1600	3500	2600
10/12/2017	12	3000	1400		
10/13/2017				3300	2400
3/20/2018	11				
3/21/2018		2900	1300		
3/22/2018				3200	
3/23/2018					2300
6/6/2018	11				
6/7/2018				3500	2200
6/8/2018		2900	1400		
11/19/2018	19.9 (D)	3200	3300	3600	
11/20/2018					2200
3/11/2019	13			3300	2200
3/12/2019		2900	3300		
5/28/2019	13				
5/29/2019		2800	3400		
5/30/2019				3700	2100
11/18/2019	14	3000			
11/19/2019			3400	3300	2200
5/5/2020	15				
5/6/2020		2500	2600		2200
5/7/2020				3600	

Time Series

Constituent: Chromium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.0087 (J)	0.012 (J)			0.0066 (JV)
2/23/2016	<0.005			<0.005	<0.005	
4/25/2016						0.0012 (J)
4/26/2016	<0.005	<0.005	<0.005			
4/27/2016				<0.005	<0.005	
6/27/2016			<0.005			<0.005
6/28/2016	<0.005	0.0029		<0.005	<0.005	
8/29/2016			<0.005	<0.005	<0.005	<0.005
8/30/2016	<0.005	0.0033				
11/1/2016			<0.005			0.0018 (J)
11/2/2016				<0.005		
11/3/2016	<0.005	0.003			<0.005	
1/4/2017			<0.005			<0.005 (*)
1/5/2017	<0.005	<0.005 (*)		<0.005	<0.005	
3/10/2017			<0.005			0.0033
3/11/2017	0.0015 (J)	0.0046		<0.005	0.0012 (J)	
5/11/2017			<0.005			0.0024 (J)
5/12/2017	<0.005	0.004		<0.005	<0.005	
3/20/2018			<0.005			
3/21/2018		0.068				0.0032
3/22/2018	<0.005			0.0024 (J)	0.0017 (J)	
6/6/2018			<0.005			0.0029
6/7/2018	<0.005	0.0048		<0.005	<0.005	
11/19/2018			<0.005	<0.005	<0.005	0.0019 (J)
11/20/2018	<0.005	0.0036				
3/11/2019	0.003	0.0033	<0.005		<0.005	0.0018 (J)
3/12/2019				<0.005		
5/28/2019			<0.005			0.002 (J)
5/29/2019		0.0028		<0.005		
5/30/2019	<0.005				<0.005	
11/18/2019	<0.005	0.002 (I)	<0.005			0.0024 (I)
11/19/2019				<0.005	<0.005	
5/5/2020			0.0005			0.0016
5/6/2020	<0.005	<0.005				
5/7/2020				<0.005	<0.005	

Time Series

Constituent: Chromium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	0.0074 (J)				
2/23/2016		<0.005	<0.005	<0.005	<0.005
4/25/2016	0.0033				
4/26/2016		<0.005	<0.005		
4/27/2016				<0.005	<0.005
6/27/2016	0.0021 (J)				
6/28/2016		<0.005	<0.005	<0.005	<0.005
8/29/2016	0.0049	<0.005	<0.005	<0.005	
8/30/2016					<0.005
11/1/2016	0.0026				
11/2/2016		<0.005	<0.005	<0.005	
11/3/2016					<0.005
1/4/2017	<0.005 (*)				
1/5/2017		<0.005	<0.005 (*)	<0.005	<0.005
3/10/2017	0.003				
3/11/2017		<0.005	0.0025	<0.005	<0.005
5/11/2017	<0.005	<0.005			
5/12/2017			0.0011 (J)	<0.005	<0.005
3/20/2018	0.0024 (J)				
3/21/2018		<0.005	0.0013 (J)		
3/22/2018				<0.005	
3/23/2018					<0.005
6/6/2018	0.0026				
6/7/2018				<0.005	<0.005
6/8/2018		<0.005	0.0012 (J)		
11/19/2018	0.0024 (J)	<0.005	0.0016 (J)	<0.005	
11/20/2018					<0.005
3/11/2019	0.002 (J)			<0.005	<0.005
3/12/2019		<0.005	0.0035		
5/28/2019	<0.005				
5/29/2019		<0.005	0.0012 (J)		
5/30/2019				<0.005	<0.005
11/18/2019	<0.005	<0.005			
11/19/2019			0.0016 (I)	<0.005	<0.005
5/5/2020	0.00064				
5/6/2020		<0.005	<0.005		<0.005
5/7/2020				<0.005	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0005	<0.0005			<0.0005
2/23/2016	<0.0005			<0.0005	<0.0005	
4/25/2016						<0.0005
4/26/2016	<0.0005	<0.0005	<0.0005			
4/27/2016				<0.0005	<0.0005	
6/27/2016			<0.0005			<0.0005
6/28/2016	<0.0005	<0.0005		<0.0005	<0.0005	
8/29/2016			<0.0005	<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005	<0.0005				
11/1/2016			<0.0005			<0.0005
11/2/2016				<0.0005		
11/3/2016	<0.0005	<0.0005			<0.0005	
1/4/2017			<0.0005			<0.0005
1/5/2017	<0.0005	<0.0005		<0.0005	<0.0005	
3/10/2017			<0.0005			<0.0005
3/11/2017	<0.0005	<0.0005		<0.0005	<0.0005	
5/11/2017			<0.0005			<0.0005
5/12/2017	<0.0005	<0.0005		<0.0005	<0.0005	
3/20/2018			<0.0005			
3/21/2018		0.00046 (J)				<0.0005
3/22/2018	<0.0005			<0.0005	<0.0005	
6/6/2018			<0.0005			<0.0005
6/7/2018	<0.0005	<0.0005		<0.0005	<0.0005	
11/19/2018			<0.0005	<0.0005	<0.0005	<0.0005
11/20/2018	<0.0005	<0.0005				
3/11/2019	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
3/12/2019				<0.0005		
5/5/2020			<0.0005			<0.0005
5/6/2020	<0.0005	0.00032 (J)				
5/7/2020				<0.0005	<0.0005	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0005				
2/23/2016		<0.0005	<0.0005	<0.0005	<0.0005
4/25/2016	<0.0005				
4/26/2016		<0.0005	<0.0005		
4/27/2016				<0.0005	<0.0005
6/27/2016	<0.0005				
6/28/2016		<0.0005	<0.0005	<0.0005	<0.0005
8/29/2016	<0.0005	<0.0005	<0.0005	<0.0005	
8/30/2016					<0.0005
11/1/2016	<0.0005				
11/2/2016		<0.0005	<0.0005	<0.0005	
11/3/2016					<0.0005
1/4/2017	<0.0005				
1/5/2017		<0.0005	<0.0005	<0.0005	<0.0005
3/10/2017	<0.0005				
3/11/2017		<0.0005	<0.0005	<0.0005	<0.0005
5/11/2017	<0.0005	<0.0005			
5/12/2017			<0.0005	<0.0005	<0.0005
3/20/2018	<0.0005				
3/21/2018		<0.0005	<0.0005		
3/22/2018				<0.0005	
3/23/2018					<0.0005
6/6/2018	<0.0005				
6/7/2018				<0.0005	<0.0005
6/8/2018		<0.0005	<0.0005		
11/19/2018	<0.0005	<0.0005	<0.0005	<0.0005	
11/20/2018					<0.0005
3/11/2019	<0.0005			<0.0005	<0.0005
3/12/2019		<0.0005	<0.0005		
5/5/2020	<0.0005				
5/6/2020		<0.0005	0.00029 (J)		0.00018 (J)
5/7/2020				<0.0005	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		32.5	4.64			3.71
2/23/2016	19.4			11.8	6.3	
4/25/2016						3.7
4/26/2016	25.2	38.6	2.65			
4/27/2016				17.2	9.6	
6/27/2016			2.49			3.04
6/28/2016	28.3	30.2		20.5	9.41	
8/29/2016			2.45	20	8.93	3.2
8/30/2016	23.9	30.4				
11/1/2016			2.59			1.75
11/2/2016				9.47	11.3	
11/3/2016	26.2	25.4				
1/4/2017			2.69			1.79
1/5/2017	29.2	33		13.8	9.88	
3/10/2017			1.84			1.78
3/11/2017	22.8	26.4		15.8	7.75	
5/11/2017			2.12			1.14
5/12/2017	24	19		10.3	8.83	
3/20/2018			1.81			
3/21/2018		26.5				1.32
3/22/2018	19.7			14	4.78	
6/6/2018			2.32			1.32
6/7/2018	18.5	23.6		14.9	4.88	
11/19/2018			2.37	11.6	5.59	0.763
11/20/2018	19.8	28.6				
3/11/2019	18.3	36.5	1.93		4.99	0.777
3/12/2019				11.7		
5/28/2019			-0.0564 (U)			1.16
5/29/2019		37.2		11		
5/30/2019	17.1				3.89	
11/18/2019	16.4	46.4	2.25			1.31
11/19/2019				11.6	4.31	
5/5/2020			1.87			0.805
5/6/2020	19.5	26.9				
5/7/2020				10.9	5.23	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	1.96				
2/23/2016		32.3	25.8	41.1	32.5
4/25/2016	1.71				
4/26/2016		39.3	25.4		
4/27/2016				45.3	30
6/27/2016	1				
6/28/2016		40.9	27.5	41.3	32
8/29/2016	1.69	18.9	26.7	38.8	
8/30/2016					27.9
11/1/2016	1.83				
11/2/2016		32	25.4	42.3	
11/3/2016					21.5
1/4/2017	1.75				
1/5/2017		25.1	27.4	48	29.6
3/10/2017	1.5				
3/11/2017		28.8	24.4	36.9	22
5/11/2017	1.34	25.5			
5/12/2017			20.7	33.5	20.2
3/20/2018	1.82				
3/21/2018		24.5	19.3		
3/22/2018				32.4	
3/23/2018					12.8
6/6/2018	1.19				
6/7/2018				37.5	13.9
6/8/2018		26.9	21.6		
11/19/2018	2.18	27.4	53.5	33.6	
11/20/2018					13.2
3/11/2019	1.24			32.9	10.2
3/12/2019		25.9	46.3		
5/28/2019	1.13				
5/29/2019		24.7	49.7		
5/30/2019				29.6	11
11/18/2019	1.52	24.8			
11/19/2019			42	32	12.9
5/5/2020	1.42				
5/6/2020		21.8	33.8		10.9
5/7/2020				36.7	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.04 (J)	0.09 (J)			0.06 (J)
2/23/2016	0.06 (J)			0.11	0.068 (J)	
4/25/2016						0.04 (J)
4/26/2016	0.04 (J)	<0.1	0.08 (J)			
4/27/2016				0.05 (J)	0.04 (J)	
6/27/2016			0.08 (J)			0.04 (J)
6/28/2016	0.04 (J)	<0.1		0.05 (J)	0.04 (J)	
8/29/2016			0.09 (J)	0.05 (J)	0.05 (J)	0.16
8/30/2016	0.04 (J)	<0.1				
11/1/2016			0.08 (J)			0.17
11/2/2016				0.04 (J)		
11/3/2016	<0.1	<0.1			0.04 (J)	
1/4/2017			0.1			0.23
1/5/2017	0.04 (J)	<0.1		0.06 (J)	0.04 (J)	
3/10/2017			0.1			0.21
3/11/2017	<0.1	<0.1		<0.1	<0.1	
5/11/2017			0.1			0.23
5/12/2017	<0.1	<0.1		0.06 (J)	0.05 (J)	
10/12/2017			0.12			0.27
10/13/2017	<0.1	<0.1		0.04	0.05	
3/20/2018			0.12			
3/21/2018		0.05 (J)				0.28
3/22/2018	<0.1			0.04 (J)	0.07 (J)	
6/6/2018			0.12			0.19
6/7/2018	<0.1	<0.1		0.05 (J)	0.08 (J)	
11/19/2018			0.13	0.04 (J)	0.08 (J)	0.12
11/20/2018	<0.1	<0.1				
3/11/2019	<0.1	0.05 (J)	0.12		0.11	0.08 (J)
3/12/2019				0.24		
5/28/2019			0.13			0.13
5/29/2019		<0.1		0.04 (J)		
5/30/2019	0.05 (J)				0.09 (J)	
11/18/2019	0.04 (I)	<0.1	0.14			0.17
11/19/2019				0.04 (I)	0.1	
5/5/2020			0.15 (V)			0.09 (J)
5/6/2020	0.04 (J)	<0.1				
5/7/2020				0.04 (J)	0.09 (J)	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	0.04 (J)				
2/23/2016		0.085 (J)	0.047 (J)	<0.1	0.077 (J)
4/25/2016	<0.1				
4/26/2016		0.05 (J)	0.04 (J)		
4/27/2016				<0.1	0.04 (J)
6/27/2016	<0.1				
6/28/2016		0.05 (J)	<0.1	<0.1	0.04 (J)
8/29/2016	0.04 (J)	<0.1	0.04 (J)	<0.1	
8/30/2016					0.04 (J)
11/1/2016	<0.1				
11/2/2016		<0.1	<0.1	<0.1	
11/3/2016					0.04 (J)
1/4/2017	<0.1				
1/5/2017		<0.1	<0.1	<0.1	0.04 (J)
3/10/2017	<0.1				
3/11/2017		0.04 (J)	<0.1	<0.1	<0.1
5/11/2017	<0.1	0.04 (J)			
5/12/2017			0.04 (J)	<0.1	<0.1
10/12/2017	<0.1	0.04	<0.1		
10/13/2017				<0.1	0.04
3/20/2018	<0.1				
3/21/2018		0.05 (J)	<0.1		
3/22/2018				<0.1	
3/23/2018					<0.1
6/6/2018	0.04 (J)				
6/7/2018				<0.1	0.05 (J)
6/8/2018		0.05 (J)	<0.1		
11/19/2018	0.04 (J)	0.04 (J)	<0.1	<0.1	
11/20/2018					<0.1
3/11/2019	0.04 (J)			<0.1	0.04 (J)
3/12/2019		0.05 (J)	<0.1		
5/28/2019	0.04 (J)				
5/29/2019		0.05 (J)	<0.1		
5/30/2019				<0.1	0.05 (J)
11/18/2019	<0.1	0.05 (I)			
11/19/2019			<0.1	<0.1	0.04 (I)
5/5/2020	0.05 (J)				
5/6/2020		<0.1	<0.1		0.04 (J)
5/7/2020				<0.1	

Time Series

Constituent: Lead (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.00025	<0.00025			<0.00025
2/23/2016	<0.00025			<0.00025	<0.00025	
4/25/2016						<0.00025
4/26/2016	<0.00025	<0.00025	<0.00025			
4/27/2016				<0.00025	<0.00025	
6/27/2016			<0.00025			<0.00025
6/28/2016	<0.00025	<0.00025		<0.00025	<0.00025	
8/29/2016			<0.00025	<0.00025	<0.00025	<0.00025
8/30/2016	<0.00025	<0.00025				
11/1/2016			<0.00025			<0.00025
11/2/2016				<0.00025		
11/3/2016	<0.00025	<0.00025			<0.00025	
1/4/2017			<0.00025			<0.00025
1/5/2017	<0.00025	<0.00025		<0.00025	<0.00025	
3/10/2017			<0.00025			<0.00025
3/11/2017	<0.00025	<0.00025		<0.00025	<0.00025	
5/11/2017			<0.00025			<0.00025
5/12/2017	<0.00025	<0.00025		<0.00025	<0.00025	
3/20/2018			<0.00025			
3/21/2018		<0.00025				<0.00025
3/22/2018	<0.00025			<0.00025	<0.00025	
3/11/2019	0.0093	<0.00025	<0.00025		<0.00025	<0.00025
3/12/2019				<0.00025		
5/28/2019			<0.00025			<0.00025
5/29/2019		0.0013		<0.00025		
5/30/2019	<0.00025				<0.00025	
11/18/2019	<0.00025	<0.00025	<0.00025			<0.00025
11/19/2019				<0.00025	<0.00025	
5/5/2020			<0.00025			<0.00025
5/6/2020	<0.00025	<0.00025				
5/7/2020				<0.00025	<0.00025	

Time Series

Constituent: Lead (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.00025				
2/23/2016		<0.00025	<0.00025	<0.00025	<0.00025
4/25/2016	<0.00025				
4/26/2016		<0.00025	<0.00025		
4/27/2016				<0.00025	<0.00025
6/27/2016	<0.00025				
6/28/2016		<0.00025	<0.00025	<0.00025	<0.00025
8/29/2016	0.00039 (J)	<0.00025	<0.00025	<0.00025	
8/30/2016					<0.00025
11/1/2016	<0.00025				
11/2/2016		<0.00025	<0.00025	<0.00025	
11/3/2016					<0.00025
1/4/2017	0.00039 (J)				
1/5/2017		<0.00025	<0.00025	<0.00025	<0.00025
3/10/2017	<0.00025				
3/11/2017		<0.00025	<0.00025	<0.00025	<0.00025
5/11/2017	<0.00025	<0.00025			
5/12/2017			<0.00025	<0.00025	<0.00025
3/20/2018	<0.00025				
3/21/2018		<0.00025	<0.00025		
3/22/2018				<0.00025	
3/23/2018					<0.00025
3/11/2019	<0.00025			<0.00025	<0.00025
3/12/2019		<0.00025	<0.00025		
5/28/2019	<0.00025				
5/29/2019		<0.00025	<0.00025		
5/30/2019				<0.00025	<0.00025
11/18/2019	<0.00025	<0.00025			
11/19/2019			<0.00025	<0.00025	<0.00025
5/5/2020	<0.00025				
5/6/2020		<0.00025	<0.00025		<0.00025
5/7/2020				<0.00025	

Time Series

Constituent: Lithium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.001	<0.001			<0.001
2/23/2016	<0.001			0.17	<0.001	
4/25/2016						<0.001
4/26/2016	<0.001	<0.001	0.025			
4/27/2016				0.17	<0.001	
6/27/2016			0.0085			<0.001
6/28/2016	0.0069	<0.001		0.18	<0.001	
8/29/2016			0.01	0.19	<0.001	<0.001
8/30/2016	0.0069	<0.001				
11/1/2016			0.011			0.0087
11/2/2016				0.19		
11/3/2016	0.0067	<0.001			<0.001	
1/4/2017			0.012			0.0079
1/5/2017	0.0049 (J)	<0.001		0.21	<0.001	
3/10/2017			0.011			0.0049 (J)
3/11/2017	0.006	0.0044 (J)		0.19	<0.001	
5/11/2017			0.0098			0.0073
5/12/2017	0.0044 (J)	<0.001		0.28	<0.001	
3/20/2018			0.016			
3/21/2018		0.012				0.012
3/22/2018	0.0065			0.25	0.0013 (J)	
6/6/2018			0.011			0.0051
6/7/2018	0.0054	0.0038 (J)		0.2	<0.001	
11/19/2018			0.011	0.26	<0.001	0.0028 (J)
11/20/2018	0.0048 (J)	0.011				
3/11/2019	0.0051	0.0058	0.014		0.002 (J)	0.0024 (J)
3/12/2019				0.19		
5/28/2019			0.013			0.0012 (J)
5/29/2019		0.0021 (J)		0.18		
5/30/2019	0.0051				0.0026 (J)	
11/18/2019	<0.001	<0.001	0.015			0.0032
11/19/2019				0.16	<0.001	
5/5/2020			0.014			0.0019
5/6/2020	0.0071	<0.001				
5/7/2020				0.15	0.0037	

Time Series

Constituent: Lithium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.001				
2/23/2016		0.029	<0.001	<0.001	0.016
4/25/2016	0.013				
4/26/2016		0.019 (J)	<0.001		
4/27/2016				<0.001	<0.001
6/27/2016	0.01				
6/28/2016		0.02	<0.001	0.0089	0.0072
8/29/2016	0.013	<0.001	<0.001	0.008	
8/30/2016					0.0071
11/1/2016	0.013				
11/2/2016		0.013	<0.001	0.0078	
11/3/2016					0.0055
1/4/2017	0.012				
1/5/2017		0.0047 (J)	<0.001	0.0081	0.0049 (J)
3/10/2017	0.013				
3/11/2017		0.018	<0.001	0.007	0.0067
5/11/2017	0.0096	0.011			
5/12/2017			<0.001	0.0067	0.0048 (J)
3/20/2018	0.016				
3/21/2018		0.019	0.0023 (J)		
3/22/2018				0.011	
3/23/2018					0.0056
6/6/2018	0.011				
6/7/2018				0.0076	0.0026 (J)
6/8/2018		0.014	0.0018 (J)		
11/19/2018	0.011	0.024	0.0047 (J)	0.015	
11/20/2018					0.0013 (J)
3/11/2019	0.013			0.0075	0.0023 (J)
3/12/2019		0.017	0.002 (J)		
5/28/2019	0.011				
5/29/2019		0.012	0.002 (J)		
5/30/2019				0.0089	0.0028 (J)
11/18/2019	0.011	0.028 (I)			
11/19/2019			<0.001	<0.001	<0.001
5/5/2020	0.013				
5/6/2020		0.0085	0.0019		0.0034
5/7/2020				0.011	

Time Series

Constituent: Mercury (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0002	<0.0002			<0.0002
2/23/2016	8.9E-05 (J)			<0.0002 (*)	<0.0002	
4/25/2016						<0.0002
4/26/2016	<0.0002	<0.0002	<0.0002			
4/27/2016				<0.0002	<0.0002	
6/27/2016			<0.0002			<0.0002
6/28/2016	<0.0002	<0.0002		<0.0002	<0.0002	
8/29/2016			<0.0002	<0.0002	<0.0002	<0.0002
8/30/2016	<0.0002	<0.0002				
11/1/2016			<0.0002			<0.0002
11/2/2016				<0.0002		
11/3/2016	<0.0002	<0.0002			<0.0002	
1/4/2017			<0.0002			<0.0002
1/5/2017	<0.0002	<0.0002		<0.0002	<0.0002	
3/10/2017			<0.0002			<0.0002
3/11/2017	<0.0002	<0.0002		<0.0002	<0.0002	
5/11/2017			<0.0002			<0.0002
5/12/2017	<0.0002	<0.0002		<0.0002	<0.0002	
3/20/2018			<0.0002			
3/21/2018		<0.0002				<0.0002
3/22/2018	<0.0002			<0.0002	<0.0002	
3/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/12/2019				<0.0002		
5/5/2020			<0.0002			<0.0002
5/6/2020	<0.0002	<0.0002				
5/7/2020				<0.0002	<0.0002	

Time Series

Constituent: Mercury (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0002				
2/23/2016		<0.0002 (*)	<0.0002	<0.0002 (*)	<0.0002 (*)
4/25/2016	<0.0002				
4/26/2016		<0.0002	<0.0002		
4/27/2016				<0.0002	<0.0002
6/27/2016	7.1E-05 (J)				
6/28/2016		<0.0002	<0.0002	<0.0002	<0.0002
8/29/2016	<0.0002	<0.0002	<0.0002	<0.0002	
8/30/2016					<0.0002
11/1/2016	<0.0002				
11/2/2016		<0.0002	<0.0002	<0.0002	
11/3/2016					<0.0002
1/4/2017	<0.0002				
1/5/2017		<0.0002	<0.0002	<0.0002	<0.0002
3/10/2017	<0.0002				
3/11/2017		<0.0002	<0.0002	<0.0002	<0.0002
5/11/2017	<0.0002	<0.0002			
5/12/2017			<0.0002	<0.0002	<0.0002
3/20/2018	<0.0002				
3/21/2018		<0.0002	<0.0002		
3/22/2018				<0.0002	
3/23/2018					<0.0002
3/11/2019	<0.0002			<0.0002	<0.0002
3/12/2019		<0.0002	<0.0002		
5/5/2020	<0.0002				
5/6/2020		<0.0002	<0.0002		<0.0002
5/7/2020				<0.0002	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		0.0089 (J)	<0.003			<0.003
2/23/2016	0.0031 (J)			0.03 (J)	0.0083 (J)	
4/25/2016						<0.003
4/26/2016	<0.003	0.0098 (J)	<0.003			
4/27/2016				0.028 (J)	0.019 (J)	
6/27/2016			<0.003			<0.003
6/28/2016	0.0027 (J)	0.0098 (J)		0.0058 (J)	0.017	
8/29/2016			<0.003	0.029	0.015	0.0009 (J)
8/30/2016	0.0027 (J)	0.012 (J)				
11/1/2016			<0.003			<0.003
11/2/2016				0.0066 (J)		
11/3/2016	0.00097 (J)	0.013 (J)			0.014 (J)	
1/4/2017			<0.003			0.0011 (J)
1/5/2017	0.0041 (J)	0.017		0.0094 (J)	0.018	
3/10/2017			<0.003			<0.003 (*)
3/11/2017	<0.003 (*)	<0.003 (*)		0.028	0.016	
5/11/2017			<0.003			<0.003
5/12/2017	<0.003 (*)	0.018		<0.003 (*)	0.015	
3/20/2018			<0.003			
3/21/2018		0.017				<0.003
3/22/2018	0.0018 (J)			0.033	0.017	
6/6/2018			<0.003			<0.003
6/7/2018	0.001 (J)	0.013 (J)		0.042	0.016	
11/19/2018			<0.003	0.02	0.013 (J)	<0.003
11/20/2018	0.0028 (J)	0.0069 (J)				
3/11/2019	<0.003	0.0082 (J)	<0.003		0.017	<0.003
3/12/2019				0.017		
5/28/2019			<0.003			<0.003
5/29/2019		0.0086 (J)		0.01 (J)		
5/30/2019	<0.003				0.017	
11/18/2019	<0.003	0.022	<0.003			<0.003
11/19/2019				0.019	0.022	
5/5/2020			<0.003			<0.003
5/6/2020	<0.003	0.032				
5/7/2020				0.0085	0.094	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.003				
2/23/2016		0.0011 (J)	0.0042 (J)	<0.003	<0.003
4/25/2016	<0.003				
4/26/2016		<0.003	<0.003		
4/27/2016				<0.003	<0.003
6/27/2016	<0.003				
6/28/2016		<0.003	0.0061 (J)	<0.003	<0.003
8/29/2016	<0.003	<0.003	0.005 (J)	<0.003	
8/30/2016					<0.003
11/1/2016	<0.003				
11/2/2016		<0.003	0.0066 (J)	<0.003	
11/3/2016					<0.003
1/4/2017	<0.003				
1/5/2017		<0.003	0.0087 (J)	<0.003	0.0014 (J)
3/10/2017	<0.003				
3/11/2017		<0.003 (*)	<0.003 (*)	<0.003	<0.003
5/11/2017	<0.003	<0.003			
5/12/2017			<0.003 (*)	<0.003	<0.003
3/20/2018	<0.003				
3/21/2018		<0.003	0.0058 (J)		
3/22/2018				<0.003	
3/23/2018					0.0014 (J)
6/6/2018	<0.003				
6/7/2018				<0.003	0.0036 (J)
6/8/2018		<0.003	0.0067 (J)		
11/19/2018	<0.003	<0.003	<0.003	<0.003	
11/20/2018					<0.003
3/11/2019	<0.003			<0.003	0.0056 (J)
3/12/2019		<0.003	<0.003		
5/28/2019	<0.003				
5/29/2019		<0.003	0.0033 (J)		
5/30/2019				<0.003	0.0023 (J)
11/18/2019	<0.003	<0.003			
11/19/2019			0.0068 (I)	<0.003	<0.003
5/5/2020	<0.003				
5/6/2020		<0.003	0.012		0.006
5/7/2020				<0.003	

Time Series

Constituent: pH (SU) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		6.33 (B01)	6.19 (B01)			6.11 (B01)
2/23/2016	5.2 (B01)			7.47 (B01)	6.9 (B01)	
4/25/2016						5.65 (B02)
4/26/2016	5.24 (B02)	6.27 (B02)	5.99 (B02)			
4/27/2016				7.08 (B02)	6.62 (B02)	
6/27/2016			6.04 (B03)			5.35 (B03)
6/28/2016	5.25 (B03)	6.76 (B03)		7.15 (B03)	6.69 (B03)	
8/29/2016			6.01 (B04)	6.97 (B04)	6.65 (B04)	7.06 (B04)
8/30/2016	5.31 (B04)	6.59 (B04)				
11/1/2016			6.03 (B05)			6.65 (B05)
11/2/2016				6.96 (B05)	6.65 (B05)	
11/3/2016	5.07 (B05)	6.54 (B05)				
1/4/2017			6.1 (B06)			6.88 (B06)
1/5/2017	5.3 (B06)	6.5 (B06)		7.02 (B06)	6.7 (B06)	
3/10/2017			6.1 (B07)			6.59 (B07)
3/11/2017	5.24 (B07)	6.32 (B07)		6.97 (B07)	6.63 (B07)	
5/11/2017			5.95 (B08)			6.7 (B08)
5/12/2017	5.12 (B08)	6.61 (B08)		7.21 (B08)	6.66 (B08)	
10/12/2017			5.9			6.66
10/13/2017	5.33	6.73		6.87	6.68	
6/6/2018			6.04			6.47
6/7/2018	5.35	6.39		6.86	6.88	
11/19/2018			6.11	6.99	6.86	6.09
11/20/2018	5.18	6.35				
3/11/2019	5.24	6.24	6.15		6.92	6.03
3/12/2019				6.96		
5/28/2019			6.62			6.29
5/29/2019		6.4		6.96		
5/30/2019	5.06				6.96	
5/5/2020			6.09			5.91
5/6/2020	5.09	6.78				
5/7/2020				7.14	7.02	

Time Series

Constituent: pH (SU) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	5.09 (B01)				
2/23/2016		5.03 (B01)	6.32 (B01)	5.06 (B01)	4.85 (B01)
4/25/2016	5 (B02)				
4/26/2016		4.68 (B02)	6.36 (B02)		
4/27/2016				4.62 (B02)	5.19 (B02)
6/27/2016	4.94 (B03)				
6/28/2016		4.82 (B03)	6.09 (B03)	3.85 (B03)	5.29 (B03)
8/29/2016	5.17 (B04)	5.94 (B04)	6.27 (B04)	4.75 (B04)	
8/30/2016					5.09 (B04)
11/1/2016	4.91 (B05)				
11/2/2016		5.2 (B05)	6.09 (B05)	4.63 (B05)	
11/3/2016					5.99 (B05)
1/4/2017	4.99 (B06)				
1/5/2017		5.2 (B06)	6.18 (B06)	4.66 (B06)	5.94 (B06)
3/10/2017	5.02 (B07)				
3/11/2017		5.05 (B07)	6.34 (B07)	4.66 (B07)	5.62 (B07)
5/11/2017	4.76 (B08)	4.96 (B08)			
5/12/2017			6.09 (B08)	4.52 (B08)	5.74 (B08)
10/12/2017	4.74	5.37	6.13		
10/13/2017				4.46	4.95
6/6/2018	4.96				
6/7/2018				4.73	6.52
6/8/2018		5.25	6.31		
11/19/2018	4.95	5.26	6.15	3.26	
11/20/2018					6.52
3/11/2019	4.97			4.44	6.69
3/12/2019		5.23	6.14		
5/28/2019	4.73				
5/29/2019		5.38	6.15		
5/30/2019				4.51	6.58
5/5/2020	5.04				
5/6/2020		5.61	6.41		6.75
5/7/2020				4.66	

Time Series

Constituent: Selenium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0025	<0.0025			<0.0025
2/23/2016	<0.0025			<0.0025	<0.0025	
4/25/2016						0.00038 (J)
4/26/2016	<0.0025	<0.0025	<0.0025			
4/27/2016				<0.0025	<0.0025	
6/27/2016			<0.0025			<0.0025
6/28/2016	<0.0025 (*)	<0.0025 (*)		<0.0025	<0.0025 (*)	
8/29/2016			<0.0025	<0.0025	0.00024 (J)	<0.0025
8/30/2016	0.00025 (J)	0.00046 (J)				
11/1/2016			<0.0025			<0.0025
11/2/2016				0.00044 (J)		
11/3/2016	<0.0025	0.00058 (J)			<0.0025	
1/4/2017			<0.0025			<0.0025
1/5/2017	0.00041 (J)	0.00051 (J)		0.0009 (J)	<0.0025	
3/10/2017			<0.0025			<0.0025 (*)
3/11/2017	<0.0025	<0.0025 (*)		<0.0025	<0.0025	
5/11/2017			<0.0025			<0.0025
5/12/2017	<0.0025	<0.0025		<0.0025	<0.0025	
3/20/2018			<0.0025			
3/21/2018		0.00066 (J)				<0.0025
3/22/2018	<0.0025			<0.0025	<0.0025	
6/6/2018			<0.0025			<0.0025
6/7/2018	<0.0025	0.0006 (J)		0.00031 (J)	0.00041 (J)	
11/19/2018			<0.0025	<0.0025	<0.0025	<0.0025
11/20/2018	<0.0025	<0.0025				
3/11/2019	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
3/12/2019				<0.0025		
5/5/2020			<0.0025			<0.0025
5/6/2020	<0.0025	<0.0025				
5/7/2020				<0.0025	<0.0025	

Time Series

Constituent: Selenium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0025				
2/23/2016		<0.0025	<0.0025	<0.0025	<0.0025
4/25/2016	<0.0025				
4/26/2016		<0.0025	<0.0025		
4/27/2016				<0.0025	<0.0025
6/27/2016	<0.0025				
6/28/2016		<0.0025 (*)	<0.0025 (*)	<0.0025 (*)	<0.0025 (*)
8/29/2016	<0.0025	0.00027 (J)	0.0003 (J)	0.00064 (J)	
8/30/2016					0.00035 (J)
11/1/2016	<0.0025				
11/2/2016		<0.0025	<0.0025	<0.0025	
11/3/2016					<0.0025
1/4/2017	<0.0025				
1/5/2017		0.0012 (J)	0.00028 (J)	0.00097 (J)	0.00033 (J)
3/10/2017	<0.0025				
3/11/2017		<0.0025 (*)	<0.0025	<0.0025	<0.0025
5/11/2017	<0.0025	<0.0025			
5/12/2017			<0.0025	<0.0025	<0.0025
3/20/2018	0.00069 (J)				
3/21/2018		0.00037 (J)	0.00062 (J)		
3/22/2018				0.0003 (J)	
3/23/2018					<0.0025
6/6/2018	0.0003 (J)				
6/7/2018				0.00032 (J)	<0.0025
6/8/2018		0.00025 (J)	0.00028 (J)		
11/19/2018	<0.0025	<0.0025	<0.0025	<0.0025	
11/20/2018					<0.0025
3/11/2019	<0.0025			<0.0025	<0.0025
3/12/2019		<0.0025	<0.0025		
5/5/2020	<0.0025				
5/6/2020		<0.0025	<0.0025		<0.0025
5/7/2020				<0.0025	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		350	<5			6.3
2/23/2016	590			730	450	
4/25/2016						6.1
4/26/2016	1000	390	<5			
4/27/2016				1200	670	
6/27/2016			1.6 (J)			6.6
6/28/2016	860	330		1200	580	
8/29/2016			<5	1300	620	4.5 (J)
8/30/2016	910	350				
11/1/2016			<5			<5
11/2/2016				31		
11/3/2016	560	330			570	
1/4/2017			<5			<5 (*)
1/5/2017	900	350		1100	650	
3/10/2017			<5			2.3 (J)
3/11/2017	920	320		1300	690	
5/11/2017			<5			<5
5/12/2017	770	170 (J)		750	560	
10/12/2017			<5			<5
10/13/2017	790	220		1000	650	
3/20/2018			1.8 (J)			
3/21/2018		240				<5
3/22/2018	810			970	590	
6/6/2018			2.3 (J)			4.8 (J)
6/7/2018	830	240		840	590	
11/19/2018			2.2 (J)	810	720	4.4 (J)
11/20/2018	830	250				
3/11/2019	860	310	1.5 (J)		640	5.2
3/12/2019				880		
5/28/2019			3 (J)			4.3 (J)
5/29/2019		350		830		
5/30/2019	800				550	
11/18/2019	660	340	<5			2.8 (I)
11/19/2019				670	65 (I)	
5/5/2020			<5			4.4 (J)
5/6/2020	640	270				
5/7/2020				530	490	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<5				
2/23/2016		480	320	630	570
4/25/2016	1.4 (J)				
4/26/2016		780	570		
4/27/2016				1000	880
6/27/2016	<5				
6/28/2016		680	580	910	780
8/29/2016	<5	470 (J)	630	970	
8/30/2016					820
11/1/2016	<5				
11/2/2016		530	570	580	
11/3/2016					510
1/4/2017	<5 (*)				
1/5/2017		490	640	950	830
3/10/2017	<5				
3/11/2017		660	710	990	840
5/11/2017	<5	570			
5/12/2017			600	840	670
10/12/2017	<5	520	670		
10/13/2017				910	760
3/20/2018	<5				
3/21/2018		530	720		
3/22/2018				900	
3/23/2018					630
6/6/2018	<5				
6/7/2018				910	640
6/8/2018		560	750		
11/19/2018	7.473 (D)	520	910	960	
11/20/2018					580
3/11/2019	<5			920	560
3/12/2019		510	870		
5/28/2019	<5				
5/29/2019		460	870		
5/30/2019				940	550
11/18/2019	<5	350			
11/19/2019			650	720	1100 (I)
5/5/2020	<5				
5/6/2020		320	550		440
5/7/2020				760	

Time Series

Constituent: Thallium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		<0.0001	<0.0001			<0.0001
2/23/2016	<0.0001			<0.0001	<0.0001	
4/25/2016						<0.0001
4/26/2016	<0.0001	<0.0001	<0.0001			
4/27/2016				<0.0001	<0.0001	
6/27/2016			<0.0001			<0.0001
6/28/2016	<0.0001	<0.0001		<0.0001	<0.0001	
8/29/2016			<0.0001	<0.0001	<0.0001	<0.0001
8/30/2016	<0.0001	<0.0001				
11/1/2016			<0.0001			<0.0001
11/2/2016				<0.0001		
11/3/2016	<0.0001	<0.0001			<0.0001	
1/4/2017			<0.0001			<0.0001
1/5/2017	<0.0001	<0.0001		<0.0001	<0.0001	
3/10/2017			<0.0001			<0.0001
3/11/2017	<0.0001	<0.0001		<0.0001	<0.0001	
5/11/2017			<0.0001			<0.0001
5/12/2017	<0.0001	<0.0001		<0.0001	<0.0001	
3/20/2018			<0.0001			
3/21/2018		<0.0001				<0.0001
3/22/2018	<0.0001			<0.0001	<0.0001	
3/11/2019	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001
3/12/2019				<0.0001		
5/5/2020			<0.0001			<0.0001
5/6/2020	<0.0001	<0.0001				
5/7/2020				<0.0001	<0.0001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	<0.0001				
2/23/2016		<0.0001	<0.0001	<0.0001	<0.0001
4/25/2016	<0.0001				
4/26/2016		<0.0001	<0.0001		
4/27/2016				<0.0001	<0.0001
6/27/2016	<0.0001				
6/28/2016		<0.0001	<0.0001	<0.0001	<0.0001
8/29/2016	<0.0001	<0.0001	<0.0001	<0.0001	
8/30/2016					<0.0001
11/1/2016	<0.0001				
11/2/2016		<0.0001	<0.0001	<0.0001	
11/3/2016					<0.0001
1/4/2017	<0.0001				
1/5/2017		<0.0001	<0.0001	<0.0001	<0.0001
3/10/2017	<0.0001				
3/11/2017		<0.0001	<0.0001	<0.0001	<0.0001
5/11/2017	<0.0001	<0.0001			
5/12/2017			<0.0001	<0.0001	<0.0001
3/20/2018	<0.0001				
3/21/2018		<0.0001	<0.0001		
3/22/2018				<0.0001	
3/23/2018					<0.0001
3/11/2019	<0.0001			<0.0001	<0.0001
3/12/2019		<0.0001	<0.0001		
5/5/2020	<0.0001				
5/6/2020		<0.0001	<0.0001		<0.0001
5/7/2020				<0.0001	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-10	MW-11	MW-12 (bg)	MW-13	MW-14	MW-2 (bg)
2/22/2016		5200	410			74
2/23/2016	7100			9200	4900	
5/11/2016	6600	5700	410	11000		200
5/12/2016					5100	
6/27/2016			4200 (o)			42
6/28/2016	6900	5100		5400	5400	
8/29/2016			490	11000	4800	200
8/30/2016	6800	4600				
11/1/2016			540			220
11/2/2016				11000		
11/3/2016	6900	4400			5500	
1/4/2017			520			140
1/5/2017	5900	3800		11000	4700	
3/10/2017			490			160
3/11/2017	5700	4400		8900	5000	
5/11/2017			490			190
5/12/2017	6200	3600		9600	5600	
10/12/2017			470			150
10/13/2017	6400	3000		9600	5000	
3/20/2018			510			
3/21/2018		3600				150
3/22/2018	6800			11000	4800	
6/6/2018			460			160
6/7/2018	5800	3400		8200	4200	
11/19/2018			490	8600	4900	88 (D)
11/20/2018	6000	4100				
3/11/2019	6400	6000	440		45500 (oD)	72
3/12/2019				9600		
5/28/2019			540			140
5/29/2019		5600		9200		
5/30/2019	5900				4300	
11/18/2019	6300	6900	560			170
11/19/2019				8500	4200	
5/5/2020			430			54
5/6/2020	5400	5200				
5/7/2020				9100	4400	

Time Series

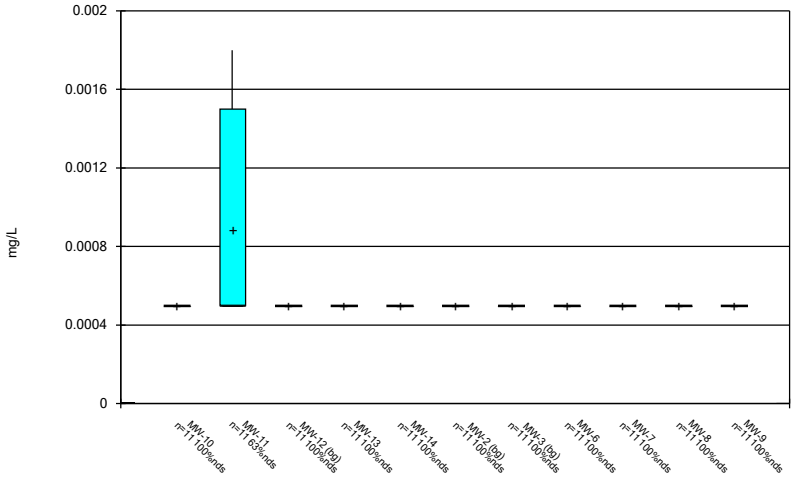
Constituent: Total Dissolved Solids (mg/L) Analysis Run 8/3/2020 1:24 PM View: Descriptive

Plant Smith Client: Gulf Power Data: Plant Smith CCR

	MW-3 (bg)	MW-6	MW-7	MW-8	MW-9
2/22/2016	46				
2/23/2016		7600	3700	7800	5800
5/11/2016	42	7500	3700		
5/12/2016				8100	6100
6/27/2016	24				
6/28/2016		7600	3700	6900	5900
8/29/2016	42	5100	3300	7900	
8/30/2016					6400
11/1/2016	64				
11/2/2016		6500	3800	7400	
11/3/2016					5000
1/4/2017	44				
1/5/2017		5500	3500	7200	4900
3/10/2017	16				
3/11/2017		7000	3500	7200	5400
5/11/2017	42	6000			
5/12/2017			3300	6400	5200
10/12/2017	30	5500	3000		
10/13/2017				6400	5100
3/20/2018	12				
3/21/2018		5400	3400		
3/22/2018				8100	
3/23/2018					1700
6/6/2018	46				
6/7/2018				6000	4000
6/8/2018		6100	3200		
11/19/2018	22	5500	6500	7300	
11/20/2018					4400
3/11/2019	12			7300	5200
3/12/2019		5400	6800		
5/28/2019	110				
5/29/2019		5800	8600		
5/30/2019				7700	4600
11/18/2019	52	6000			
11/19/2019			8200	9800	5300
5/5/2020	34				
5/6/2020		5000	6100		5000
5/7/2020				8100	

Box Plots

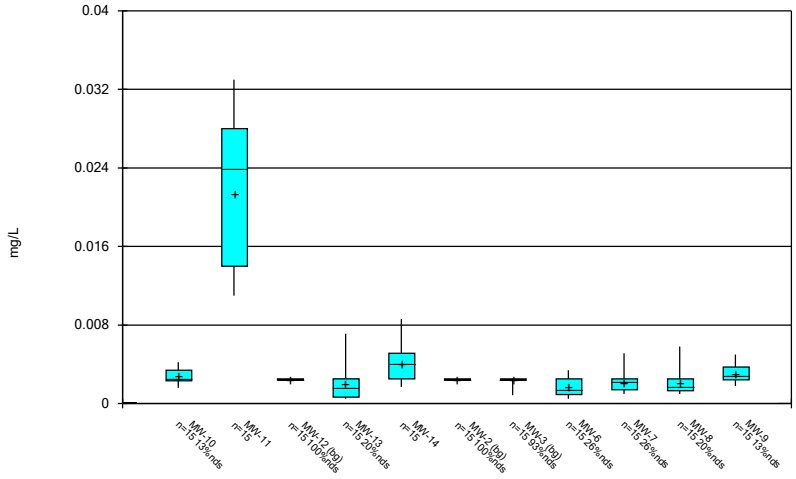
Box & Whiskers Plot



Constituent: Antimony Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

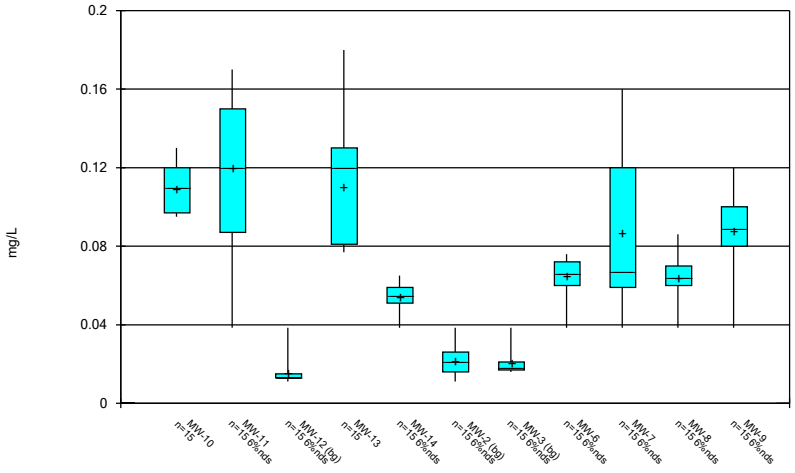
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

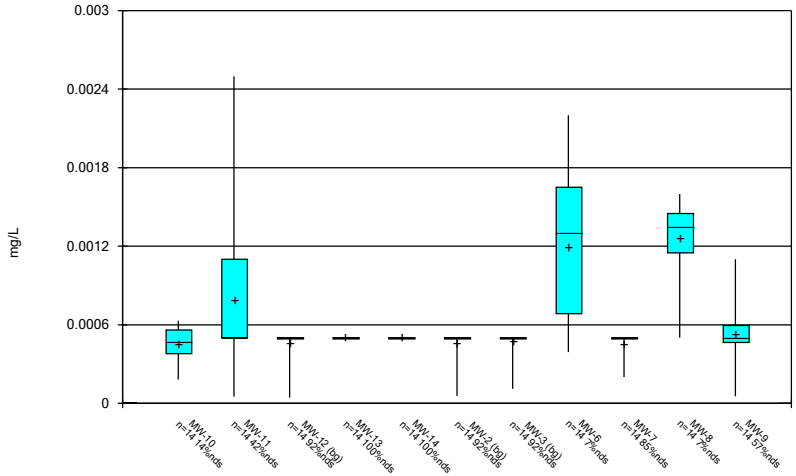
Box & Whiskers Plot



Constituent: Barium Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

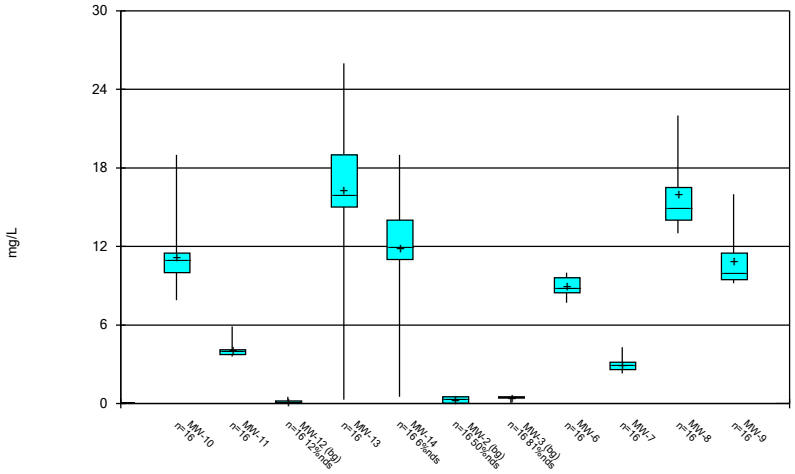
Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

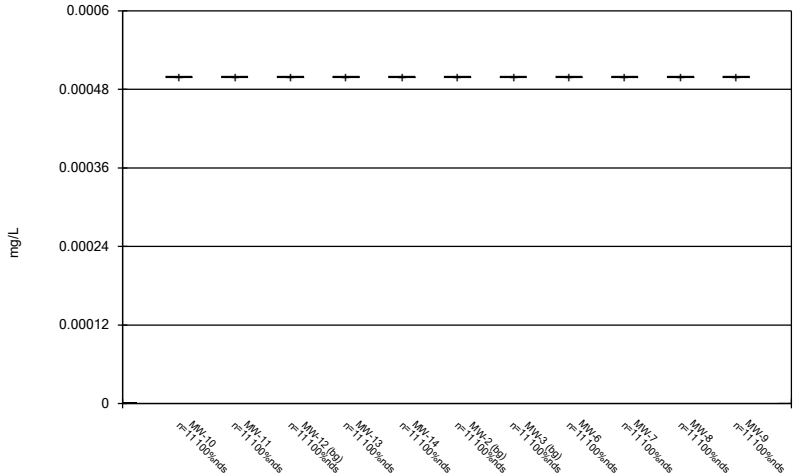
Box & Whiskers Plot



Constituent: Boron Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

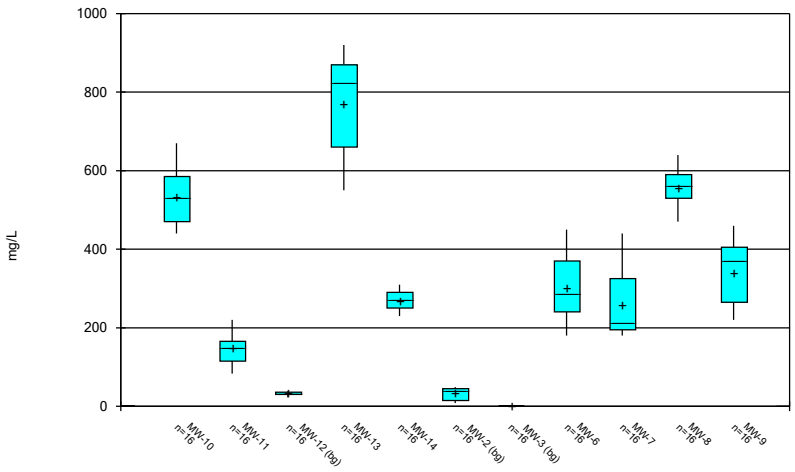
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

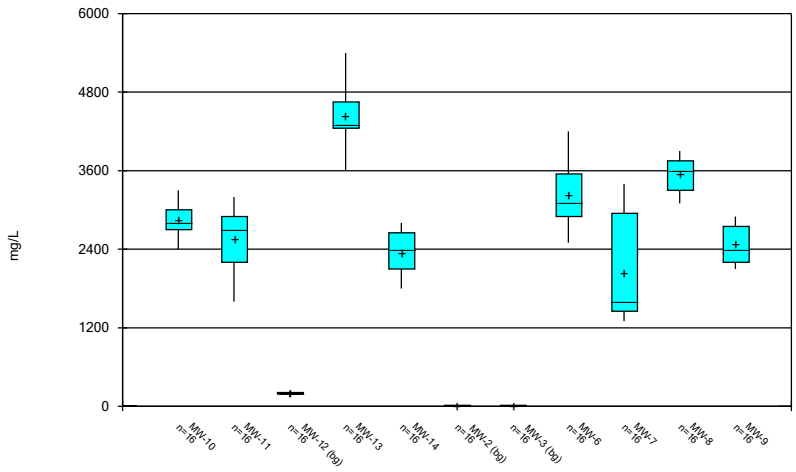
Box & Whiskers Plot



Constituent: Calcium Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

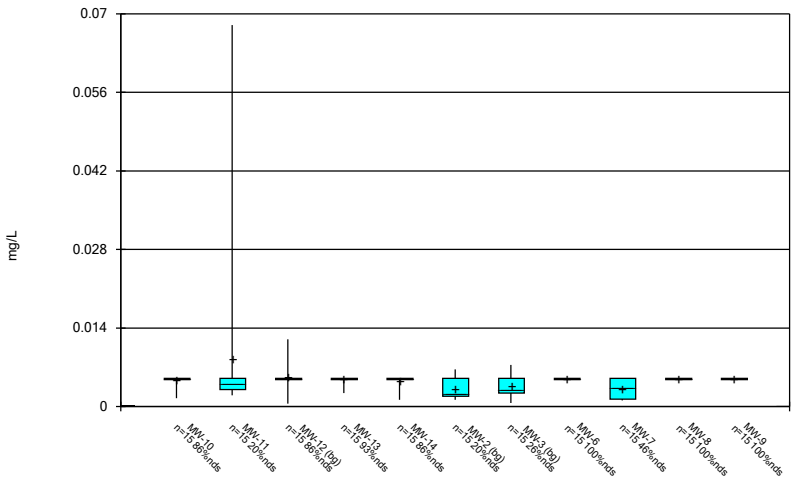
Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

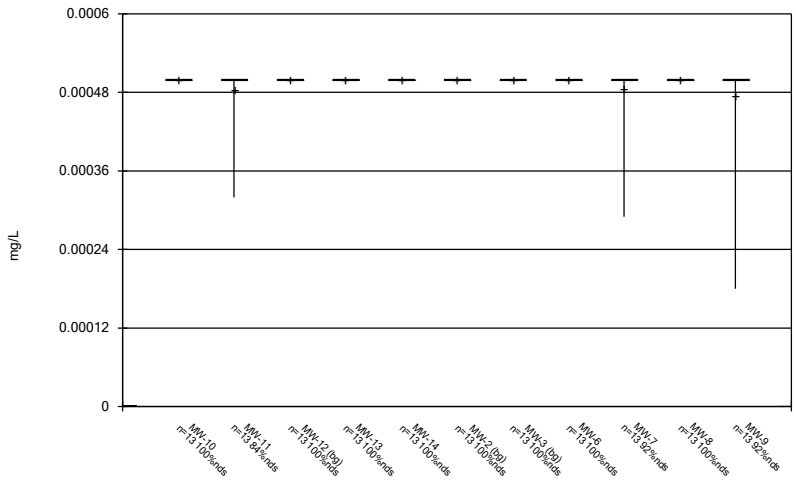
Box & Whiskers Plot



Constituent: Chromium Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

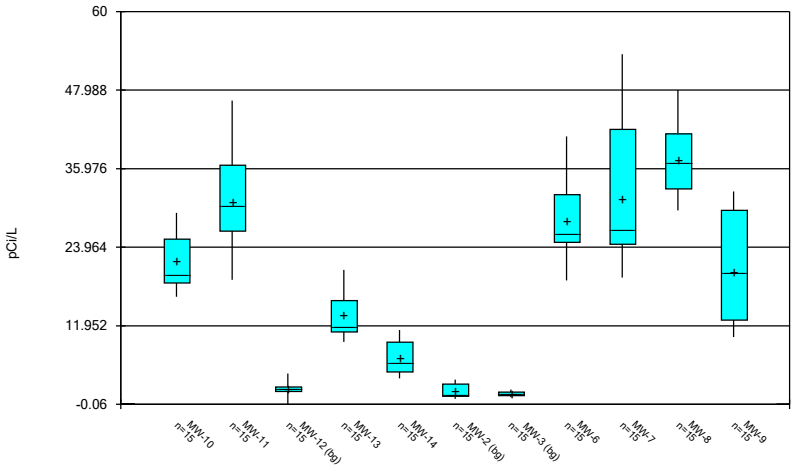
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

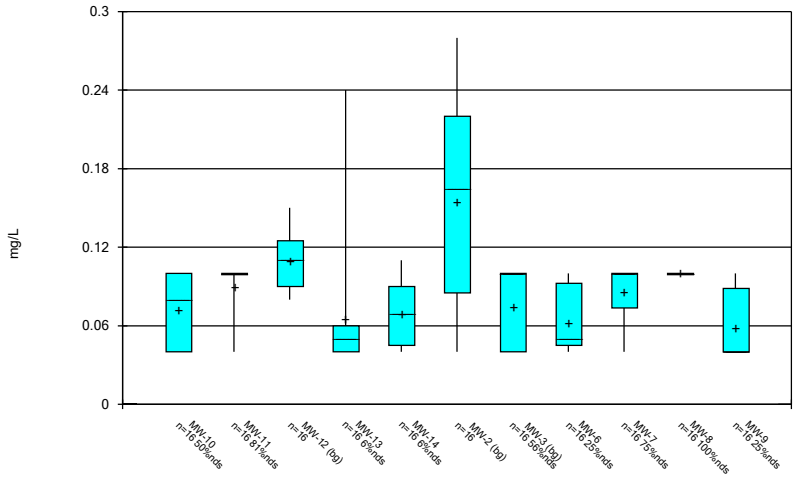
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

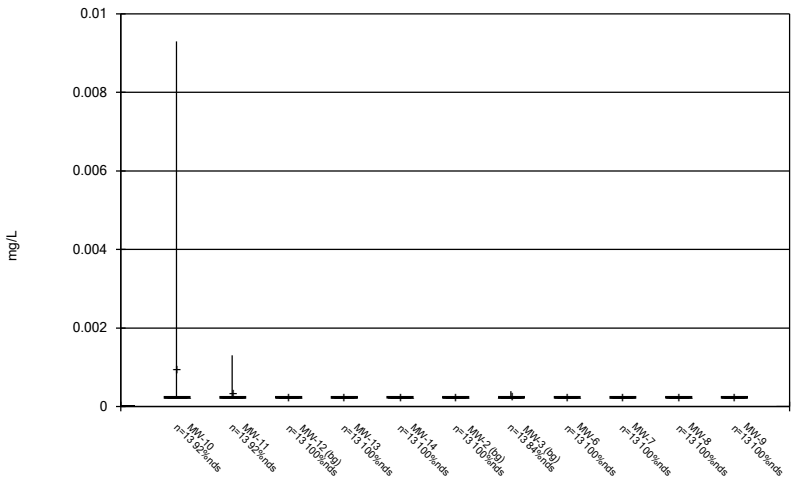
Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

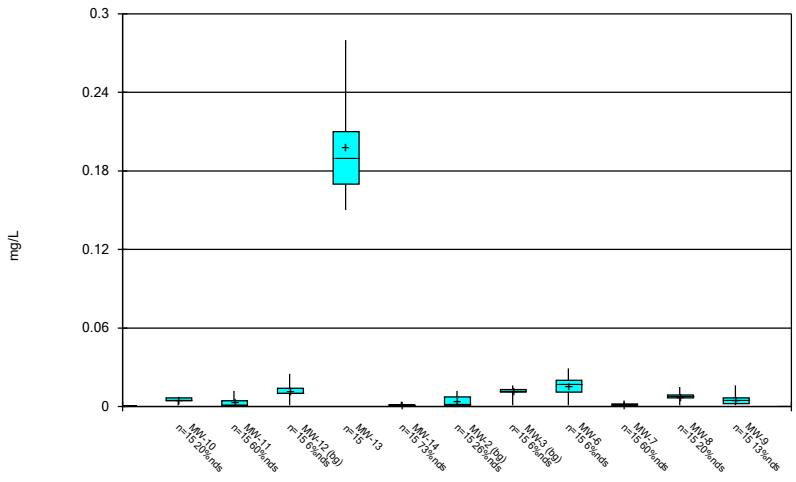
Box & Whiskers Plot



Constituent: Lead Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

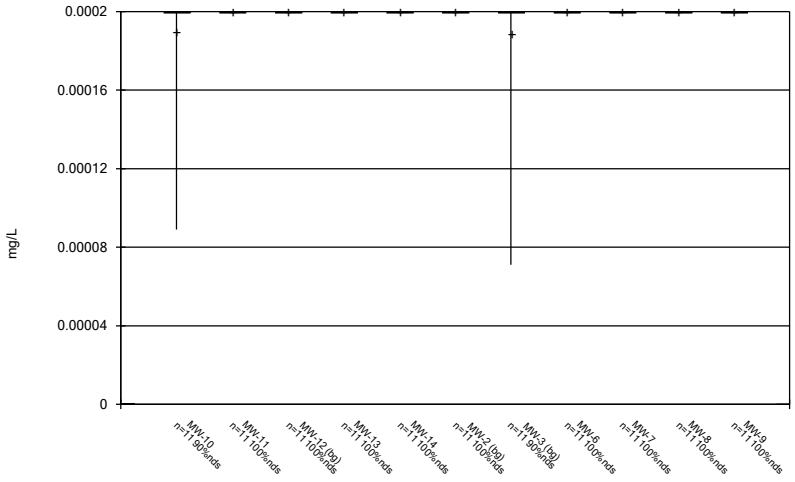
Box & Whiskers Plot



Constituent: Lithium Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

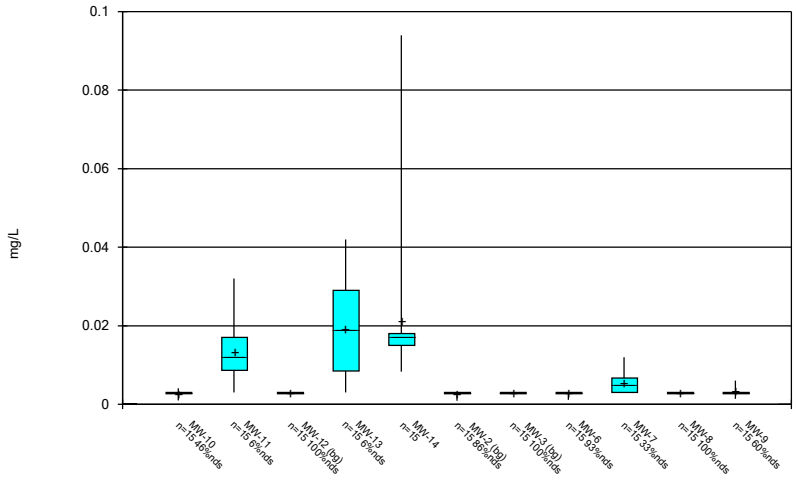
Box & Whiskers Plot



Constituent: Mercury Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

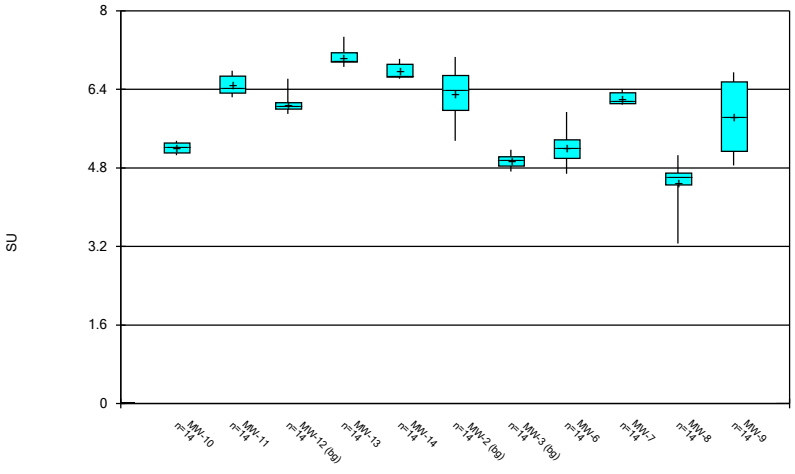
Sanitas™ v.9.6.26f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



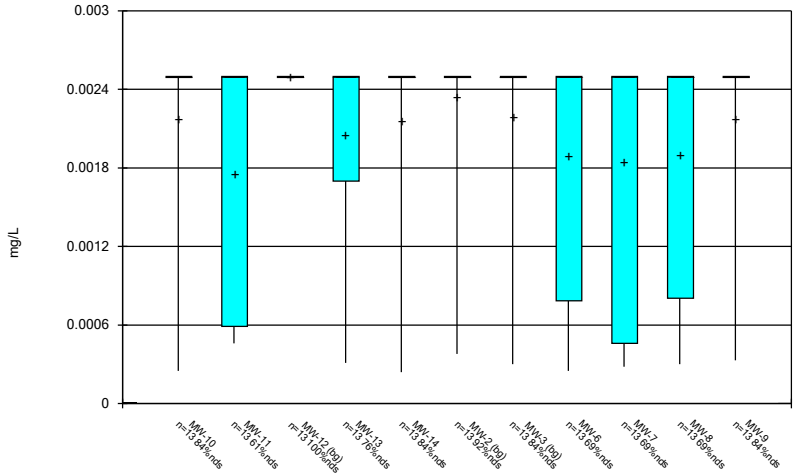
Constituent: Molybdenum Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Box & Whiskers Plot



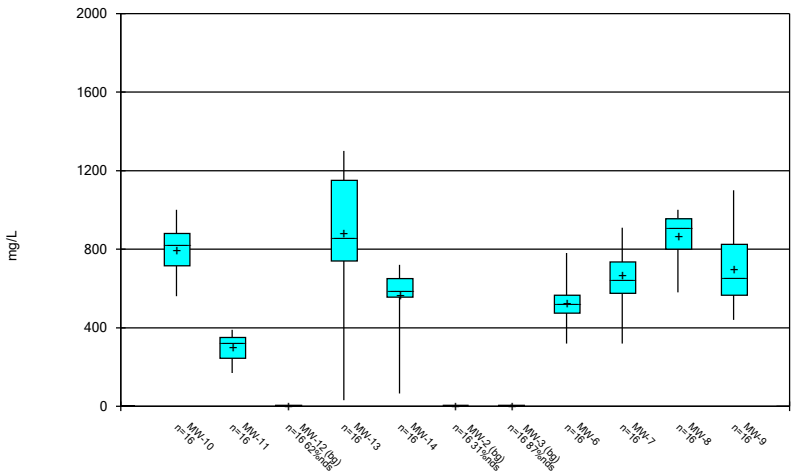
Constituent: pH Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Box & Whiskers Plot



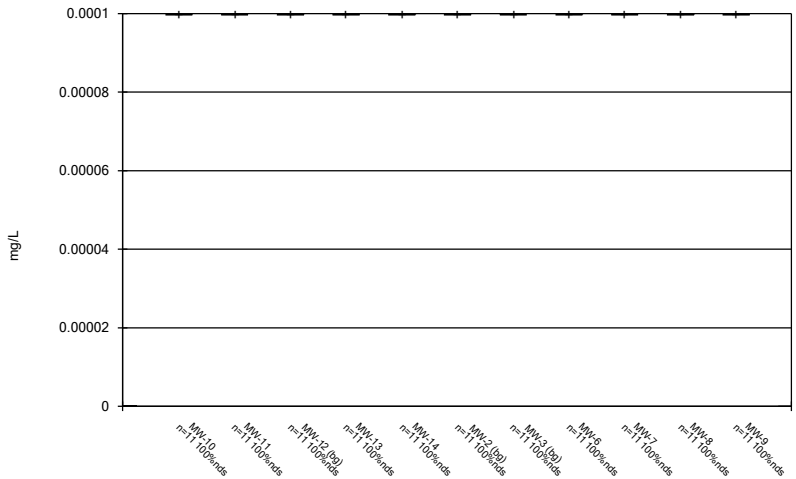
Constituent: Selenium Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Box & Whiskers Plot



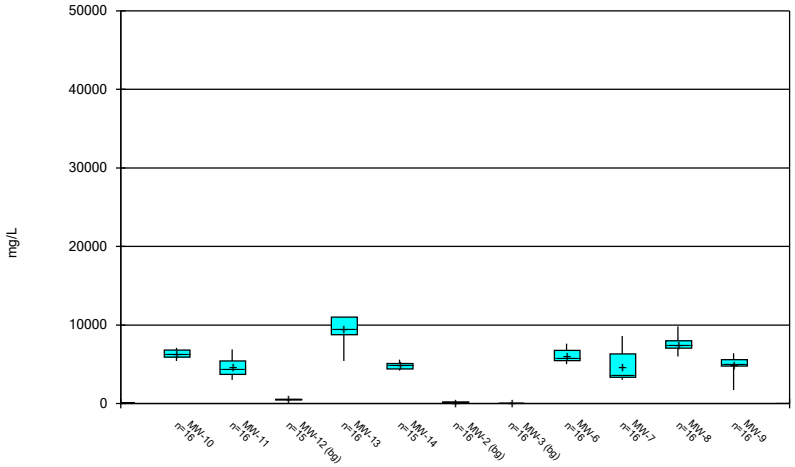
Constituent: Sulfate Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Thallium Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 8/3/2020 1:25 PM View: Descriptive
Plant Smith Client: Gulf Power Data: Plant Smith CCR

APPENDIX D

Statistical Analyses – September 2020
Semi-Annual Monitoring

September 2020

GROUNDWATER STATISTICAL ANALYSIS

FOR GULF POWER'S

PLANT SMITH

Prepared by:

Groundwater Stats Consulting LLC

TABLE OF CONTENTS

GROUNDWATER STATS CONSULTING

December 14, 2020

Geosyntec Consultants
Attn: Mr. Benjamin K. Amos, Ph.D., P.E.
1255 Roberts Boulevard, Suite 200
Kennesaw, GA 30144

Re: Plant Smith – September 2020 Statistical Analysis

Dear Mr. Amos,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of the groundwater data for the September 2020 sample event at Gulf Power Company's Plant Smith. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

Sampling began at Plant Smith for the CCR program in 2016 at each of the groundwater monitoring wells. The current monitoring well network, as provided by Geosyntec Consultants, consists of the following:

- **Upgradient wells:** MW-2, MW-3, MW-12
- **Downgradient wells:** MW-6 and MW-7

Data were provided electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

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

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

- **Appendix IV** (Assessment Monitoring) **–** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Time series and box plots are provided for the above Appendix III and IV constituents at all wells. The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. While all Appendix IV constituents are plotted on the time series graphs and box plots, confidence intervals are provided only for downgradient well/constituent pairs which have concentrations greater than the reporting limit. A summary of well/constituent pairs with 100% nondetects follows this letter.

Proposed background data at all wells were initially evaluated, and reports submitted, during the October 2017 screening for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended.

Summary of Statistical Methods – Detection Monitoring Appendix III Constituents:

Based on the earlier evaluation described above, the following methods were selected:

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

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% for each semi-annual sample event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).

- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In the intrawell case, data for all wells and constituents may re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, earlier data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the deselected data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. A summary of the findings of the original background screening conducted in October 2017 as well as the background update conducted in October 2019 is provided below.

Historical Summary Background Screening – October 2017

Outlier and Trend Testing

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits. The results of those findings were submitted with the October 2017 report.

No suspected outliers were observed in any of the data sets, with the exception of TDS in upgradient well MW-12. Tukey's box plot method was used to screen this and resulted in a value of 4200 mg/L being flagged. Any values identified as outliers are plotted in a

lighter font on the time series graph. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

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

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

The results of the trend analyses were provided with the 2017 screening report. No statistically significant increasing or decreasing trends were identified for any of the wells in the current monitoring well network; therefore, no adjustments were necessary for any of the records.

Appendix III – Determination of Spatial Variation

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

The ANOVA identified variation among upgradient wells at Plant Smith for the following Appendix III parameters: boron, calcium, chloride, pH, and TDS, suggesting consideration of intrawell methods for these parameters. These constituents were further evaluated as described below for the appropriateness of intrawell testing to accommodate the groundwater quality. No statistically significant variation was noted for fluoride or sulfate, making these parameters eligible for interwell methods. A summary table of the ANOVA results was included with the screening report.

Appendix III – Intrawell Method Eligibility Screening

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

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

Either parametric or nonparametric tolerance limits are calculated based on the data characteristics that are described below for prediction limits. Parametric tolerance limits (for normal or transformed-normally distributed data) were constructed with a target of 99% confidence and 95% coverage using pooled upgradient well data for each of the Appendix III parameters recommended for intrawell analyses. For non-normal data, nonparametric tolerance limits are used. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As more data are collected, the background population is better represented, and the confidence and coverage levels increase.

Confidence intervals were constructed on downgradient wells for each of the Appendix III parameters exhibiting spatial variation, using the tolerance limits discussed above, to determine intrawell eligibility. Either parametric or nonparametric confidence intervals

were constructed as appropriate. When the entire confidence interval is above the background limit for a given parameter, interwell methods are initially recommended as the statistical method. Note that this screening identifies whether confidence intervals are above a background limit but does not identify the reason for this occurrence. Therefore, only the wells/parameters with confidence intervals which did not exceed background limits are eligible for intrawell prediction limits.

Confidence intervals for the above Appendix III parameters were found to be within their respective background limit for pH in all downgradient wells. The confidence intervals for boron, calcium, chloride, and TDS were above the background standard which precludes using intrawell methods without further evaluation. The results of the upper tolerance limits calculations and confidence interval comparisons were presented in the background screening report.

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

Summary of Appendix III Background Update – Conducted in October 2019

Historical data were evaluated for updating with newer data through March 2019 through the use of time series graphs to identify potential outliers when necessary, as well as with the Mann Whitney test for equality of medians. Intrawell prediction limits are used to evaluate pH due to natural spatial variation for this parameter.

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend, as well as for outliers over the entire record.

Interwell prediction limits are used to evaluate boron, calcium, chloride, fluoride, sulfate, and TDS.

Prior to constructing prediction limits, proposed background data through May 2019 were reviewed to identify any newly suspected outliers at all wells for pH for intrawell testing and all Appendix IV parameters, and at upgradient wells for boron, calcium, chloride, fluoride, sulfate, and TDS for interwell testing. Visual screening is used to identify potential outliers using time series graphs. When necessary, Tukey's outlier test is used to formally test suspected outliers. No new outliers were identified for pH in any of the wells or for all other Appendix III parameters in upgradient wells. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of flagged values follows this letter.

For pH, which required intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through October 2017 to newer compliance samples through March 2019 at each of the wells to evaluate whether the groups are statistically similar at the 99% confidence level. If no statistically significant difference is found, background data may be updated with compliance data. No statistically significant differences were found between the two groups for pH; therefore, all background data sets were updated.

When the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data but will be reconsidered in the future.

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant trends are identified in upgradient wells, the earlier portion of data is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. No statistically significant increasing trends were noted in upgradient wells with the exception of fluoride in MW-12; however, the magnitude of the trend was moderate relative to average concentrations, and truncation of the background would not affect the nonparametric prediction limit. Therefore, no adjustment of the record was required.

Evaluation of Appendix III Parameters – September 2020 Sample Event

Prediction Limits

All available historical data through March 2019 for pH at each well is used to construct intrawell prediction limits based on a 1-of-2 resample plan, and the September 2020 sample from the same well is compared to its respective background. Interwell prediction limits, combined with a 1-of-2 resample plan, are constructed using all available data from upgradient wells through September 2020 for boron, calcium, chloride, fluoride, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of an additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary.

For intrawell prediction limits, an exceedance was noted for pH in downgradient well MW-7. For interwell prediction limits, exceedances were noted for boron, calcium, chloride, sulfate, and TDS in both downgradient wells. Summaries of both intrawell and interwell prediction limits and exceedances, along with complete results may be found following this letter in the Prediction Limits section.

The Sen's Slope/Mann Kendall trend test was used to determine whether a statistically significant trend exists over the entire period of record for both the intrawell and interwell exceedances noted above. Upgradient wells are included in the trend testing to determine whether similar patterns exist upgradient of the facility. Upgradient trends are an indication of natural variability in groundwater unrelated to practices at the site. Statistically significant increasing trends were noted for boron in well MW-7 and for chloride in upgradient well MW-3. Statistically significant decreasing trends were noted for the following: calcium, chloride, and sulfate in downgradient well MW-6. Summaries of the trend tests follow this report.

Evaluation of Appendix IV Parameters – September 2020 Sample Event

Either parametric or nonparametric tolerance limits, depending on the distribution of the background data, were used to calculate background limits from pooled upgradient well

data through September 2020 for Appendix IV parameters, with a target of 95% confidence and 95% coverage for parametric limits, to determine the background limits. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. These limits were compared to the Maximum Contaminant Levels (MCLs) and CCR rule-specified levels to determine the highest limit for use as the Groundwater Protection Standard (GWPS) in the Confidence Interval comparisons.

Confidence intervals were then constructed on downgradient wells for each of well/constituent pair with detections above the reporting limit for the Appendix IV constituents using the highest limit of the MCL, rule-specified level, or background as discussed above. A list of Appendix IV well/constituent pairs with 100% nondetects follows this letter. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified Exceedances were noted for combined radium 226 + 228 in both downgradient wells. No other confidence interval exceedances were identified.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Smith. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew T. Collins
Project Manager

Kristina L. Rayner
Groundwater Statistician

Outlier Summary

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 12:11 PM

	MW-12 Total Dissolved Solids (mg/L)
6/27/2016	4200 (o)

100% Non-Detects

Analysis Run 12/14/2020 11:43 AM View: 100% Nondetects
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Antimony (mg/L)
MW-12, MW-2, MW-3, MW-6, MW-7

Arsenic (mg/L)
MW-12, MW-2

Cadmium (mg/L)
MW-12, MW-2, MW-3, MW-6, MW-7

Chromium (mg/L)
MW-6

Cobalt (mg/L)
MW-12, MW-2, MW-3, MW-6

Lead (mg/L)
MW-12, MW-2, MW-6, MW-7

Mercury (mg/L)
MW-12, MW-2, MW-6, MW-7

Molybdenum (mg/L)
MW-12, MW-3

Selenium (mg/L)
MW-12

Thallium (mg/L)
MW-12, MW-2, MW-3, MW-6, MW-7

Interwell Prediction Limit - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:36 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-6**	**0.33**	**n/a**	**9/30/2020**	**8.2**	**Yes**	**51**	**n/a**	**n/a**	**47.06**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**9/30/2020**	**3.1**	**Yes**	**51**	**n/a**	**n/a**	**47.06**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**9/30/2020**	**220**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**9/30/2020**	**270**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**9/30/2020**	**2400**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**9/30/2020**	**1900**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Sulfate (mg/L)	**MW-6**	**7.473**	**n/a**	**9/30/2020**	**430**	**Yes**	**51**	**n/a**	**n/a**	**58.82**	**n/a**	**n/a**	**0.000728**	NP (NDs) 1 of 2
Sulfate (mg/L)	**MW-7**	**7.473**	**n/a**	**9/30/2020**	**630**	**Yes**	**51**	**n/a**	**n/a**	**58.82**	**n/a**	**n/a**	**0.000728**	NP (NDs) 1 of 2
Total Dissolved Solids (mg/L)	**MW-6**	**824.7**	**n/a**	**9/30/2020**	**5600**	**Yes**	**50**	**4.798**	**1.186**	**0**	**None**	**ln(x)**	**0.003756**	Param 1 of 2
Total Dissolved Solids (mg/L)	**MW-7**	**824.7**	**n/a**	**9/30/2020**	**4300**	**Yes**	**50**	**4.798**	**1.186**	**0**	**None**	**ln(x)**	**0.003756**	Param 1 of 2

Interwell Prediction Limit - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:36 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-6**	**0.33**	**n/a**	**9/30/2020**	**8.2**	**Yes**	**51**	**n/a**	**n/a**	**47.06**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**9/30/2020**	**3.1**	**Yes**	**51**	**n/a**	**n/a**	**47.06**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**9/30/2020**	**220**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**9/30/2020**	**270**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**9/30/2020**	**2400**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**9/30/2020**	**1900**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Fluoride (mg/L)	MW-6	0.1772	n/a	9/30/2020	0.1ND	No	51	0.267	0.09538	19.61	Kaplan-Meier	sqrt(x)	0.003756	Param 1 of 2
Fluoride (mg/L)	MW-7	0.1772	n/a	9/30/2020	0.1ND	No	51	0.267	0.09538	19.61	Kaplan-Meier	sqrt(x)	0.003756	Param 1 of 2
Sulfate (mg/L)	**MW-6**	**7.473**	**n/a**	**9/30/2020**	**430**	**Yes**	**51**	**n/a**	**n/a**	**58.82**	**n/a**	**n/a**	**0.000728**	NP (NDs) 1 of 2
Sulfate (mg/L)	**MW-7**	**7.473**	**n/a**	**9/30/2020**	**630**	**Yes**	**51**	**n/a**	**n/a**	**58.82**	**n/a**	**n/a**	**0.000728**	NP (NDs) 1 of 2
Total Dissolved Solids (mg/L)	**MW-6**	**824.7**	**n/a**	**9/30/2020**	**5600**	**Yes**	**50**	**4.798**	**1.186**	**0**	**None**	**ln(x)**	**0.003756**	Param 1 of 2
Total Dissolved Solids (mg/L)	**MW-7**	**824.7**	**n/a**	**9/30/2020**	**4300**	**Yes**	**50**	**4.798**	**1.186**	**0**	**None**	**ln(x)**	**0.003756**	Param 1 of 2

Intrawell Prediction Limit - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	**MW-7**	**6.413**	**5.999**	**9/30/2020**	**6.43**	**Yes**	**12**	**6.206**	**0.1061**	**0**	**None**	**No**	**0.001878**	**Param Intra 1 of 2**

Intrawell Prediction Limit - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-12	6.214	5.888	9/29/2020	6.08	No	12	6.051	0.08339	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-2	7.353	5.354	9/29/2020	5.73	No	12	6.353	0.512	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-3	5.193	4.724	9/29/2020	4.91	No	12	4.958	0.1201	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-6	5.781	4.55	9/30/2020	5.57	No	12	5.166	0.3153	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	**MW-7**	**6.413**	**5.999**	**9/30/2020**	**6.43**	**Yes**	**12**	**6.206**	**0.1061**	**0**	**None**	**No**	**0.001878**	**Param Intra 1 of 2**

Trend Test Summary - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 12:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-7**	**0.2635**	**99**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-46.65**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.9777**	**86**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-275.3**	**-87**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-6**	**-48.52**	**-64**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 12:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-12 (bg)	-0.007419	-25	-63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0	-7	-63	No	17	47.06	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	-27	-63	No	17	82.35	n/a	n/a	0.01	NP
Boron (mg/L)	MW-6	-0.09417	-15	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-7**	**0.2635**	**99**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-12 (bg)	1.158	36	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-2.776	-26	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	0.07141	60	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-6**	**-46.65**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	24.26	54	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	3.506	27	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.5395	-23	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.9777**	**86**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-275.3**	**-87**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	193.1	40	63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	MW-12 (bg)	0.01726	21	53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	MW-2 (bg)	-0.1928	-27	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	MW-3 (bg)	-0.02157	-30	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	MW-7	0.01849	15	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-23	-63	No	17	58.82	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.3006	-58	-63	No	17	29.41	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	63	No	17	88.24	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-6**	**-48.52**	**-64**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-7	74.77	57	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	14.99	26	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-20.53	-42	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	-1.619	-11	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-6	-359.2	-54	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-7	300.3	31	63	No	17	0	n/a	n/a	0.01	NP

Tolerance Limit Summary Table

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:47 AM

Constituent	Well	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0025	33	n/a	n/a	100	n/a	n/a	0.184	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0013	42	n/a	n/a	97.62	n/a	n/a	0.116	NP Inter(NDs)
Barium (mg/L)	n/a	0.02885	42	0.01731	0.005462	7.143	None	No	0.05	Inter
Beryllium (mg/L)	n/a	0.0025	42	n/a	n/a	92.86	n/a	n/a	0.116	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	33	n/a	n/a	100	n/a	n/a	0.184	NP Inter(NDs)
Chromium (mg/L)	n/a	0.012	42	n/a	n/a	47.62	n/a	n/a	0.116	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0025	39	n/a	n/a	100	n/a	n/a	0.1353	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	3.716	42	2.007	0.8088	0	None	No	0.05	Inter
Fluoride (mg/L)	n/a	0.2318	45	0.2762	0.09809	22.22	Kaplan-Meier	sqrt(x)	0.05	Inter
Lead (mg/L)	n/a	0.0013	36	n/a	n/a	94.44	n/a	n/a	0.1578	NP Inter(NDs)
Lithium (mg/L)	n/a	0.01814	42	0.007716	0.004933	16.67	Kaplan-Meier	No	0.05	Inter
Mercury (mg/L)	n/a	0.0002	33	n/a	n/a	96.97	n/a	n/a	0.184	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	42	n/a	n/a	95.24	n/a	n/a	0.116	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0013	39	n/a	n/a	92.31	n/a	n/a	0.1353	NP Inter(NDs)
Thallium (mg/L)	n/a	0.0005	33	n/a	n/a	100	n/a	n/a	0.184	NP Inter(NDs)

PLANT SMITH GWPS				
Constituent Name	**MCL**	**CCR Rule Specified**	**Background**	**GWPS**
Antimony, Total (mg/L)	0.006		0.0025	0.006
Arsenic, Total (mg/L)	0.01		0.0013	0.01
Barium, Total (mg/L)	2		0.029	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.012	0.1
Cobalt, Total (mg/L)		0.006	0.0025	0.006
Combined Radium, Total (pCi/L)	5		3.72	5
Fluoride, Total (mg/L)	4		0.23	4
Lead, Total (mg/L)	0.015		0.0013	0.015
Lithium, Total (mg/L)		0.04	0.018	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.015	0.1
Selenium, Total (mg/L)	0.05		0.0013	0.05
Thallium, Total (mg/L)	0.002		0.0005	0.002

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Confidence Interval Summary Table - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**31.32**	**24.04**	**5**	**Yes**	**16**	**27.83**	**5.811**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**36.42**	**24.15**	**5**	**Yes**	**16**	**31.16**	**10.74**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

Confidence Interval Summary Table - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-6	0.001689	0.0007526	0.01	No	16	0.001658	0.0009427	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	MW-7	0.002083	0.001085	0.01	No	16	0.002037	0.0009892	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Barium (mg/L)	MW-6	0.07055	0.05988	2	No	16	0.06406	0.0112	6.25	None	x^3	0.01	Param.
Barium (mg/L)	MW-7	0.1084	0.05931	2	No	16	0.08606	0.03937	6.25	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MW-6	0.001706	0.0009142	0.004	No	15	0.00131	0.000584	6.667	None	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	15	0.002195	0.0008058	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0013	0.1	No	16	0.003275	0.001719	43.75	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-7	0.0025	0.00029	0.006	No	14	0.002342	0.0005906	92.86	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**31.32**	**24.04**	**5**	**Yes**	**16**	**27.83**	**5.811**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**36.42**	**24.15**	**5**	**Yes**	**16**	**31.16**	**10.74**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	17	0.06441	0.02573	29.41	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.047	4	No	17	0.08629	0.02551	76.47	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.02054	0.01098	0.04	No	16	0.01576	0.007349	6.25	None	No	0.01	Param.
Lithium (mg/L)	MW-7	0.005	0.002	0.04	No	16	0.004044	0.001428	62.5	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-6	0.015	0.0011	0.1	No	16	0.01413	0.003475	93.75	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.015	0.005	0.1	No	16	0.009144	0.004496	31.25	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-6	0.0013	0.00037	0.05	No	14	0.001078	0.0004249	71.43	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-7	0.0013	0.0003	0.05	No	14	0.001034	0.0004433	71.43	None	No	0.01	NP (normality)

Prediction Limits - Interwell

Interwell Prediction Limit - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:36 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-6**	**0.33**	**n/a**	**9/30/2020**	**8.2**	**Yes**	**51**	**n/a**	**n/a**	**47.06**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**9/30/2020**	**3.1**	**Yes**	**51**	**n/a**	**n/a**	**47.06**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**9/30/2020**	**220**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**9/30/2020**	**270**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**9/30/2020**	**2400**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**9/30/2020**	**1900**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Sulfate (mg/L)	**MW-6**	**7.473**	**n/a**	**9/30/2020**	**430**	**Yes**	**51**	**n/a**	**n/a**	**58.82**	**n/a**	**n/a**	**0.000728**	NP (NDs) 1 of 2
Sulfate (mg/L)	**MW-7**	**7.473**	**n/a**	**9/30/2020**	**630**	**Yes**	**51**	**n/a**	**n/a**	**58.82**	**n/a**	**n/a**	**0.000728**	NP (NDs) 1 of 2
Total Dissolved Solids (mg/L)	**MW-6**	**824.7**	**n/a**	**9/30/2020**	**5600**	**Yes**	**50**	**4.798**	**1.186**	**0**	**None**	**ln(x)**	**0.003756**	Param 1 of 2
Total Dissolved Solids (mg/L)	**MW-7**	**824.7**	**n/a**	**9/30/2020**	**4300**	**Yes**	**50**	**4.798**	**1.186**	**0**	**None**	**ln(x)**	**0.003756**	Param 1 of 2

Interwell Prediction Limit - All Results

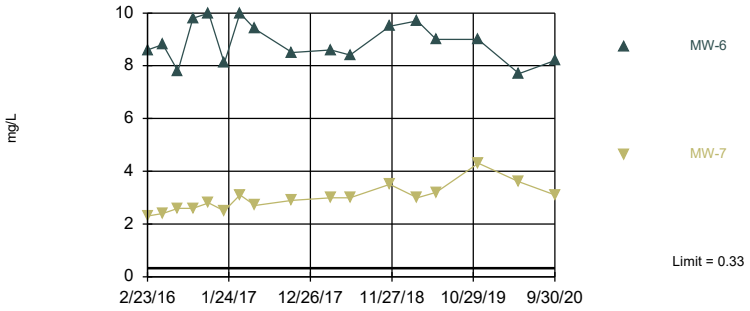
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:36 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-6**	**0.33**	**n/a**	**9/30/2020**	**8.2**	**Yes**	**51**	**n/a**	**n/a**	**47.06**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**9/30/2020**	**3.1**	**Yes**	**51**	**n/a**	**n/a**	**47.06**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**9/30/2020**	**220**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**9/30/2020**	**270**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**9/30/2020**	**2400**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**9/30/2020**	**1900**	**Yes**	**51**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000728**	NP (normality) 1 of 2
Fluoride (mg/L)	MW-6	0.1772	n/a	9/30/2020	0.1ND	No	51	0.267	0.09538	19.61	Kaplan-Meier	sqrt(x)	0.003756	Param 1 of 2
Fluoride (mg/L)	MW-7	0.1772	n/a	9/30/2020	0.1ND	No	51	0.267	0.09538	19.61	Kaplan-Meier	sqrt(x)	0.003756	Param 1 of 2
Sulfate (mg/L)	**MW-6**	**7.473**	**n/a**	**9/30/2020**	**430**	**Yes**	**51**	**n/a**	**n/a**	**58.82**	**n/a**	**n/a**	**0.000728**	NP (NDs) 1 of 2
Sulfate (mg/L)	**MW-7**	**7.473**	**n/a**	**9/30/2020**	**630**	**Yes**	**51**	**n/a**	**n/a**	**58.82**	**n/a**	**n/a**	**0.000728**	NP (NDs) 1 of 2
Total Dissolved Solids (mg/L)	**MW-6**	**824.7**	**n/a**	**9/30/2020**	**5600**	**Yes**	**50**	**4.798**	**1.186**	**0**	**None**	**ln(x)**	**0.003756**	Param 1 of 2
Total Dissolved Solids (mg/L)	**MW-7**	**824.7**	**n/a**	**9/30/2020**	**4300**	**Yes**	**50**	**4.798**	**1.186**	**0**	**None**	**ln(x)**	**0.003756**	Param 1 of 2

Exceeds Limit: MW-6, MW-7

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 51 background values. 47.06% NDs. Annual per-constituent alpha = 0.002909. Individual comparison alpha = 0.000728 (1 of 2). Comparing 2 points to limit.

Constituent: Boron Analysis Run 12/14/2020 11:33 AM View: PL's Interwell

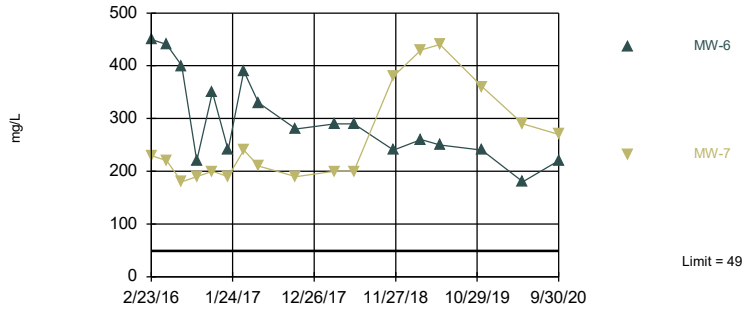
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: MW-6, MW-7

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 51 background values. Annual per-constituent alpha = 0.002909. Individual comparison alpha = 0.000728 (1 of 2). Comparing 2 points to limit.

Constituent: Calcium Analysis Run 12/14/2020 11:33 AM View: PL's Interwell

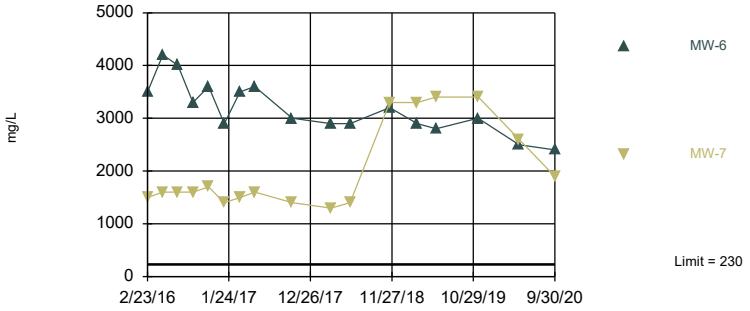
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: MW-6, MW-7

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 51 background values. Annual per-constituent alpha = 0.002909. Individual comparison alpha = 0.000728 (1 of 2). Comparing 2 points to limit.

Constituent: Chloride Analysis Run 12/14/2020 11:33 AM View: PL's Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

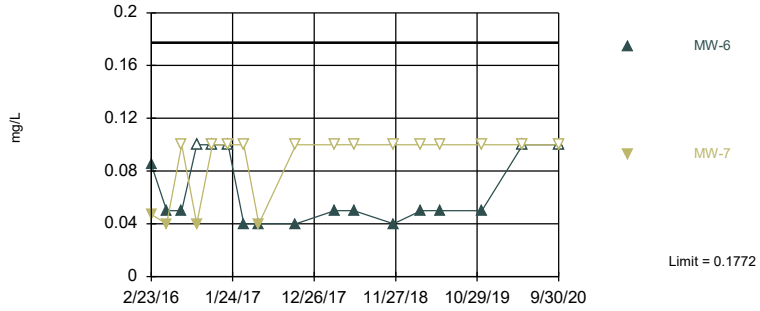
Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.267, Std. Dev.=0.09538, n=51, 19.61% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9464, critical = 0.935. Kappa = 1.614 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.003756. Comparing 2 points to limit.

Constituent: Fluoride Analysis Run 12/14/2020 11:33 AM View: PL's Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/14/2020 11:36 AM View: PL's Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	0.14 (J)	<0.05	<0.05		
2/23/2016				8.6	2.3
4/25/2016		0.022 (J)	<0.05		
4/26/2016	0.27			8.8	2.4
6/27/2016	0.083	0.032 (J)	<0.05		
6/28/2016				7.8	2.6
8/29/2016	<0.05 (*)	<0.05 (*)	<0.05	9.8	2.6
11/1/2016	0.1	<0.05	<0.05		
11/2/2016				10	2.8
1/4/2017	0.062	<0.05	<0.05		
1/5/2017				8.1	2.5
3/10/2017	0.06	0.032 (J)	<0.05		
3/11/2017				10	3.1
5/11/2017	0.33	0.23	0.18	9.4	
5/12/2017					2.7
10/12/2017	0.082	<0.05	<0.05	8.5	2.9
3/20/2018	0.072		<0.05		
3/21/2018		<0.05		8.6	3
6/6/2018	0.077	0.027 (J)	<0.05		
6/8/2018				8.4	3
11/19/2018	0.071	0.045 (J)	<0.05	9.5	3.5
3/11/2019	<0.05	<0.05	<0.05		
3/12/2019				9.7	3
5/28/2019	0.024 (J)	<0.05	<0.05		
5/29/2019				9	3.2
11/18/2019	0.075	0.036 (V)	0.0094 (IV)	9 (J3)	
11/19/2019					4.3 (J3)
5/5/2020	0.11	0.041	0.0073 (J)		
5/6/2020				7.7	3.6
9/29/2020	0.086	0.04	<0.05		
9/30/2020				8.2	3.1

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/14/2020 11:36 AM View: PL's Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	23	12	1.9		
2/23/2016				450	230
4/25/2016		11	1.8		
4/26/2016	33			440	220
6/27/2016	29	7.7	1.7		
6/28/2016				400	180
8/29/2016	28	48	1.7	220	190
11/1/2016	36	49	1.9		
11/2/2016				350	200
1/4/2017	36	44	1.8		
1/5/2017				240	190
3/10/2017	37	46	1.9		
3/11/2017				390	240
5/11/2017	31	43	1.7	330	
5/12/2017					210
10/12/2017	32	45	1.9	280	190
3/20/2018	34		1.9		
3/21/2018		45		290	200
6/6/2018	30	32	1.8		
6/8/2018				290	200
11/19/2018	38	20	1.8	240	380
3/11/2019	31	16	1.9		
3/12/2019				260	430
5/28/2019	37	35	2.1		
5/29/2019				250	440
11/18/2019	30	44	1.9	240	
11/19/2019					360
5/5/2020	31	13	2.3		
5/6/2020				180	290
9/29/2020	41	9.6	2.6		
9/30/2020				220	270

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/14/2020 11:36 AM View: PL's Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	140	15	11		
2/23/2016				3500	1500
4/25/2016		18	10		
4/26/2016	190			4200	1600
6/27/2016	170	17	11		
6/28/2016				4000	1600
8/29/2016	180	16	11	3300	1600
11/1/2016	230	11	11		
11/2/2016				3600	1700
1/4/2017	220	11	11		
1/5/2017				2900	1400
3/10/2017	210	14	11		
3/11/2017				3500	1500
5/11/2017	200	11	12	3600	
5/12/2017					1600
10/12/2017	190	12	12	3000	1400
3/20/2018	190		11		
3/21/2018		9.3		2900	1300
6/6/2018	190	13	11		
6/8/2018				2900	1400
11/19/2018	210	13	19.9 (D)	3200	3300
3/11/2019	190	12	13		
3/12/2019				2900	3300
5/28/2019	190	13	13		
5/29/2019				2800	3400
11/18/2019	210	12	14	3000	
11/19/2019					3400
5/5/2020	200	13	15		
5/6/2020				2500	2600
9/29/2020	200	14	16		
9/30/2020				2400	1900

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/14/2020 11:36 AM View: PL's Interwell

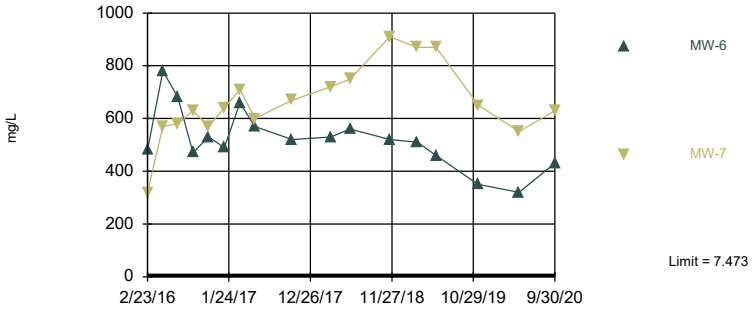
Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	0.09 (J)	0.06 (J)	0.04 (J)		
2/23/2016				0.085 (J)	0.047 (J)
4/25/2016		0.04 (J)	<0.1		
4/26/2016	0.08 (J)			0.05 (J)	0.04 (J)
6/27/2016	0.08 (J)	0.04 (J)	<0.1		
6/28/2016				0.05 (J)	<0.1
8/29/2016	0.09 (J)	0.16	0.04 (J)	<0.1	0.04 (J)
11/1/2016	0.08 (J)	0.17	<0.1		
11/2/2016				<0.1	<0.1
1/4/2017	0.1	0.23	<0.1		
1/5/2017				<0.1	<0.1
3/10/2017	0.1	0.21	<0.1		
3/11/2017				0.04 (J)	<0.1
5/11/2017	0.1	0.23	<0.1	0.04 (J)	
5/12/2017					0.04 (J)
10/12/2017	0.12	0.27	<0.1	0.04	<0.1
3/20/2018	0.12		<0.1		
3/21/2018		0.28		0.05 (J)	<0.1
6/6/2018	0.12	0.19	0.04 (J)		
6/8/2018				0.05 (J)	<0.1
11/19/2018	0.13	0.12	0.04 (J)	0.04 (J)	<0.1
3/11/2019	0.12	0.08 (J)	0.04 (J)		
3/12/2019				0.05 (J)	<0.1
5/28/2019	0.13	0.13	0.04 (J)		
5/29/2019				0.05 (J)	<0.1
11/18/2019	0.14	0.17	<0.1	0.05 (I)	
11/19/2019					<0.1
5/5/2020	0.15 (V)	0.09 (J)	0.05 (J)		
5/6/2020				<0.1	<0.1
9/29/2020	0.15	0.06	<0.1		
9/30/2020				<0.1	<0.1

Exceeds Limit: MW-6, MW-7

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 51 background values. 58.82% NDs. Annual per-constituent alpha = 0.002909. Individual comparison alpha = 0.000728 (1 of 2). Comparing 2 points to limit.

Constituent: Sulfate Analysis Run 12/14/2020 11:33 AM View: PL's Interwell

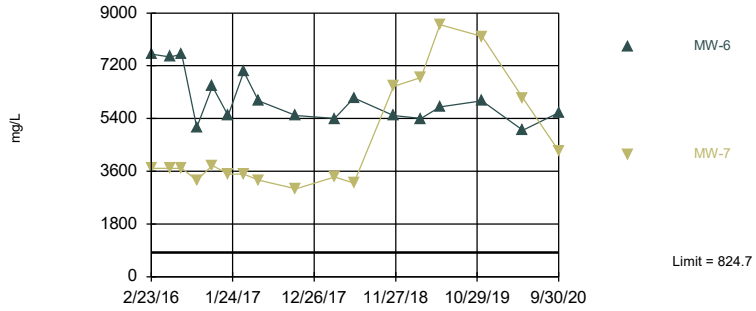
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: MW-6, MW-7

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=4.798, Std. Dev.=1.186, n=50. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9357, critical = 0.935. Kappa = 1.616 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.003756. Comparing 2 points to limit.

Constituent: Total Dissolved Solids Analysis Run 12/14/2020 11:33 AM View: PL's Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/14/2020 11:36 AM View: PL's Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<5	6.3	<5		
2/23/2016				480	320
4/25/2016		6.1	1.4 (J)		
4/26/2016	<5			780	570
6/27/2016	1.6 (J)	6.6	<5		
6/28/2016				680	580
8/29/2016	<5	4.5 (J)	<5	470 (J)	630
11/1/2016	<5	<5	<5		
11/2/2016				530	570
1/4/2017	<5	<5 (*)	<5 (*)		
1/5/2017				490	640
3/10/2017	<5	2.3 (J)	<5		
3/11/2017				660	710
5/11/2017	<5	<5	<5	570	
5/12/2017					600
10/12/2017	<5	<5	<5	520	670
3/20/2018	1.8 (J)		<5		
3/21/2018		<5		530	720
6/6/2018	2.3 (J)	4.8 (J)	<5		
6/8/2018				560	750
11/19/2018	2.2 (J)	4.4 (J)	7.473 (D)	520	910
3/11/2019	1.5 (J)	5.2	<5		
3/12/2019				510	870
5/28/2019	3 (J)	4.3 (J)	<5		
5/29/2019				460	870
11/18/2019	<5	2.8 (I)	<5	350	
11/19/2019					650
5/5/2020	<5	4.4 (J)	<5		
5/6/2020				320	550
9/29/2020	3.3	4.8	<5		
9/30/2020				430	630

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/14/2020 11:36 AM View: PL's Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-7	MW-6
2/22/2016	410	74	46		
2/23/2016				3700	7600
5/11/2016	410	200	42	3700	7500
6/27/2016	4200 (o)	42	24		
6/28/2016				3700	7600
8/29/2016	490	200	42	3300	5100
11/1/2016	540	220	64		
11/2/2016				3800	6500
1/4/2017	520	140	44		
1/5/2017				3500	5500
3/10/2017	490	160	16		
3/11/2017				3500	7000
5/11/2017	490	190	42		6000
5/12/2017				3300	
10/12/2017	470	150	30	3000	5500
3/20/2018	510		12		
3/21/2018		150		3400	5400
6/6/2018	460	160	46		
6/8/2018				3200	6100
11/19/2018	490	88 (D)	22	6500	5500
3/11/2019	440	72	12		
3/12/2019				6800	5400
5/28/2019	540	140	110		
5/29/2019				8600	5800
11/18/2019	560	170	52		6000
11/19/2019				8200	
5/5/2020	430	54	34		
5/6/2020				6100	5000
9/29/2020	580	40	36		
9/30/2020				4300	5600

Prediction Limits - Intrawell

Intrawell Prediction Limit - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	**MW-7**	**6.413**	**5.999**	**9/30/2020**	**6.43**	**Yes**	**12**	**6.206**	**0.1061**	**0**	**None**	**No**	**0.001878**	**Param Intra 1 of 2**

Intrawell Prediction Limit - All Results

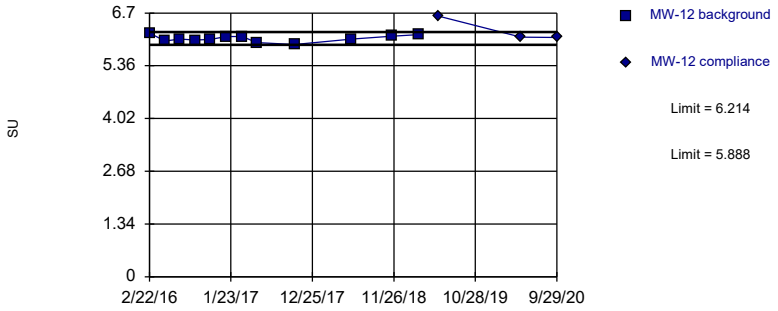
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-12	6.214	5.888	9/29/2020	6.08	No	12	6.051	0.08339	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-2	7.353	5.354	9/29/2020	5.73	No	12	6.353	0.512	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-3	5.193	4.724	9/29/2020	4.91	No	12	4.958	0.1201	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-6	5.781	4.55	9/30/2020	5.57	No	12	5.166	0.3153	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	**MW-7**	**6.413**	**5.999**	**9/30/2020**	**6.43**	**Yes**	**12**	**6.206**	**0.1061**	**0**	**None**	**No**	**0.001878**	**Param Intra 1 of 2**

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.051, Std. Dev.=0.08339, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9827, critical = 0.805. Kappa = 1.952 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.003756.

Constituent: pH Analysis Run 12/14/2020 11:27 AM View: PL's - Intrawell

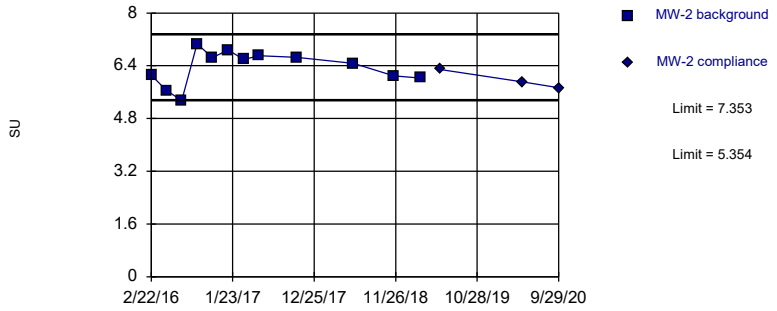
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.353, Std. Dev.=0.512, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.94, critical = 0.805. Kappa = 1.952 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.003756.

Constituent: pH Analysis Run 12/14/2020 11:27 AM View: PL's - Intrawell

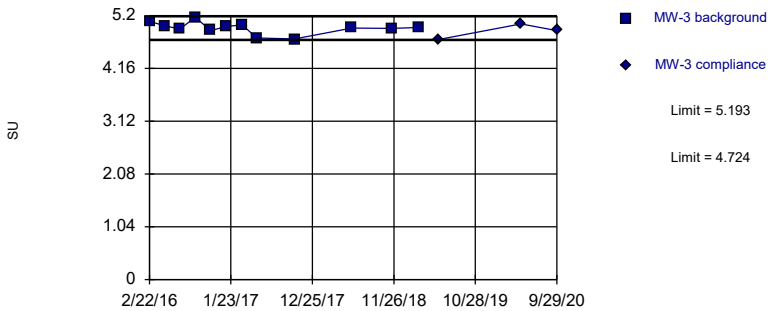
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.958, Std. Dev.=0.1201, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9322, critical = 0.805. Kappa = 1.952 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.003756.

Constituent: pH Analysis Run 12/14/2020 11:27 AM View: PL's - Intrawell

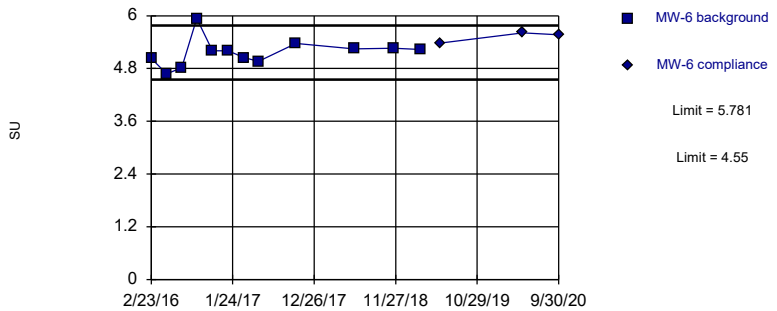
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.166, Std. Dev.=0.3153, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9049, critical = 0.805. Kappa = 1.952 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.003756.

Constituent: pH Analysis Run 12/14/2020 11:27 AM View: PL's - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: pH (SU) Analysis Run 12/14/2020 11:30 AM View: PL's - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12	MW-12
2/22/2016	6.19 (B01)	
4/26/2016	5.99 (B02)	
6/27/2016	6.04 (B03)	
8/29/2016	6.01 (B04)	
11/1/2016	6.03 (B05)	
1/4/2017	6.1 (B06)	
3/10/2017	6.1 (B07)	
5/11/2017	5.95 (B08)	
10/12/2017	5.9	
6/6/2018	6.04	
11/19/2018	6.11	
3/11/2019	6.15	
5/28/2019		6.62
5/5/2020		6.09
9/29/2020		6.08

Prediction Limit

Constituent: pH (SU) Analysis Run 12/14/2020 11:30 AM View: PL's - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-2	MW-2
2/22/2016	6.11 (B01)	
4/25/2016	5.65 (B02)	
6/27/2016	5.35 (B03)	
8/29/2016	7.06 (B04)	
11/1/2016	6.65 (B05)	
1/4/2017	6.88 (B06)	
3/10/2017	6.59 (B07)	
5/11/2017	6.7 (B08)	
10/12/2017	6.66	
6/6/2018	6.47	
11/19/2018	6.09	
3/11/2019	6.03	
5/28/2019		6.29
5/5/2020		5.91
9/29/2020		5.73

Prediction Limit

Constituent: pH (SU) Analysis Run 12/14/2020 11:30 AM View: PL's - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-3	MW-3
2/22/2016	5.09 (B01)	
4/25/2016	5 (B02)	
6/27/2016	4.94 (B03)	
8/29/2016	5.17 (B04)	
11/1/2016	4.91 (B05)	
1/4/2017	4.99 (B06)	
3/10/2017	5.02 (B07)	
5/11/2017	4.76 (B08)	
10/12/2017	4.74	
6/6/2018	4.96	
11/19/2018	4.95	
3/11/2019	4.97	
5/28/2019		4.73
5/5/2020		5.04
9/29/2020		4.91

Prediction Limit

Constituent: pH (SU) Analysis Run 12/14/2020 11:30 AM View: PL's - Intrawell

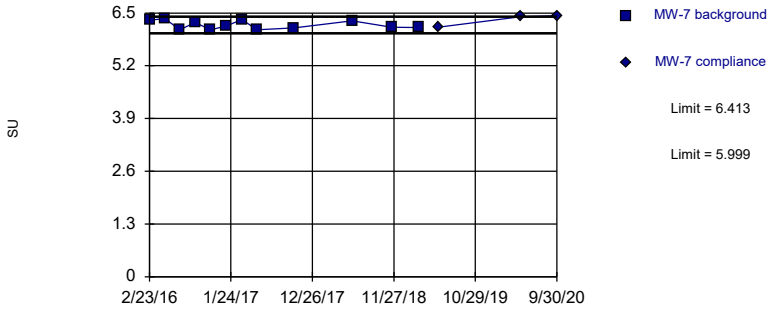
Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-6	MW-6
2/23/2016	5.03 (B01)	
4/26/2016	4.68 (B02)	
6/28/2016	4.82 (B03)	
8/29/2016	5.94 (B04)	
11/2/2016	5.2 (B05)	
1/5/2017	5.2 (B06)	
3/11/2017	5.05 (B07)	
5/11/2017	4.96 (B08)	
10/12/2017	5.37	
6/8/2018	5.25	
11/19/2018	5.26	
3/12/2019	5.23	
5/29/2019		5.38
5/6/2020		5.61
9/30/2020		5.57

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.206, Std. Dev.=0.1061, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8598, critical = 0.805. Kappa = 1.952 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.003756.

Constituent: pH Analysis Run 12/14/2020 11:27 AM View: PL's - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: pH (SU) Analysis Run 12/14/2020 11:30 AM View: PL's - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-7	MW-7
2/23/2016	6.32 (B01)	
4/26/2016	6.36 (B02)	
6/28/2016	6.09 (B03)	
8/29/2016	6.27 (B04)	
11/2/2016	6.09 (B05)	
1/5/2017	6.18 (B06)	
3/11/2017	6.34 (B07)	
5/12/2017	6.09 (B08)	
10/12/2017	6.13	
6/8/2018	6.31	
11/19/2018	6.15	
3/12/2019	6.14	
5/29/2019		6.15
5/6/2020		6.41
9/30/2020		6.43

Trend Tests - Prediction Limit Exceedances

Trend Test Summary - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 12:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-7**	**0.2635**	**99**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-46.65**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.9777**	**86**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-275.3**	**-87**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-6**	**-48.52**	**-64**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary - All Results

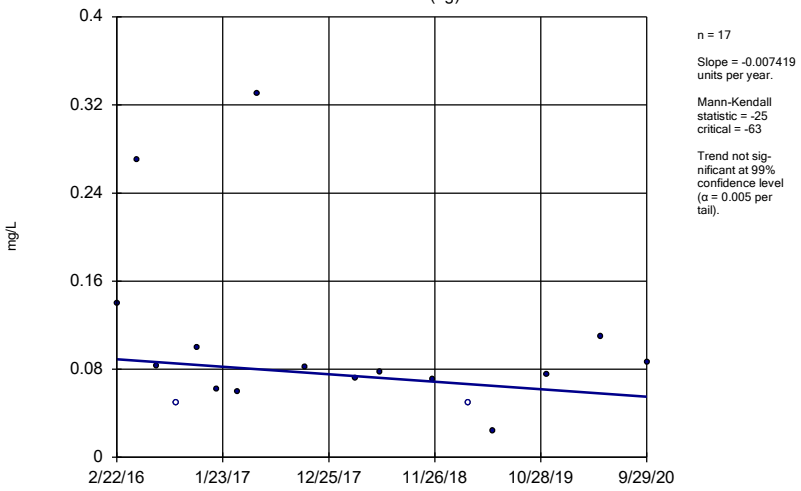
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 12:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-12 (bg)	-0.007419	-25	-63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0	-7	-63	No	17	47.06	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	-27	-63	No	17	82.35	n/a	n/a	0.01	NP
Boron (mg/L)	MW-6	-0.09417	-15	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-7**	**0.2635**	**99**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-12 (bg)	1.158	36	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-2.776	-26	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	0.07141	60	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-6**	**-46.65**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	24.26	54	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	3.506	27	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.5395	-23	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.9777**	**86**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-275.3**	**-87**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	193.1	40	63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	MW-12 (bg)	0.01726	21	53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	MW-2 (bg)	-0.1928	-27	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	MW-3 (bg)	-0.02157	-30	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	MW-7	0.01849	15	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-23	-63	No	17	58.82	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.3006	-58	-63	No	17	29.41	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	63	No	17	88.24	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-6**	**-48.52**	**-64**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-7	74.77	57	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	14.99	26	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-20.53	-42	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	-1.619	-11	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-6	-359.2	-54	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-7	300.3	31	63	No	17	0	n/a	n/a	0.01	NP

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

Sen's Slope Estimator

MW-12 (bg)



n = 17

Slope = -0.007419 units per year.

Mann-Kendall statistic = -25
critical = -63

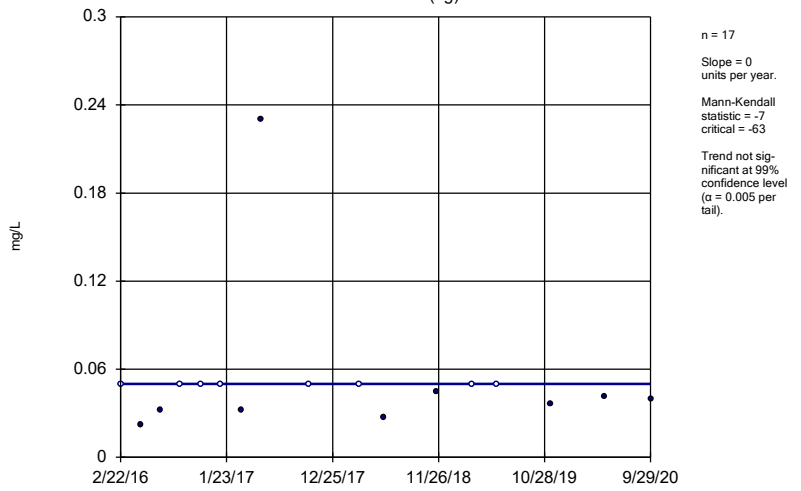
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

Sen's Slope Estimator

MW-2 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -7
critical = -63

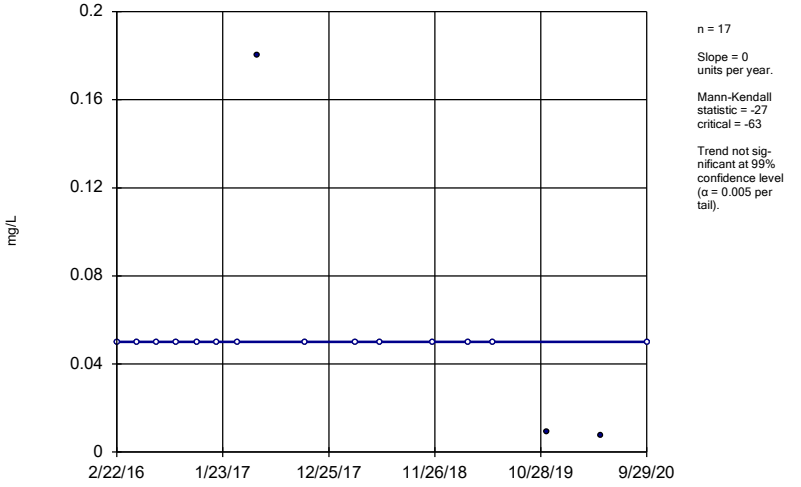
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

Sen's Slope Estimator

MW-3 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -27
critical = -63

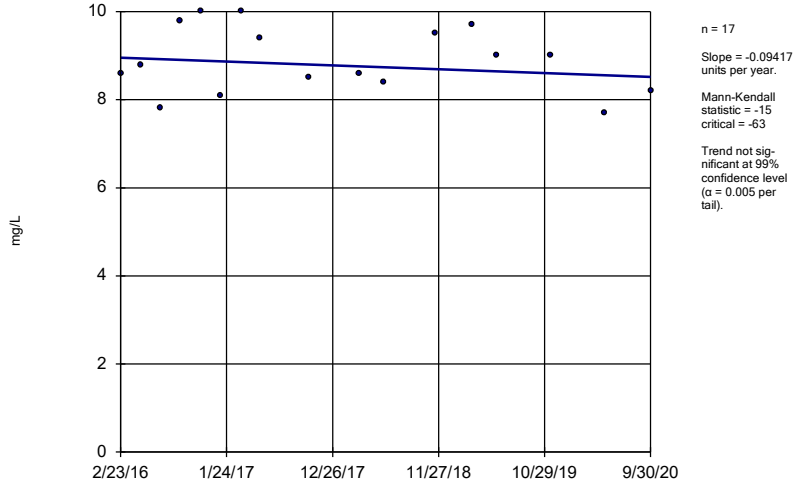
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 17

Slope = -0.09417 units per year.

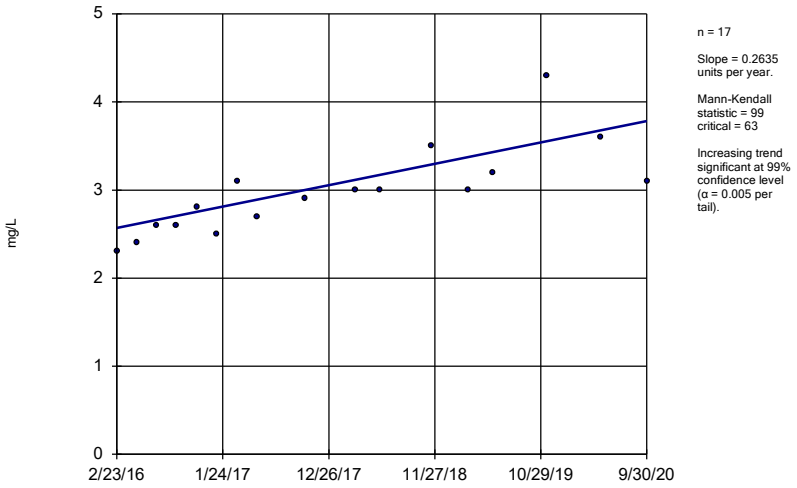
Mann-Kendall statistic = -15
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-7

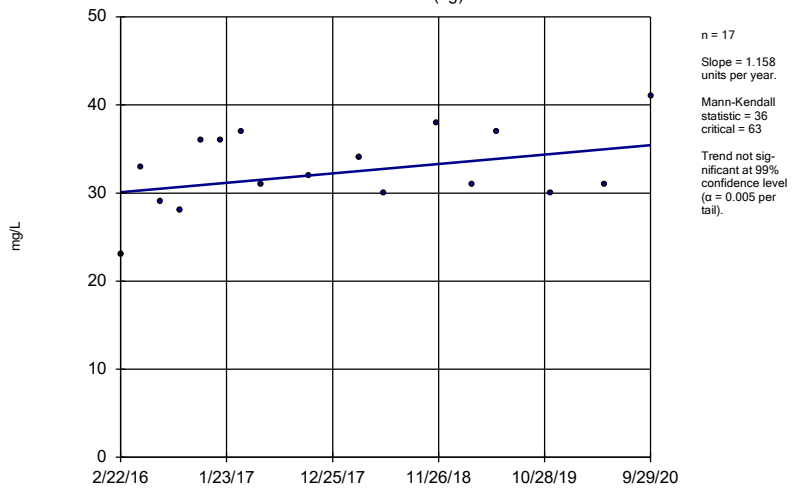


Constituent: Boron Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)

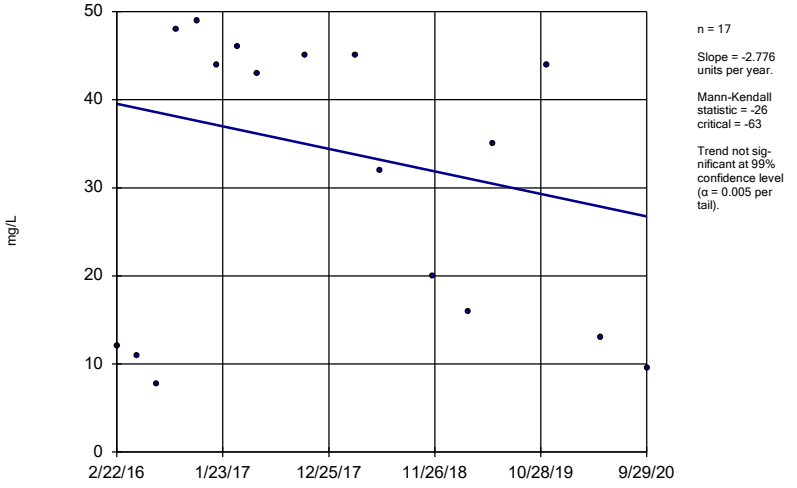


Constituent: Calcium Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)

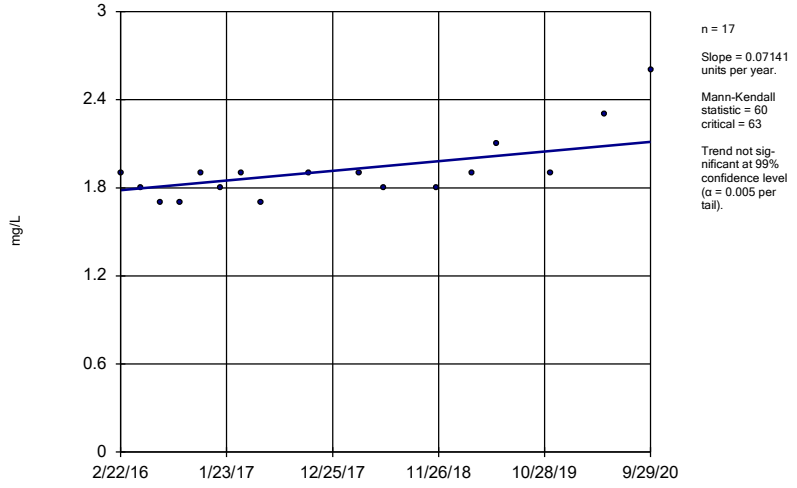


Constituent: Calcium Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

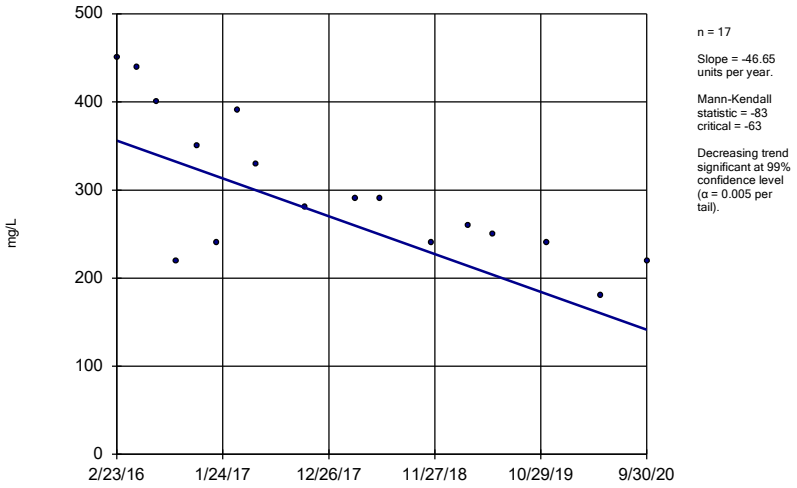
MW-3 (bg)



Constituent: Calcium Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-6



n = 17

Slope = -46.65 units per year.

Mann-Kendall statistic = -83
critical = -63

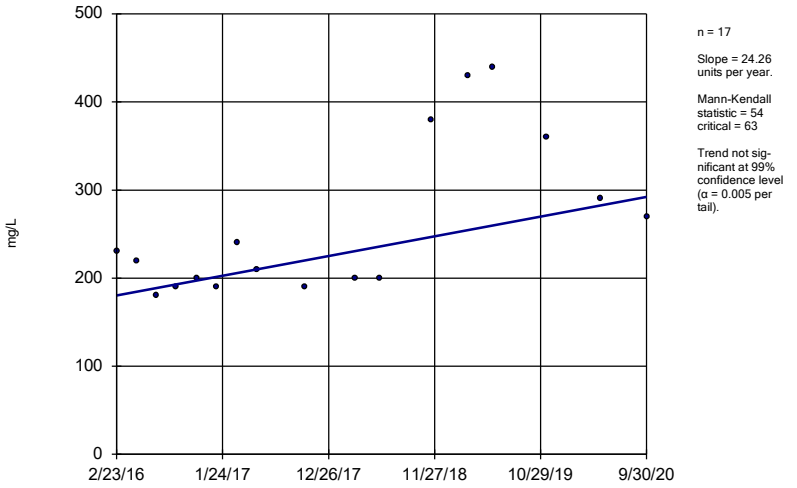
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 17

Slope = 24.26 units per year.

Mann-Kendall statistic = 54
critical = 63

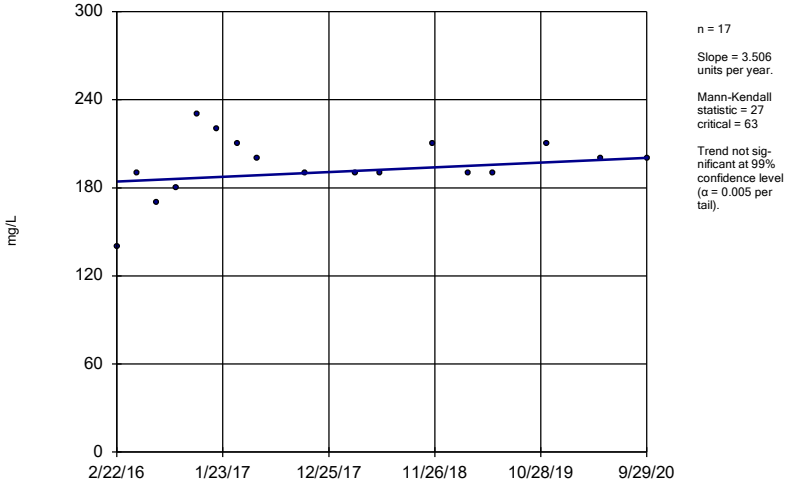
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 17

Slope = 3.506 units per year.

Mann-Kendall statistic = 27
critical = 63

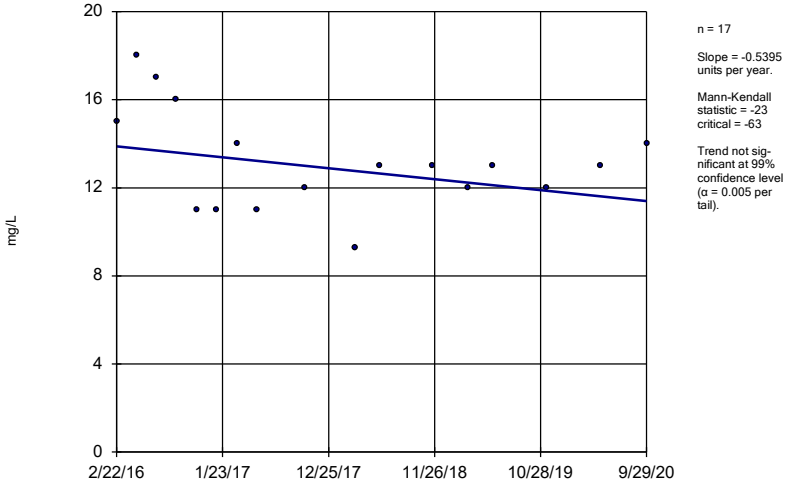
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 17

Slope = -0.5395 units per year.

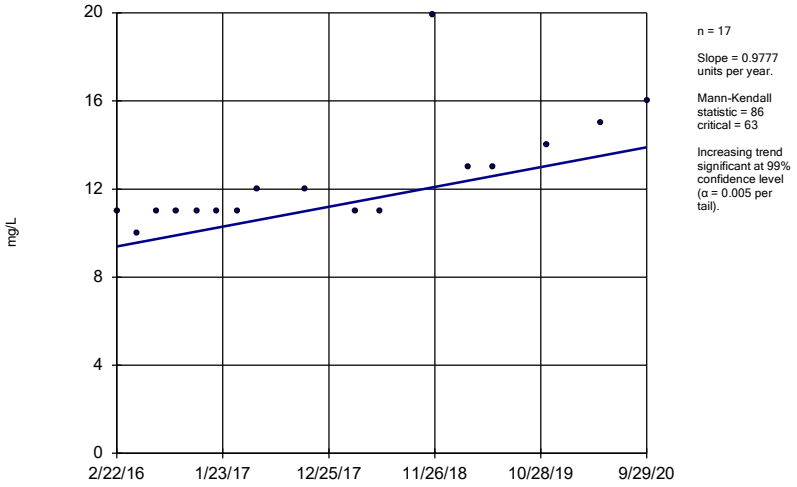
Mann-Kendall statistic = -23
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-3 (bg)



n = 17

Slope = 0.9777 units per year.

Mann-Kendall statistic = 86 critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

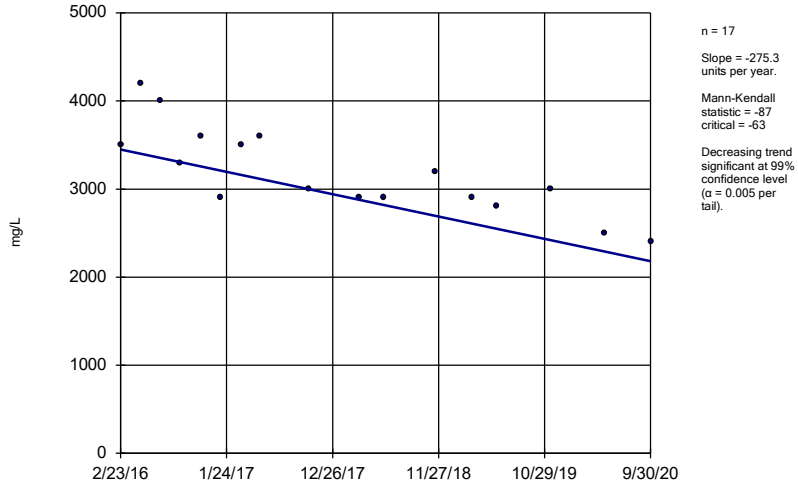
Constituent: Chloride Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 17

Slope = -275.3 units per year.

Mann-Kendall statistic = -87 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

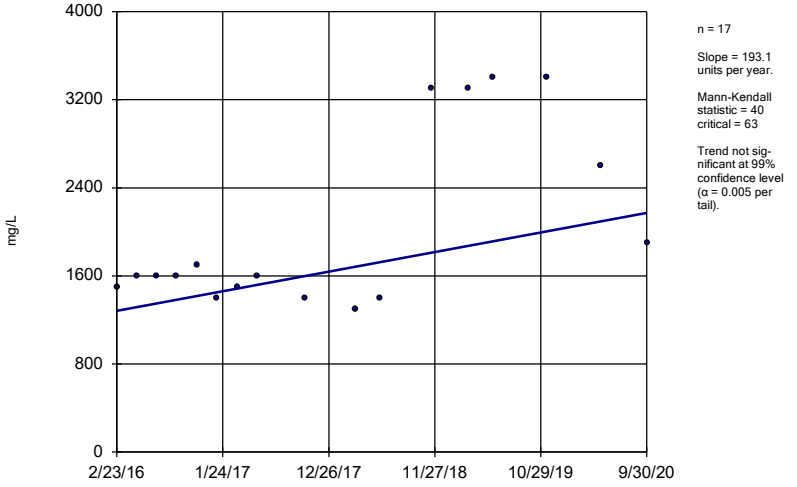
Constituent: Chloride Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 17

Slope = 193.1 units per year.

Mann-Kendall statistic = 40 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

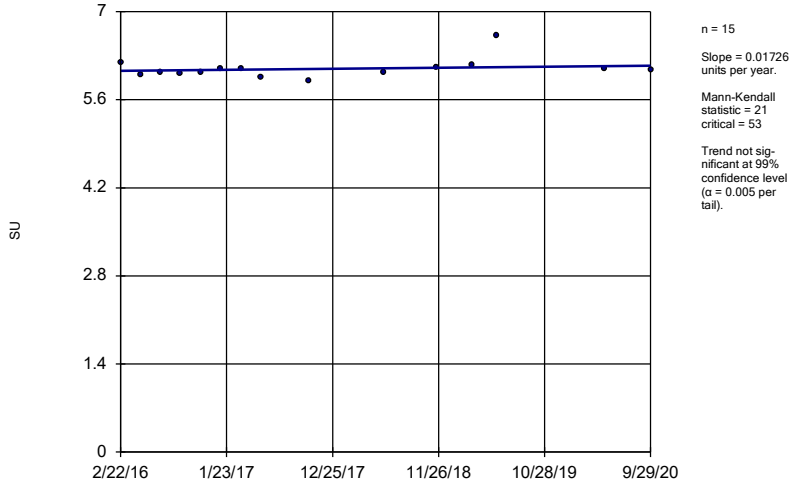
Constituent: Chloride Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 15

Slope = 0.01726 units per year.

Mann-Kendall statistic = 21 critical = 53

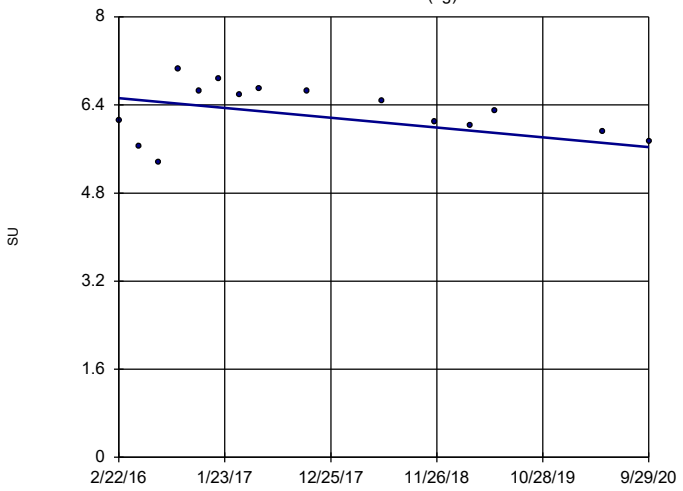
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-2 (bg)



n = 15

Slope = -0.1928 units per year.

Mann-Kendall statistic = -27 critical = -53

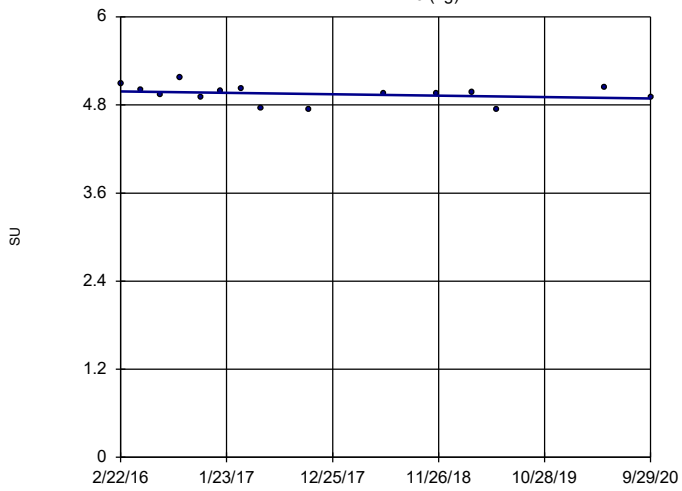
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 15

Slope = -0.02157 units per year.

Mann-Kendall statistic = -30 critical = -53

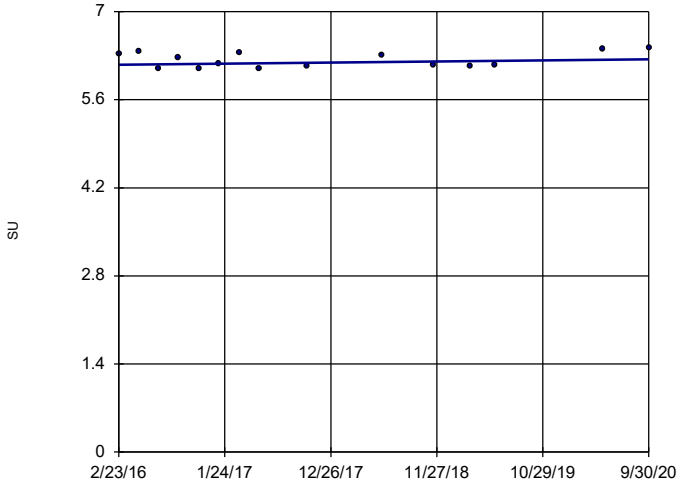
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 15

Slope = 0.01849 units per year.

Mann-Kendall statistic = 15 critical = 53

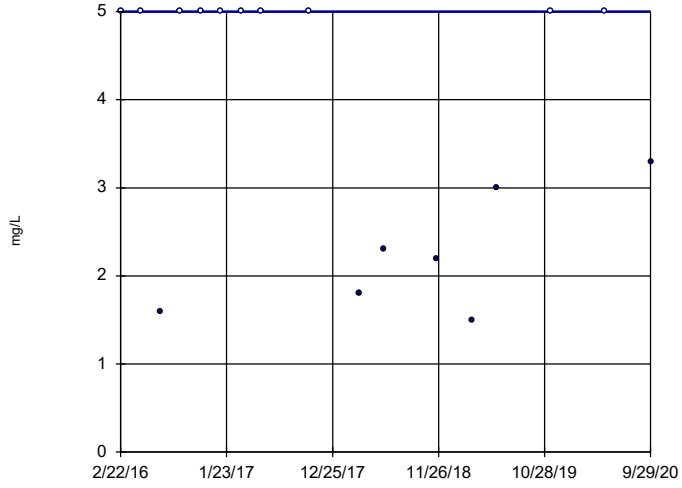
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

Sen's Slope Estimator

MW-12 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -23 critical = -63

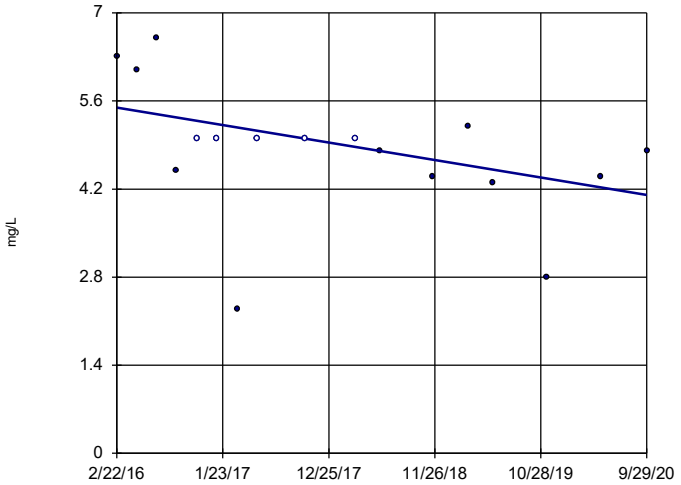
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

Sen's Slope Estimator

MW-2 (bg)



n = 17

Slope = -0.3006 units per year.

Mann-Kendall statistic = -58
critical = -63

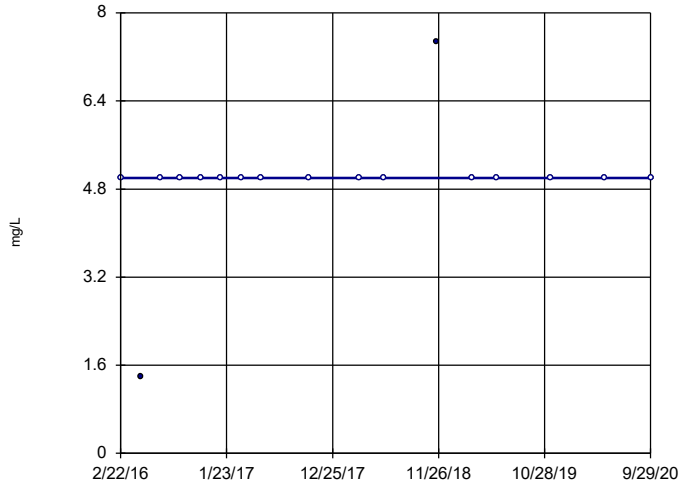
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

Sen's Slope Estimator

MW-3 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 19
critical = 63

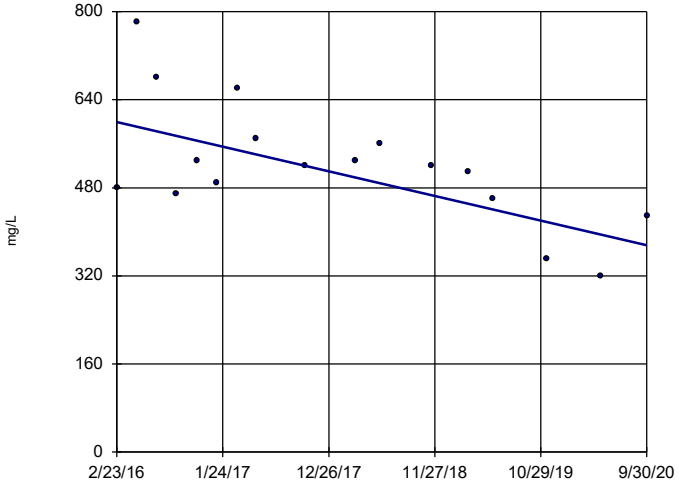
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 17

Slope = -48.52 units per year.

Mann-Kendall statistic = -64
critical = -63

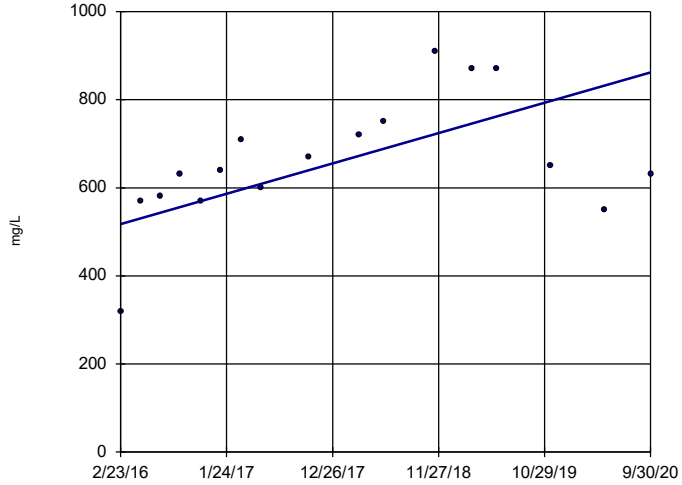
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 17

Slope = 74.77 units per year.

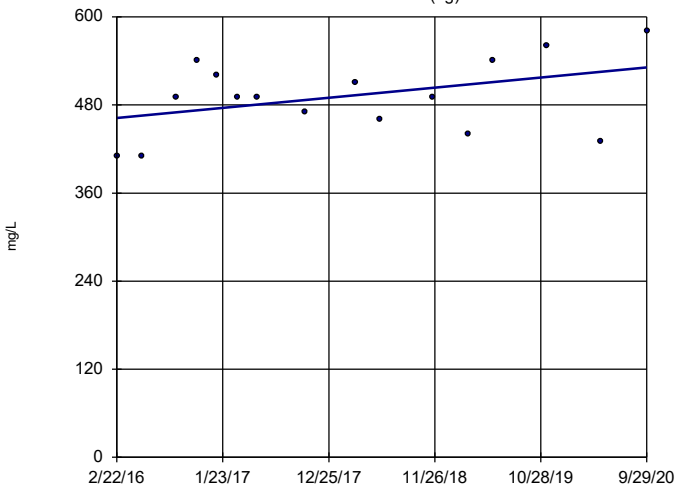
Mann-Kendall statistic = 57
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedances
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-12 (bg)



n = 16

Slope = 14.99 units per year.

Mann-Kendall statistic = 26
critical = 58

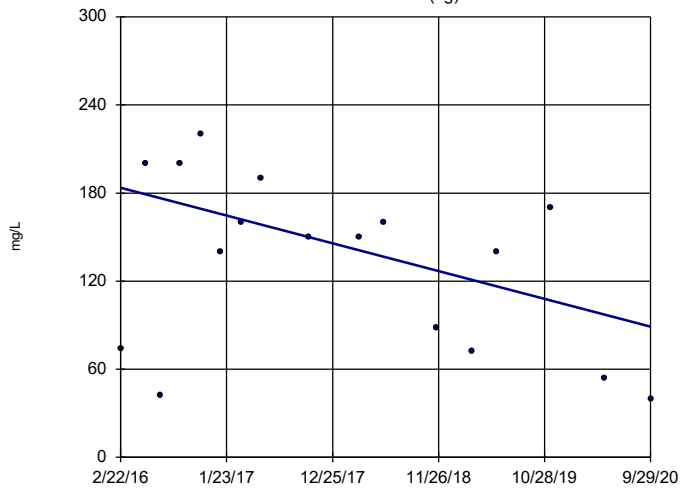
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedan
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 17

Slope = -20.53 units per year.

Mann-Kendall statistic = -42
critical = -63

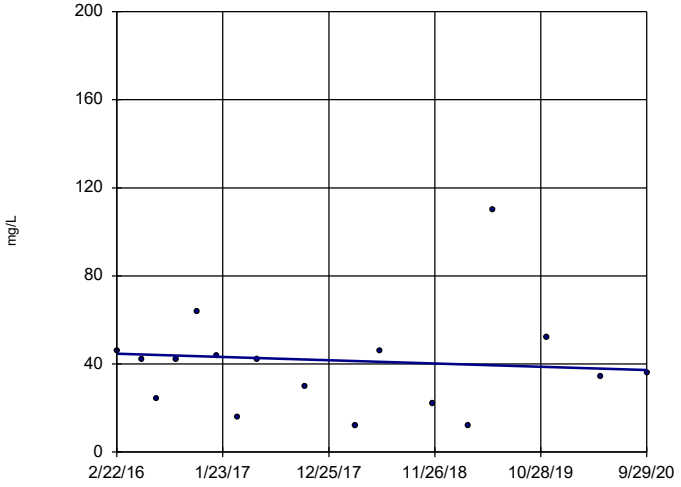
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedan
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 17

Slope = -1.619 units per year.

Mann-Kendall statistic = -11
critical = -63

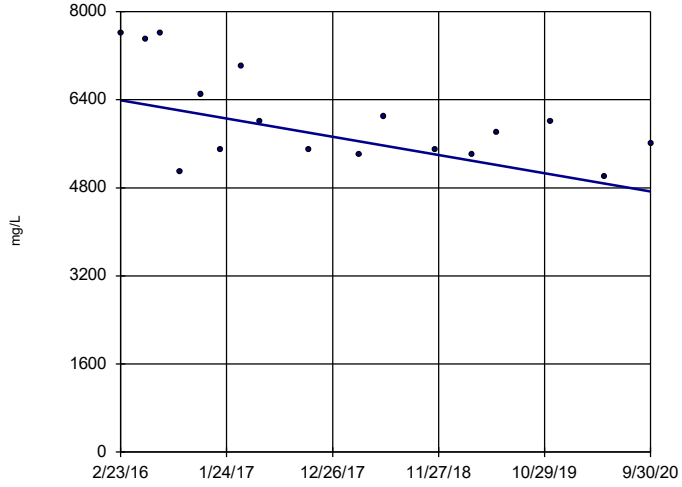
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedan
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 17

Slope = -359.2 units per year.

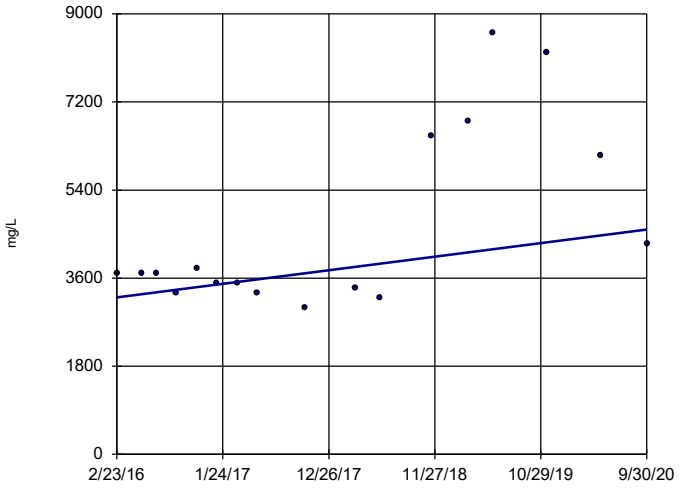
Mann-Kendall statistic = -54
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedan
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-7



n = 17

Slope = 300.3 units per year.

Mann-Kendall statistic = 31 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 12/14/2020 12:02 PM View: Trend Tests - PL Exceedan

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Confidence Intervals

Confidence Interval Summary Table - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**31.32**	**24.04**	**5**	**Yes**	**16**	**27.83**	**5.811**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**36.42**	**24.15**	**5**	**Yes**	**16**	**31.16**	**10.74**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

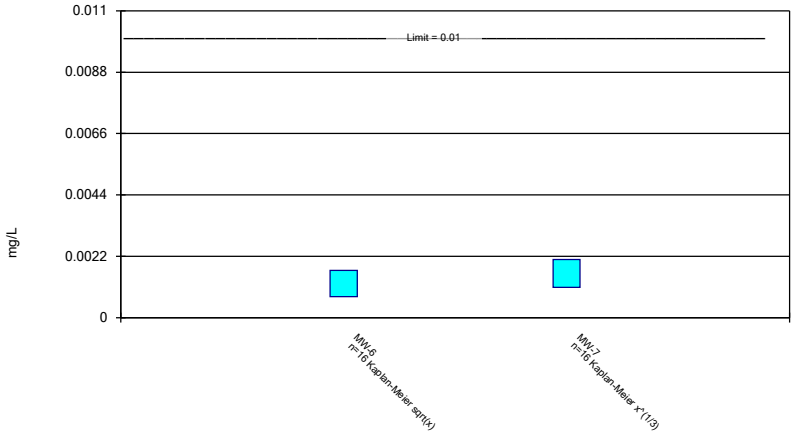
Confidence Interval Summary Table - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/14/2020, 11:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-6	0.001689	0.0007526	0.01	No	16	0.001658	0.0009427	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	MW-7	0.002083	0.001085	0.01	No	16	0.002037	0.0009892	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Barium (mg/L)	MW-6	0.07055	0.05988	2	No	16	0.06406	0.0112	6.25	None	x^3	0.01	Param.
Barium (mg/L)	MW-7	0.1084	0.05931	2	No	16	0.08606	0.03937	6.25	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MW-6	0.001706	0.0009142	0.004	No	15	0.00131	0.000584	6.667	None	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	15	0.002195	0.0008058	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0013	0.1	No	16	0.003275	0.001719	43.75	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-7	0.0025	0.00029	0.006	No	14	0.002342	0.0005906	92.86	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**31.32**	**24.04**	**5**	**Yes**	**16**	**27.83**	**5.811**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**36.42**	**24.15**	**5**	**Yes**	**16**	**31.16**	**10.74**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	17	0.06441	0.02573	29.41	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.047	4	No	17	0.08629	0.02551	76.47	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.02054	0.01098	0.04	No	16	0.01576	0.007349	6.25	None	No	0.01	Param.
Lithium (mg/L)	MW-7	0.005	0.002	0.04	No	16	0.004044	0.001428	62.5	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-6	0.015	0.0011	0.1	No	16	0.01413	0.003475	93.75	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.015	0.005	0.1	No	16	0.009144	0.004496	31.25	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-6	0.0013	0.00037	0.05	No	14	0.001078	0.0004249	71.43	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-7	0.0013	0.0003	0.05	No	14	0.001034	0.0004433	71.43	None	No	0.01	NP (normality)

Parametric Confidence Interval

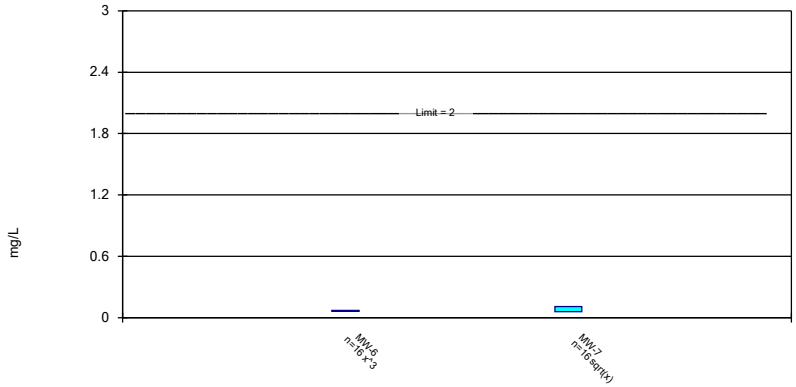
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric Confidence Interval

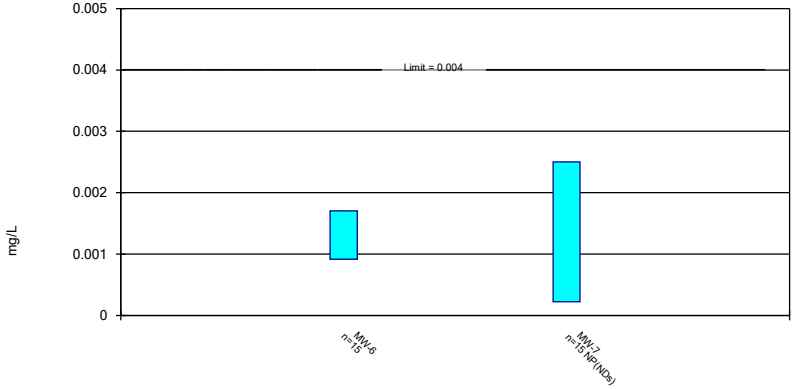
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

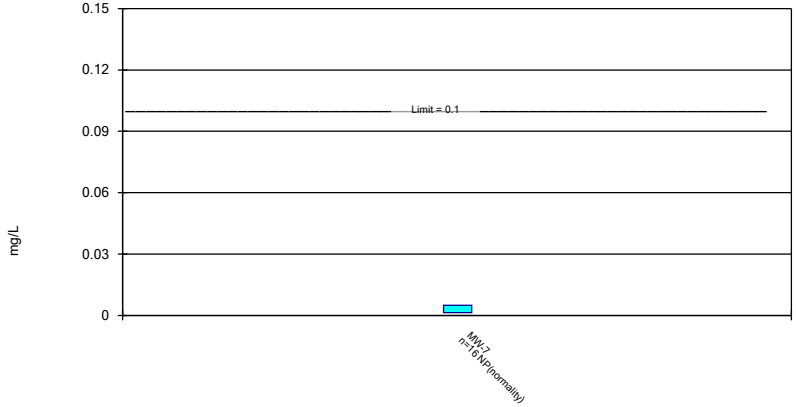
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

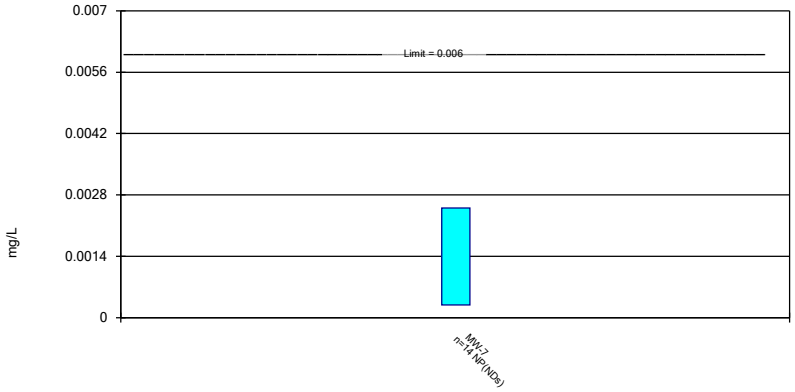
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

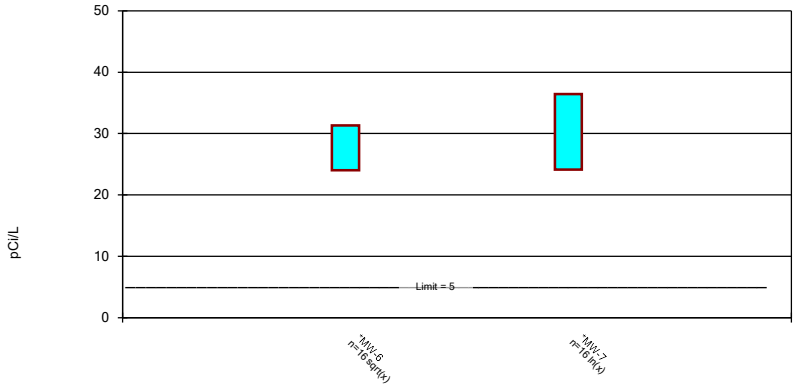


Constituent: Cobalt Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

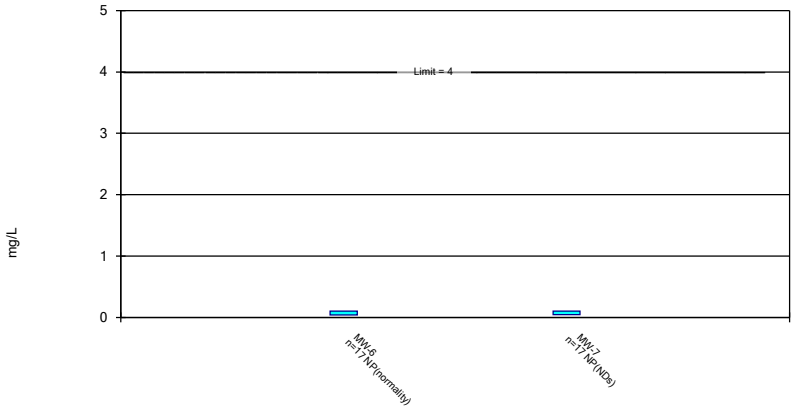


Constituent: Combined Radium 226 + 228 Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

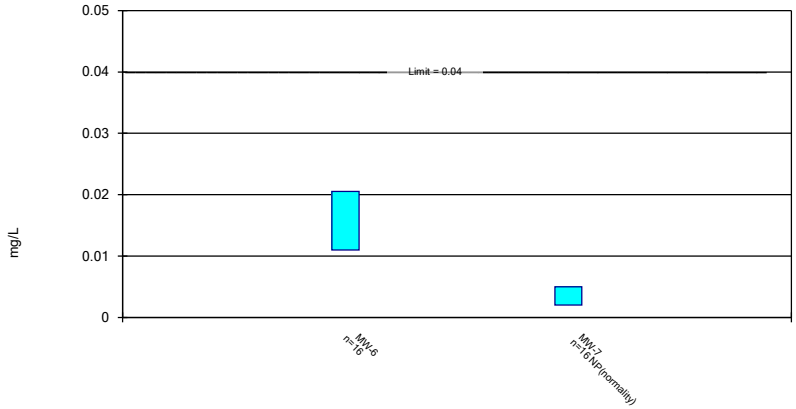


Constituent: Fluoride Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

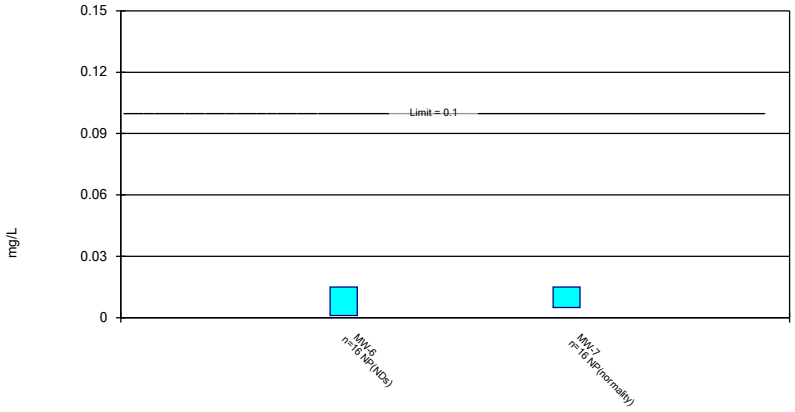
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



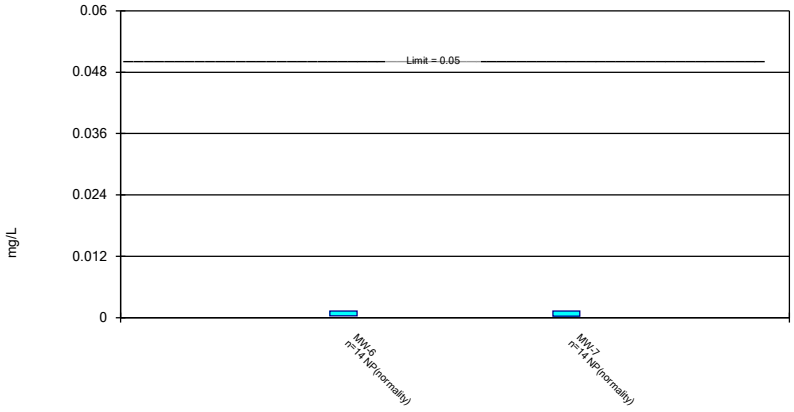
Constituent: Molybdenum Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



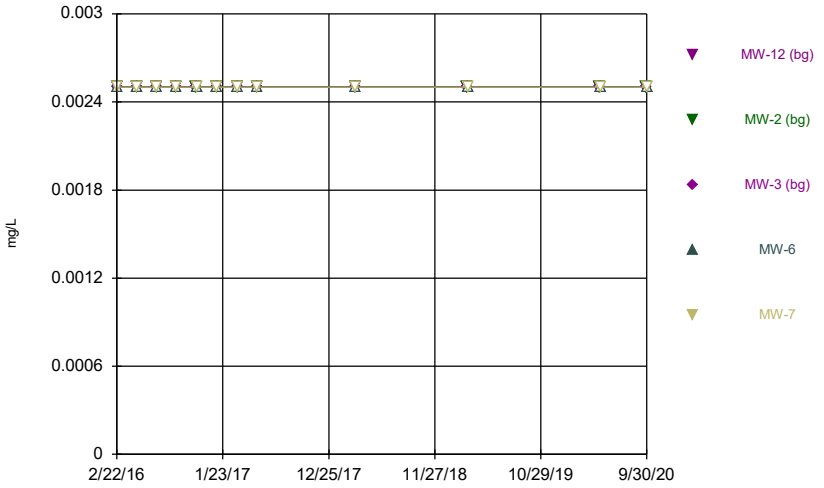
Constituent: Selenium Analysis Run 12/14/2020 11:52 AM View: Confidence Intervals - App IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

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

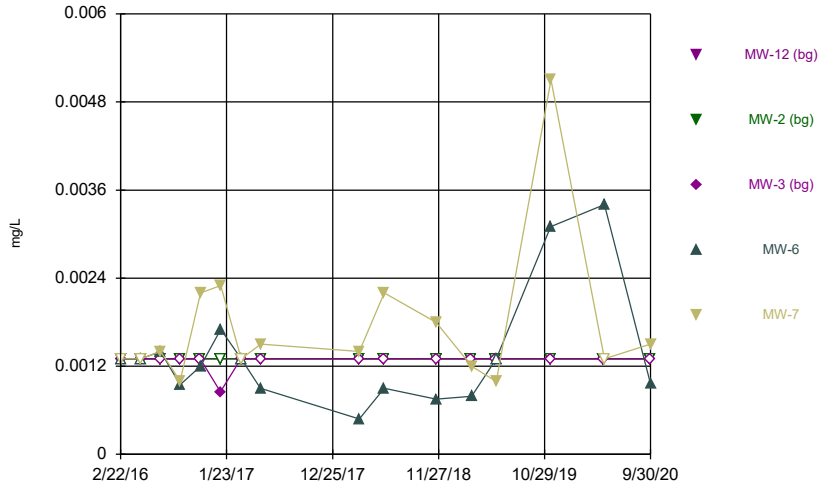
Time Series



Constituent: Antimony Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

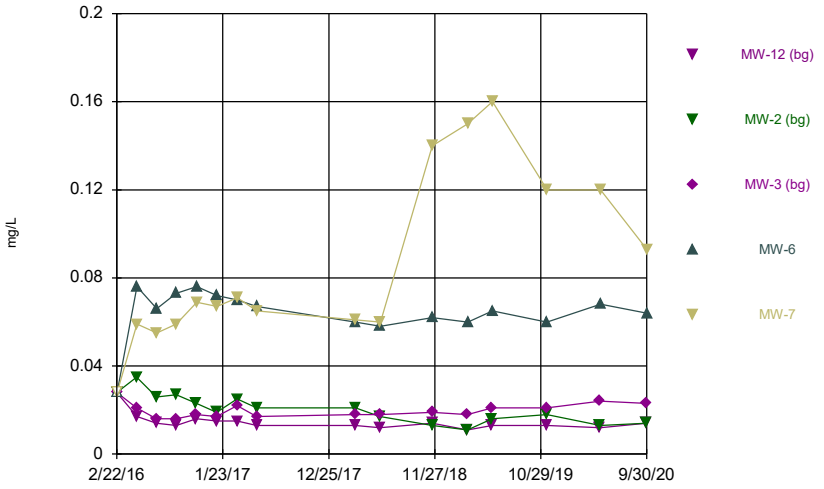
Time Series



Constituent: Arsenic Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

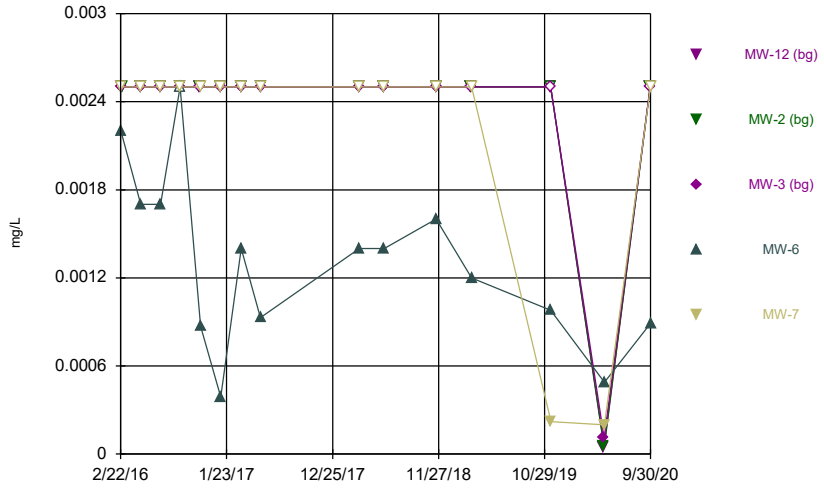
Time Series



Constituent: Barium Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

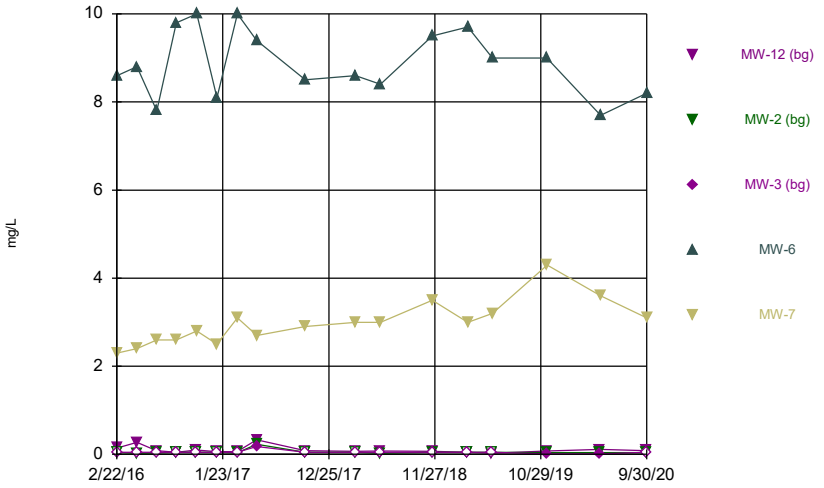
Time Series



Constituent: Beryllium Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

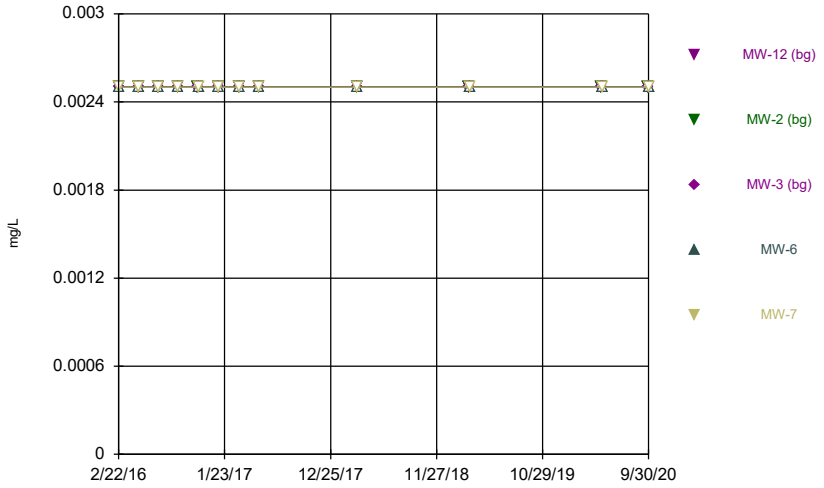
Time Series



Constituent: Boron Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

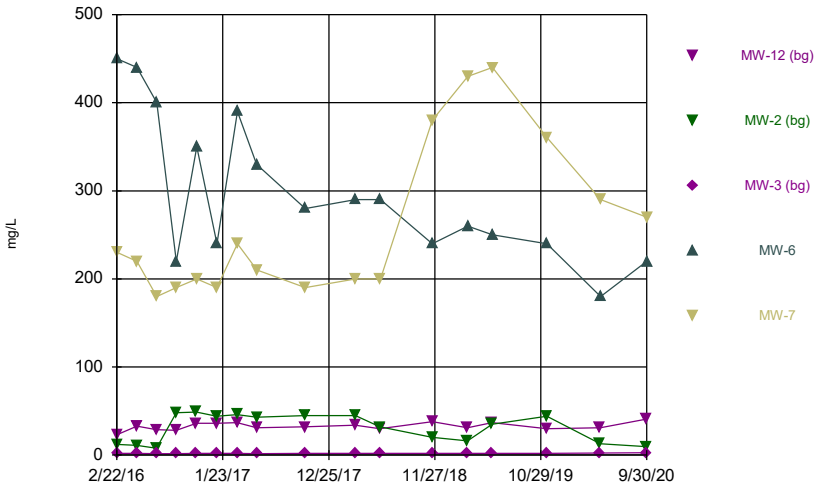
Time Series



Constituent: Cadmium Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

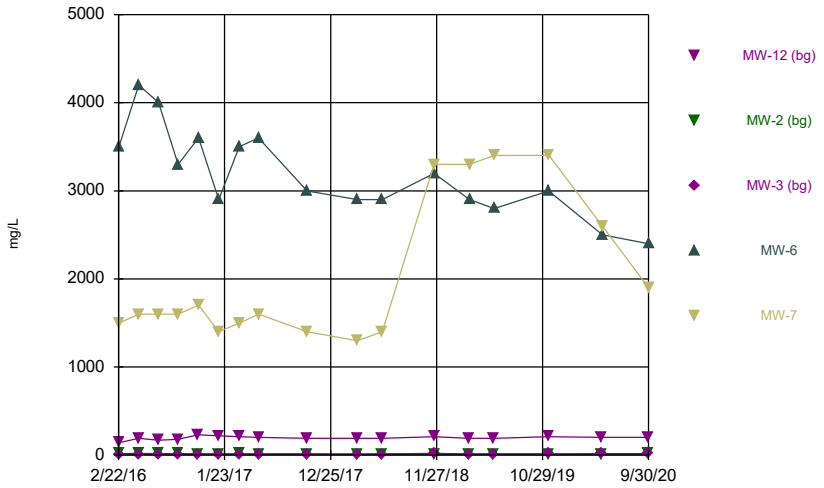
Time Series



Constituent: Calcium Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

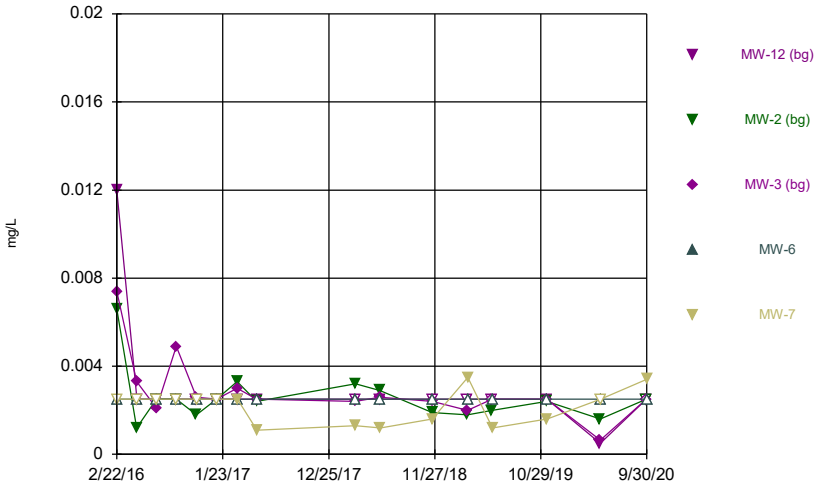
Time Series



Constituent: Chloride Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

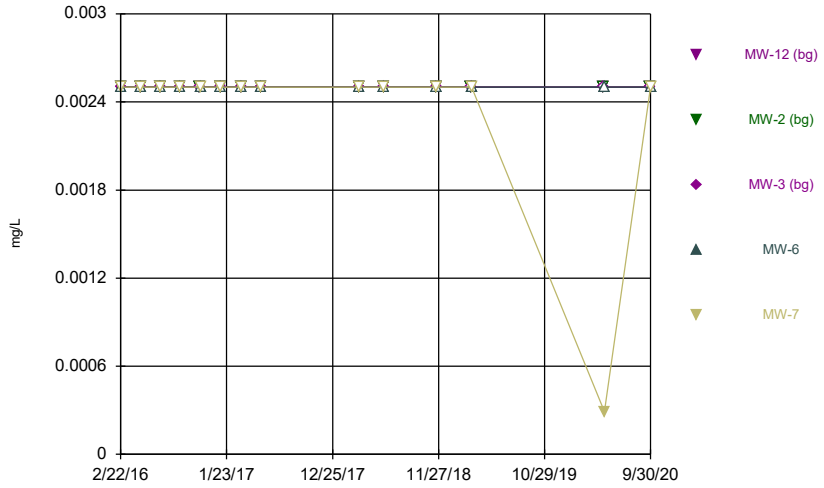
Time Series



Constituent: Chromium Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

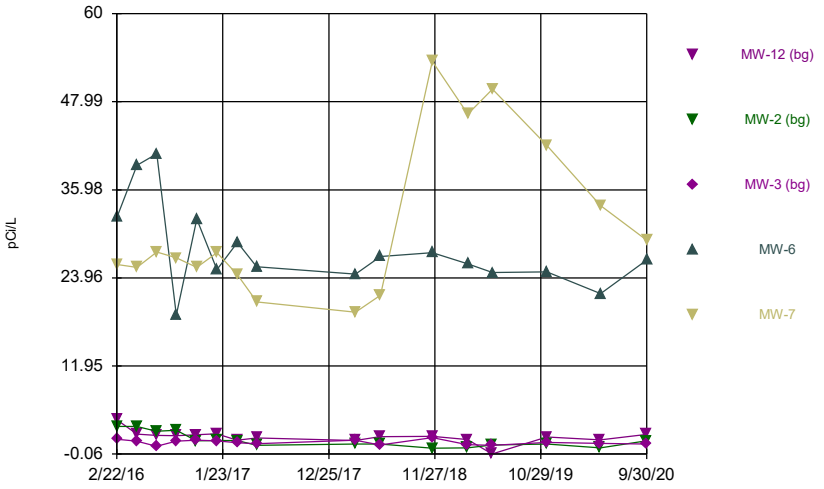
Time Series



Constituent: Cobalt Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

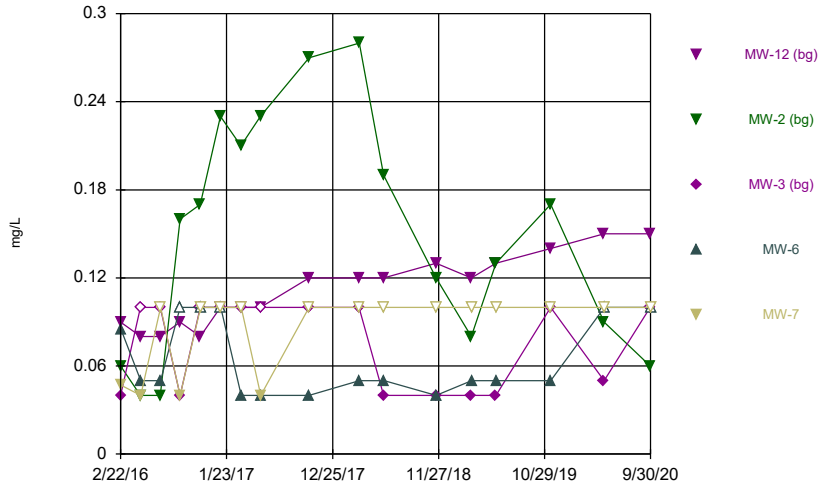
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

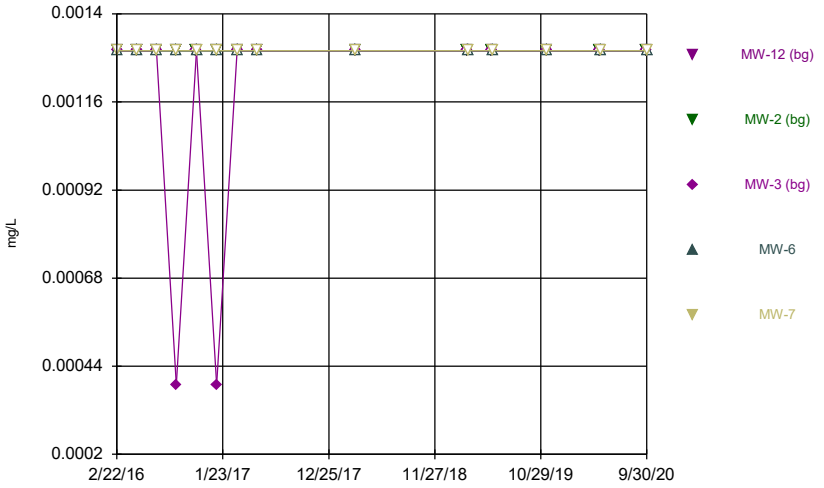
Time Series



Constituent: Fluoride Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

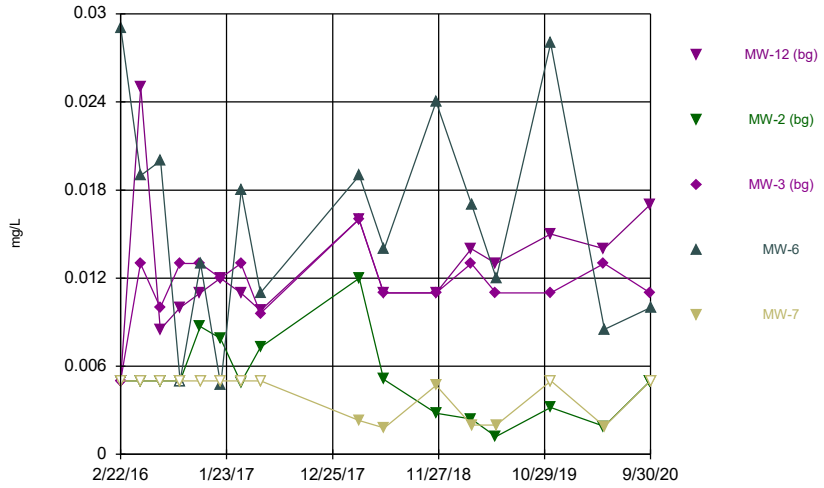
Time Series



Constituent: Lead Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

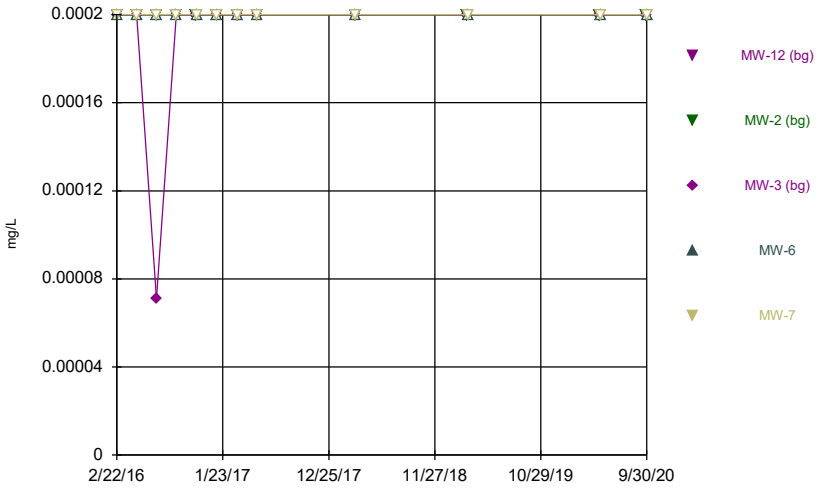
Time Series



Constituent: Lithium Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

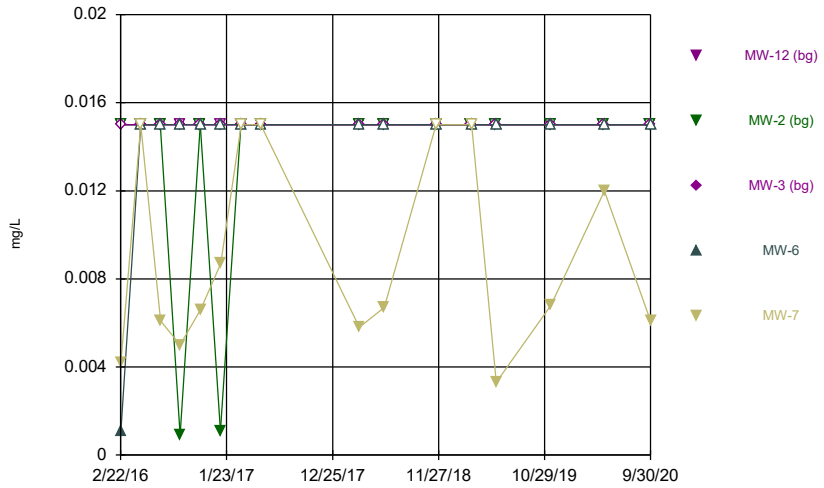
Time Series



Constituent: Mercury Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

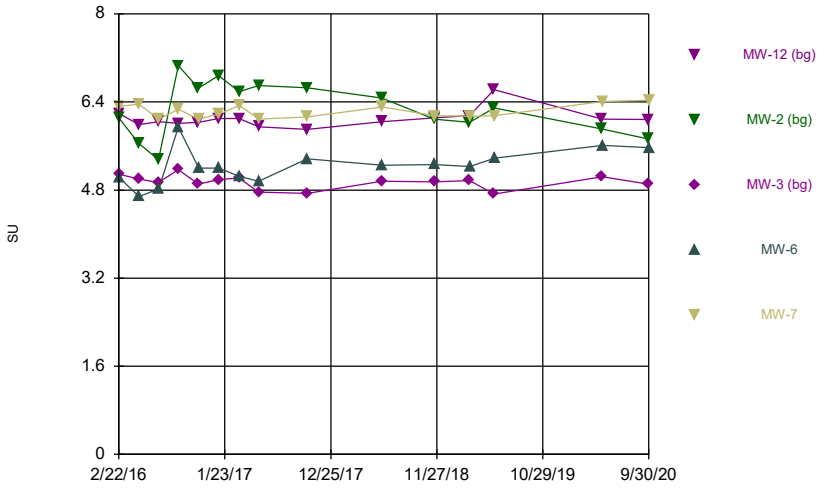
Time Series



Constituent: Molybdenum Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG

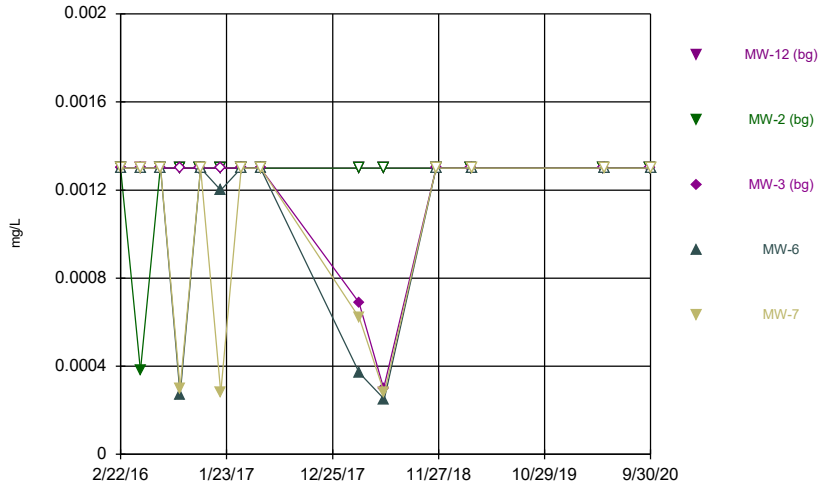
Time Series



Constituent: pH Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

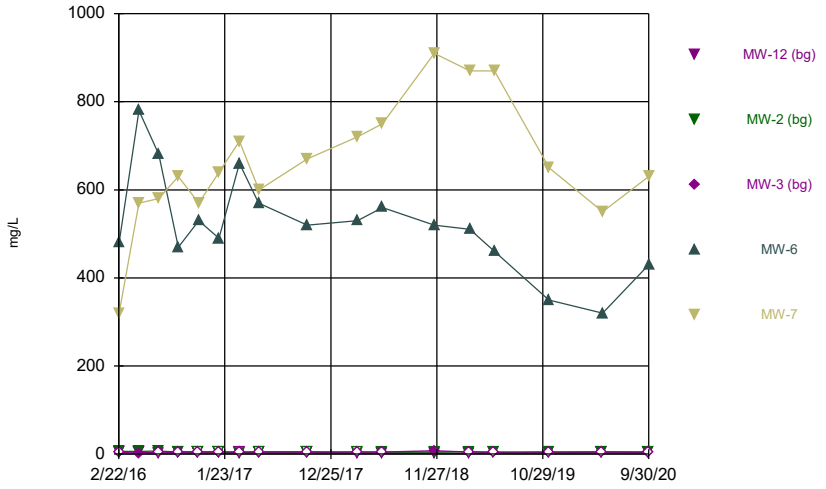
Time Series



Constituent: Selenium Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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

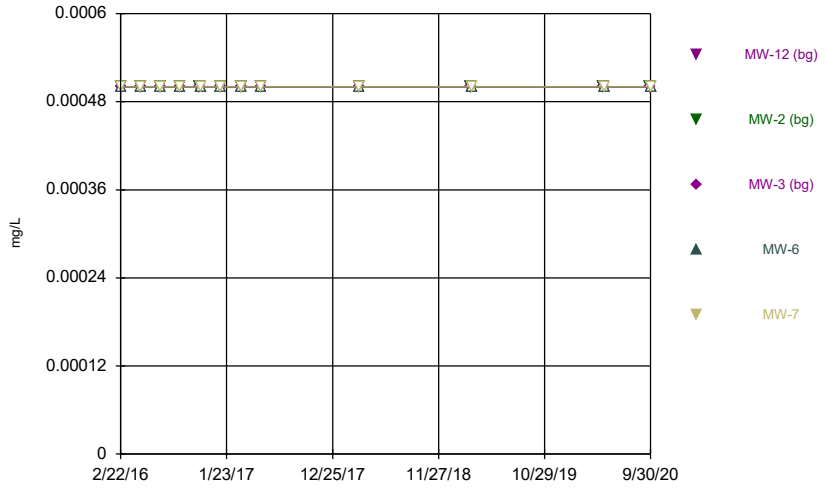
Time Series



Constituent: Sulfate Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

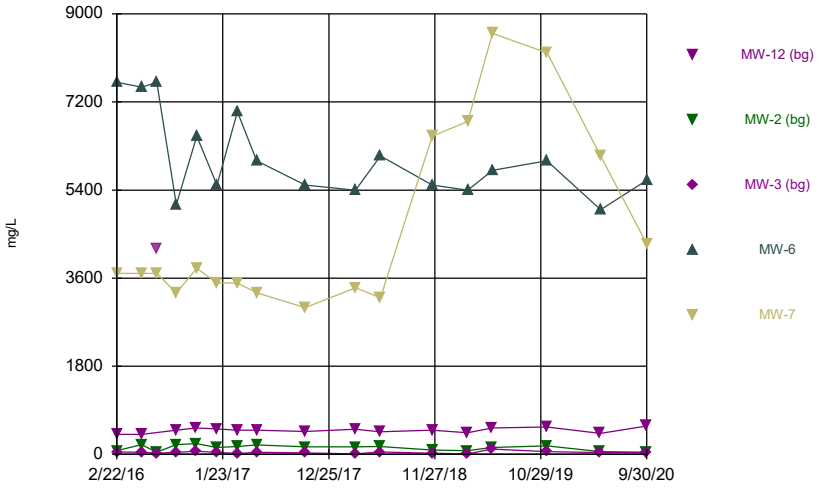
Sanitas™ v.9.6.27b Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 12/14/2020 2:22 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 12/14/2020 2:22 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0025	<0.0025	<0.0025		
2/23/2016				<0.0025	<0.0025
4/25/2016		<0.0025	<0.0025		
4/26/2016	<0.0025			<0.0025	<0.0025
6/27/2016	<0.0025	<0.0025	<0.0025		
6/28/2016				<0.0025	<0.0025
8/29/2016	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/1/2016	<0.0025	<0.0025	<0.0025		
11/2/2016				<0.0025	<0.0025
1/4/2017	<0.0025	<0.0025	<0.0025		
1/5/2017				<0.0025	<0.0025
3/10/2017	<0.0025	<0.0025	<0.0025		
3/11/2017				<0.0025	<0.0025
5/11/2017	<0.0025	<0.0025	<0.0025	<0.0025	
5/12/2017					<0.0025
3/20/2018	<0.0025		<0.0025		
3/21/2018		<0.0025		<0.0025	<0.0025
3/11/2019	<0.0025	<0.0025	<0.0025		
3/12/2019				<0.0025	<0.0025
5/5/2020	<0.0025	<0.0025	<0.0025		
5/6/2020				<0.0025	<0.0025
9/29/2020	<0.0025	<0.0025	<0.0025		
9/30/2020				<0.0025	<0.0025

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0013	<0.0013	<0.0013		
2/23/2016				<0.0013	<0.0013
4/25/2016		<0.0013	<0.0013		
4/26/2016	<0.0013			<0.0013	<0.0013
6/27/2016	<0.0013	<0.0013	<0.0013		
6/28/2016				0.0014	0.0014
8/29/2016	<0.0013	<0.0013	<0.0013	0.00095 (J)	0.001 (J)
11/1/2016	<0.0013	<0.0013	<0.0013		
11/2/2016				0.0012 (J)	0.0022
1/4/2017	<0.0013	<0.0013	0.00085 (J)		
1/5/2017				0.0017	0.0023
3/10/2017	<0.0013	<0.0013 (*)	<0.0013		
3/11/2017				<0.0013 (*)	<0.0013 (*)
5/11/2017	<0.0013	<0.0013	<0.0013	0.0009 (J)	
5/12/2017					0.0015
3/20/2018	<0.0013		<0.0013		
3/21/2018		<0.0013		0.00048 (J)	0.0014
6/6/2018	<0.0013	<0.0013	<0.0013		
6/8/2018				0.0009 (J)	0.0022
11/19/2018	<0.0013	<0.0013	<0.0013	0.00075 (J)	0.0018
3/11/2019	<0.0013	<0.0013	<0.0013		
3/12/2019				0.00079 (J)	0.0012 (J)
5/28/2019	<0.0013	<0.0013	<0.0013		
5/29/2019				<0.0013	0.00099 (J)
11/18/2019	<0.0013	<0.0013	<0.0013	0.0031	
11/19/2019					0.0051
5/5/2020	<0.0013	<0.0013	<0.0013		
5/6/2020				0.0034	<0.0013
9/29/2020	<0.0013	<0.0013	<0.0013		
9/30/2020				0.00096	0.0015

Time Series

Constituent: Barium (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.056 (*)	<0.056 (*)	<0.056 (*)		
2/23/2016				<0.056 (*)	<0.056 (*)
4/25/2016		0.035	0.021		
4/26/2016	0.017			0.076	0.059
6/27/2016	0.014	0.026	0.016		
6/28/2016				0.066	0.055
8/29/2016	0.013	0.027	0.016	0.073	0.059
11/1/2016	0.016	0.023	0.018		
11/2/2016				0.076	0.069
1/4/2017	0.015	0.019	0.017		
1/5/2017				0.072	0.067
3/10/2017	0.015	0.025	0.022		
3/11/2017				0.07	0.071
5/11/2017	0.013	0.021	0.017	0.067	
5/12/2017					0.065
3/20/2018	0.013		0.018		
3/21/2018		0.021		0.06	0.061
6/6/2018	0.012	0.017	0.018		
6/8/2018				0.058	0.06
11/19/2018	0.014	0.013	0.019	0.062	0.14
3/11/2019	0.011	0.011	0.018		
3/12/2019				0.06	0.15
5/28/2019	0.013	0.016	0.021		
5/29/2019				0.065	0.16
11/18/2019	0.013	0.018	0.021	0.06	
11/19/2019					0.12
5/5/2020	0.012	0.013	0.024		
5/6/2020				0.068	0.12
9/29/2020	0.014	0.014	0.023		
9/30/2020				0.064	0.093

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0025		<0.0025		
2/23/2016				0.0022 (J)	<0.0025
2/26/2016		<0.0025			
4/25/2016		<0.0025	<0.0025		
4/26/2016	<0.0025			0.0017 (J)	<0.0025
6/27/2016	<0.0025	<0.0025	<0.0025		
6/28/2016				0.0017 (J)	<0.0025
8/29/2016	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/1/2016	<0.0025	<0.0025	<0.0025		
11/2/2016				0.00087 (J)	<0.0025
1/4/2017	<0.0025	<0.0025	<0.0025		
1/5/2017				0.00039 (J)	<0.0025
3/10/2017	<0.0025	<0.0025	<0.0025		
3/11/2017				0.0014 (J)	<0.0025
5/11/2017	<0.0025	<0.0025	<0.0025	0.00093 (J)	
5/12/2017					<0.0025
3/20/2018	<0.0025		<0.0025		
3/21/2018		<0.0025		0.0014 (J)	<0.0025
6/6/2018	<0.0025	<0.0025	<0.0025		
6/8/2018				0.0014 (J)	<0.0025
11/19/2018	<0.0025	<0.0025	<0.0025	0.0016 (J)	<0.0025
3/11/2019	<0.0025	<0.0025	<0.0025		
3/12/2019				0.0012 (J)	<0.0025
11/18/2019	<0.0025	<0.0025	<0.0025	0.00098 (J)	
11/19/2019					0.00022 (J)
5/5/2020	4.3E-05 (J)	5.7E-05 (J)	0.00011 (J)		
5/6/2020				0.00049 (J)	0.0002 (J)
9/29/2020	<0.0025	<0.0025	<0.0025		
9/30/2020				0.00089	<0.0025

Time Series

Constituent: Boron (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	0.14 (J)	<0.05	<0.05		
2/23/2016				8.6	2.3
4/25/2016		0.022 (J)	<0.05		
4/26/2016	0.27			8.8	2.4
6/27/2016	0.083	0.032 (J)	<0.05		
6/28/2016				7.8	2.6
8/29/2016	<0.05 (*)	<0.05 (*)	<0.05	9.8	2.6
11/1/2016	0.1	<0.05	<0.05		
11/2/2016				10	2.8
1/4/2017	0.062	<0.05	<0.05		
1/5/2017				8.1	2.5
3/10/2017	0.06	0.032 (J)	<0.05		
3/11/2017				10	3.1
5/11/2017	0.33	0.23	0.18	9.4	
5/12/2017					2.7
10/12/2017	0.082	<0.05	<0.05	8.5	2.9
3/20/2018	0.072		<0.05		
3/21/2018		<0.05		8.6	3
6/6/2018	0.077	0.027 (J)	<0.05		
6/8/2018				8.4	3
11/19/2018	0.071	0.045 (J)	<0.05	9.5	3.5
3/11/2019	<0.05	<0.05	<0.05		
3/12/2019				9.7	3
5/28/2019	0.024 (J)	<0.05	<0.05		
5/29/2019				9	3.2
11/18/2019	0.075	0.036 (V)	0.0094 (IV)	9 (J3)	
11/19/2019					4.3 (J3)
5/5/2020	0.11	0.041	0.0073 (J)		
5/6/2020				7.7	3.6
9/29/2020	0.086	0.04	<0.05		
9/30/2020				8.2	3.1

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0025	<0.0025	<0.0025		
2/23/2016				<0.0025	<0.0025
4/25/2016		<0.0025	<0.0025		
4/26/2016	<0.0025			<0.0025	<0.0025
6/27/2016	<0.0025	<0.0025	<0.0025		
6/28/2016				<0.0025	<0.0025
8/29/2016	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/1/2016	<0.0025	<0.0025	<0.0025		
11/2/2016				<0.0025	<0.0025
1/4/2017	<0.0025	<0.0025	<0.0025		
1/5/2017				<0.0025	<0.0025
3/10/2017	<0.0025	<0.0025	<0.0025		
3/11/2017				<0.0025	<0.0025
5/11/2017	<0.0025	<0.0025	<0.0025	<0.0025	
5/12/2017					<0.0025
3/20/2018	<0.0025		<0.0025		
3/21/2018		<0.0025		<0.0025	<0.0025
3/11/2019	<0.0025	<0.0025	<0.0025		
3/12/2019				<0.0025	<0.0025
5/5/2020	<0.0025	<0.0025	<0.0025		
5/6/2020				<0.0025	<0.0025
9/29/2020	<0.0025	<0.0025	<0.0025		
9/30/2020				<0.0025	<0.0025

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	23	12	1.9		
2/23/2016				450	230
4/25/2016		11	1.8		
4/26/2016	33			440	220
6/27/2016	29	7.7	1.7		
6/28/2016				400	180
8/29/2016	28	48	1.7	220	190
11/1/2016	36	49	1.9		
11/2/2016				350	200
1/4/2017	36	44	1.8		
1/5/2017				240	190
3/10/2017	37	46	1.9		
3/11/2017				390	240
5/11/2017	31	43	1.7	330	
5/12/2017					210
10/12/2017	32	45	1.9	280	190
3/20/2018	34		1.9		
3/21/2018		45		290	200
6/6/2018	30	32	1.8		
6/8/2018				290	200
11/19/2018	38	20	1.8	240	380
3/11/2019	31	16	1.9		
3/12/2019				260	430
5/28/2019	37	35	2.1		
5/29/2019				250	440
11/18/2019	30	44	1.9	240	
11/19/2019					360
5/5/2020	31	13	2.3		
5/6/2020				180	290
9/29/2020	41	9.6	2.6		
9/30/2020				220	270

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	140	15	11		
2/23/2016				3500	1500
4/25/2016		18	10		
4/26/2016	190			4200	1600
6/27/2016	170	17	11		
6/28/2016				4000	1600
8/29/2016	180	16	11	3300	1600
11/1/2016	230	11	11		
11/2/2016				3600	1700
1/4/2017	220	11	11		
1/5/2017				2900	1400
3/10/2017	210	14	11		
3/11/2017				3500	1500
5/11/2017	200	11	12	3600	
5/12/2017					1600
10/12/2017	190	12	12	3000	1400
3/20/2018	190		11		
3/21/2018		9.3		2900	1300
6/6/2018	190	13	11		
6/8/2018				2900	1400
11/19/2018	210	13	19.9 (D)	3200	3300
3/11/2019	190	12	13		
3/12/2019				2900	3300
5/28/2019	190	13	13		
5/29/2019				2800	3400
11/18/2019	210	12	14	3000	
11/19/2019					3400
5/5/2020	200	13	15		
5/6/2020				2500	2600
9/29/2020	200	14	16		
9/30/2020				2400	1900

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	0.012 (J)	0.0066 (JV)	0.0074 (J)		
2/23/2016				<0.0025	<0.0025
4/25/2016		0.0012 (J)	0.0033		
4/26/2016	<0.0025			<0.0025	<0.0025
6/27/2016	<0.0025	<0.0025	0.0021 (J)		
6/28/2016				<0.0025	<0.0025
8/29/2016	<0.0025	<0.0025	0.0049	<0.0025	<0.0025
11/1/2016	<0.0025	0.0018 (J)	0.0026		
11/2/2016				<0.0025	<0.0025
1/4/2017	<0.0025	<0.0025 (*)	<0.0025 (*)		
1/5/2017				<0.0025	<0.0025 (*)
3/10/2017	<0.0025	0.0033	0.003		
3/11/2017				<0.0025	0.0025
5/11/2017	<0.0025	0.0024 (J)	<0.0025	<0.0025	
5/12/2017					0.0011 (J)
3/20/2018	<0.0025		0.0024 (J)		
3/21/2018		0.0032		<0.0025	0.0013 (J)
6/6/2018	<0.0025	0.0029	0.0026		
6/8/2018				<0.0025	0.0012 (J)
11/19/2018	<0.0025	0.0019 (J)	0.0024 (J)	<0.0025	0.0016 (J)
3/11/2019	<0.0025	0.0018 (J)	0.002 (J)		
3/12/2019				<0.0025	0.0035
5/28/2019	<0.0025	0.002 (J)	<0.0025		
5/29/2019				<0.0025	0.0012 (J)
11/18/2019	<0.0025	0.0024 (I)	<0.0025	<0.0025	
11/19/2019					0.0016 (I)
5/5/2020	0.0005	0.0016	0.00064		
5/6/2020				<0.0025	<0.0025
9/29/2020	<0.0025	<0.0025	<0.0025		
9/30/2020				<0.0025	0.0034

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0025	<0.0025	<0.0025		
2/23/2016				<0.0025	<0.0025
4/25/2016		<0.0025	<0.0025		
4/26/2016	<0.0025			<0.0025	<0.0025
6/27/2016	<0.0025	<0.0025	<0.0025		
6/28/2016				<0.0025	<0.0025
8/29/2016	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/1/2016	<0.0025	<0.0025	<0.0025		
11/2/2016				<0.0025	<0.0025
1/4/2017	<0.0025	<0.0025	<0.0025		
1/5/2017				<0.0025	<0.0025
3/10/2017	<0.0025	<0.0025	<0.0025		
3/11/2017				<0.0025	<0.0025
5/11/2017	<0.0025	<0.0025	<0.0025	<0.0025	
5/12/2017					<0.0025
3/20/2018	<0.0025		<0.0025		
3/21/2018		<0.0025		<0.0025	<0.0025
6/6/2018	<0.0025	<0.0025	<0.0025		
6/8/2018				<0.0025	<0.0025
11/19/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
3/11/2019	<0.0025	<0.0025	<0.0025		
3/12/2019				<0.0025	<0.0025
5/5/2020	<0.0025	<0.0025	<0.0025		
5/6/2020				<0.0025	0.00029 (J)
9/29/2020	<0.0025	<0.0025	<0.0025		
9/30/2020				<0.0025	<0.0025

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	4.64	3.71	1.96		
2/23/2016				32.3	25.8
4/25/2016		3.7	1.71		
4/26/2016	2.65			39.3	25.4
6/27/2016	2.49	3.04	1		
6/28/2016				40.9	27.5
8/29/2016	2.45	3.2	1.69	18.9	26.7
11/1/2016	2.59	1.75	1.83		
11/2/2016				32	25.4
1/4/2017	2.69	1.79	1.75		
1/5/2017				25.1	27.4
3/10/2017	1.84	1.78	1.5		
3/11/2017				28.8	24.4
5/11/2017	2.12	1.14	1.34	25.5	
5/12/2017					20.7
3/20/2018	1.81		1.82		
3/21/2018		1.32		24.5	19.3
6/6/2018	2.32	1.32	1.19		
6/8/2018				26.9	21.6
11/19/2018	2.37	0.763	2.18	27.4	53.5
3/11/2019	1.93	0.777	1.24		
3/12/2019				25.9	46.3
5/28/2019	-0.0564 (U)	1.16	1.13		
5/29/2019				24.7	49.7
11/18/2019	2.25	1.31	1.52	24.8	
11/19/2019					42
5/5/2020	1.87	0.805	1.42		
5/6/2020				21.8	33.8
9/29/2020	2.63	1.73	1.32		
9/30/2020				26.4	29.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	0.09 (J)	0.06 (J)	0.04 (J)		
2/23/2016				0.085 (J)	0.047 (J)
4/25/2016		0.04 (J)	<0.1		
4/26/2016	0.08 (J)			0.05 (J)	0.04 (J)
6/27/2016	0.08 (J)	0.04 (J)	<0.1		
6/28/2016				0.05 (J)	<0.1
8/29/2016	0.09 (J)	0.16	0.04 (J)	<0.1	0.04 (J)
11/1/2016	0.08 (J)	0.17	<0.1		
11/2/2016				<0.1	<0.1
1/4/2017	0.1	0.23	<0.1		
1/5/2017				<0.1	<0.1
3/10/2017	0.1	0.21	<0.1		
3/11/2017				0.04 (J)	<0.1
5/11/2017	0.1	0.23	<0.1	0.04 (J)	
5/12/2017					0.04 (J)
10/12/2017	0.12	0.27	<0.1	0.04	<0.1
3/20/2018	0.12		<0.1		
3/21/2018		0.28		0.05 (J)	<0.1
6/6/2018	0.12	0.19	0.04 (J)		
6/8/2018				0.05 (J)	<0.1
11/19/2018	0.13	0.12	0.04 (J)	0.04 (J)	<0.1
3/11/2019	0.12	0.08 (J)	0.04 (J)		
3/12/2019				0.05 (J)	<0.1
5/28/2019	0.13	0.13	0.04 (J)		
5/29/2019				0.05 (J)	<0.1
11/18/2019	0.14	0.17	<0.1	0.05 (I)	
11/19/2019					<0.1
5/5/2020	0.15 (V)	0.09 (J)	0.05 (J)		
5/6/2020				<0.1	<0.1
9/29/2020	0.15	0.06	<0.1		
9/30/2020				<0.1	<0.1

Time Series

Constituent: Lead (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0013	<0.0013	<0.0013		
2/23/2016				<0.0013	<0.0013
4/25/2016		<0.0013	<0.0013		
4/26/2016	<0.0013			<0.0013	<0.0013
6/27/2016	<0.0013	<0.0013	<0.0013		
6/28/2016				<0.0013	<0.0013
8/29/2016	<0.0013	<0.0013	0.00039 (J)	<0.0013	<0.0013
11/1/2016	<0.0013	<0.0013	<0.0013		
11/2/2016				<0.0013	<0.0013
1/4/2017	<0.0013	<0.0013	0.00039 (J)		
1/5/2017				<0.0013	<0.0013
3/10/2017	<0.0013	<0.0013	<0.0013		
3/11/2017				<0.0013	<0.0013
5/11/2017	<0.0013	<0.0013	<0.0013	<0.0013	
5/12/2017					<0.0013
3/20/2018	<0.0013		<0.0013		
3/21/2018		<0.0013		<0.0013	<0.0013
3/11/2019	<0.0013	<0.0013	<0.0013		
3/12/2019				<0.0013	<0.0013
5/28/2019	<0.0013	<0.0013	<0.0013		
5/29/2019				<0.0013	<0.0013
11/18/2019	<0.0013	<0.0013	<0.0013	<0.0013	
11/19/2019					<0.0013
5/5/2020	<0.0013	<0.0013	<0.0013		
5/6/2020				<0.0013	<0.0013
9/29/2020	<0.0013	<0.0013	<0.0013		
9/30/2020				<0.0013	<0.0013

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.005	<0.005	<0.005		
2/23/2016				0.029	<0.005
4/25/2016		<0.005	0.013		
4/26/2016	0.025			0.019 (J)	<0.005
6/27/2016	0.0085	<0.005	0.01		
6/28/2016				0.02	<0.005
8/29/2016	0.01	<0.005	0.013	<0.005	<0.005
11/1/2016	0.011	0.0087	0.013		
11/2/2016				0.013	<0.005
1/4/2017	0.012	0.0079	0.012		
1/5/2017				0.0047 (J)	<0.005
3/10/2017	0.011	0.0049 (J)	0.013		
3/11/2017				0.018	<0.005
5/11/2017	0.0098	0.0073	0.0096	0.011	
5/12/2017					<0.005
3/20/2018	0.016		0.016		
3/21/2018		0.012		0.019	0.0023 (J)
6/6/2018	0.011	0.0051	0.011		
6/8/2018				0.014	0.0018 (J)
11/19/2018	0.011	0.0028 (J)	0.011	0.024	0.0047 (J)
3/11/2019	0.014	0.0024 (J)	0.013		
3/12/2019				0.017	0.002 (J)
5/28/2019	0.013	0.0012 (J)	0.011		
5/29/2019				0.012	0.002 (J)
11/18/2019	0.015	0.0032	0.011	0.028 (I)	
11/19/2019					<0.005
5/5/2020	0.014	0.0019	0.013		
5/6/2020				0.0085	0.0019
9/29/2020	0.017	<0.005	0.011		
9/30/2020				0.01	<0.005

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0002	<0.0002	<0.0002		
2/23/2016				<0.0002 (*)	<0.0002
4/25/2016		<0.0002	<0.0002		
4/26/2016	<0.0002			<0.0002	<0.0002
6/27/2016	<0.0002	<0.0002	7.1E-05 (J)		
6/28/2016				<0.0002	<0.0002
8/29/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
11/1/2016	<0.0002	<0.0002	<0.0002		
11/2/2016				<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	<0.0002		
1/5/2017				<0.0002	<0.0002
3/10/2017	<0.0002	<0.0002	<0.0002		
3/11/2017				<0.0002	<0.0002
5/11/2017	<0.0002	<0.0002	<0.0002	<0.0002	
5/12/2017					<0.0002
3/20/2018	<0.0002		<0.0002		
3/21/2018		<0.0002		<0.0002	<0.0002
3/11/2019	<0.0002	<0.0002	<0.0002		
3/12/2019				<0.0002	<0.0002
5/5/2020	<0.0002	<0.0002	<0.0002		
5/6/2020				<0.0002	<0.0002
9/29/2020	<0.0002	<0.0002	<0.0002		
9/30/2020				<0.0002	<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.015	<0.015	<0.015		
2/23/2016				0.0011 (J)	0.0042 (J)
4/25/2016		<0.015	<0.015		
4/26/2016	<0.015			<0.015	<0.015
6/27/2016	<0.015	<0.015	<0.015		
6/28/2016				<0.015	0.0061 (J)
8/29/2016	<0.015	0.0009 (J)	<0.015	<0.015	0.005 (J)
11/1/2016	<0.015	<0.015	<0.015		
11/2/2016				<0.015	0.0066 (J)
1/4/2017	<0.015	0.0011 (J)	<0.015		
1/5/2017				<0.015	0.0087 (J)
3/10/2017	<0.015	<0.015 (*)	<0.015		
3/11/2017				<0.015 (*)	<0.015 (*)
5/11/2017	<0.015	<0.015	<0.015	<0.015	
5/12/2017					<0.015 (*)
3/20/2018	<0.015		<0.015		
3/21/2018		<0.015		<0.015	0.0058 (J)
6/6/2018	<0.015	<0.015	<0.015		
6/8/2018				<0.015	0.0067 (J)
11/19/2018	<0.015	<0.015	<0.015	<0.015	<0.015
3/11/2019	<0.015	<0.015	<0.015		
3/12/2019				<0.015	<0.015
5/28/2019	<0.015	<0.015	<0.015		
5/29/2019				<0.015	0.0033 (J)
11/18/2019	<0.015	<0.015	<0.015	<0.015	
11/19/2019					0.0068 (I)
5/5/2020	<0.015	<0.015	<0.015		
5/6/2020				<0.015	0.012
9/29/2020	<0.015	<0.015	<0.015		
9/30/2020				<0.015	0.0061

Time Series

Constituent: pH (SU) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	6.19 (B01)	6.11 (B01)	5.09 (B01)		
2/23/2016				5.03 (B01)	6.32 (B01)
4/25/2016		5.65 (B02)	5 (B02)		
4/26/2016	5.99 (B02)			4.68 (B02)	6.36 (B02)
6/27/2016	6.04 (B03)	5.35 (B03)	4.94 (B03)		
6/28/2016				4.82 (B03)	6.09 (B03)
8/29/2016	6.01 (B04)	7.06 (B04)	5.17 (B04)	5.94 (B04)	6.27 (B04)
11/1/2016	6.03 (B05)	6.65 (B05)	4.91 (B05)		
11/2/2016				5.2 (B05)	6.09 (B05)
1/4/2017	6.1 (B06)	6.88 (B06)	4.99 (B06)		
1/5/2017				5.2 (B06)	6.18 (B06)
3/10/2017	6.1 (B07)	6.59 (B07)	5.02 (B07)		
3/11/2017				5.05 (B07)	6.34 (B07)
5/11/2017	5.95 (B08)	6.7 (B08)	4.76 (B08)	4.96 (B08)	
5/12/2017					6.09 (B08)
10/12/2017	5.9	6.66	4.74	5.37	6.13
6/6/2018	6.04	6.47	4.96		
6/8/2018				5.25	6.31
11/19/2018	6.11	6.09	4.95	5.26	6.15
3/11/2019	6.15	6.03	4.97		
3/12/2019				5.23	6.14
5/28/2019	6.62	6.29	4.73		
5/29/2019				5.38	6.15
5/5/2020	6.09	5.91	5.04		
5/6/2020				5.61	6.41
9/29/2020	6.08	5.73	4.91		
9/30/2020				5.57	6.43

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0013	<0.0013	<0.0013		
2/23/2016				<0.0013	<0.0013
4/25/2016		0.00038 (J)	<0.0013		
4/26/2016	<0.0013			<0.0013	<0.0013
6/27/2016	<0.0013	<0.0013	<0.0013		
6/28/2016				<0.0013 (*)	<0.0013 (*)
8/29/2016	<0.0013	<0.0013	<0.0013	0.00027 (J)	0.0003 (J)
11/1/2016	<0.0013	<0.0013	<0.0013		
11/2/2016				<0.0013	<0.0013
1/4/2017	<0.0013	<0.0013	<0.0013		
1/5/2017				0.0012 (J)	0.00028 (J)
3/10/2017	<0.0013	<0.0013 (*)	<0.0013		
3/11/2017				<0.0013 (*)	<0.0013
5/11/2017	<0.0013	<0.0013	<0.0013	<0.0013	
5/12/2017					<0.0013
3/20/2018	<0.0013		0.00069 (J)		
3/21/2018		<0.0013		0.00037 (J)	0.00062 (J)
6/6/2018	<0.0013	<0.0013	0.0003 (J)		
6/8/2018				0.00025 (J)	0.00028 (J)
11/19/2018	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
3/11/2019	<0.0013	<0.0013	<0.0013		
3/12/2019				<0.0013	<0.0013
5/5/2020	<0.0013	<0.0013	<0.0013		
5/6/2020				<0.0013	<0.0013
9/29/2020	<0.0013	<0.0013	<0.0013		
9/30/2020				<0.0013	<0.0013

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<5	6.3	<5		
2/23/2016				480	320
4/25/2016		6.1	1.4 (J)		
4/26/2016	<5			780	570
6/27/2016	1.6 (J)	6.6	<5		
6/28/2016				680	580
8/29/2016	<5	4.5 (J)	<5	470 (J)	630
11/1/2016	<5	<5	<5		
11/2/2016				530	570
1/4/2017	<5	<5 (*)	<5 (*)		
1/5/2017				490	640
3/10/2017	<5	2.3 (J)	<5		
3/11/2017				660	710
5/11/2017	<5	<5	<5	570	
5/12/2017					600
10/12/2017	<5	<5	<5	520	670
3/20/2018	1.8 (J)		<5		
3/21/2018		<5		530	720
6/6/2018	2.3 (J)	4.8 (J)	<5		
6/8/2018				560	750
11/19/2018	2.2 (J)	4.4 (J)	7.473 (D)	520	910
3/11/2019	1.5 (J)	5.2	<5		
3/12/2019				510	870
5/28/2019	3 (J)	4.3 (J)	<5		
5/29/2019				460	870
11/18/2019	<5	2.8 (I)	<5	350	
11/19/2019					650
5/5/2020	<5	4.4 (J)	<5		
5/6/2020				320	550
9/29/2020	3.3	4.8	<5		
9/30/2020				430	630

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.0005	<0.0005	<0.0005		
2/23/2016				<0.0005	<0.0005
4/25/2016		<0.0005	<0.0005		
4/26/2016	<0.0005			<0.0005	<0.0005
6/27/2016	<0.0005	<0.0005	<0.0005		
6/28/2016				<0.0005	<0.0005
8/29/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
11/1/2016	<0.0005	<0.0005	<0.0005		
11/2/2016				<0.0005	<0.0005
1/4/2017	<0.0005	<0.0005	<0.0005		
1/5/2017				<0.0005	<0.0005
3/10/2017	<0.0005	<0.0005	<0.0005		
3/11/2017				<0.0005	<0.0005
5/11/2017	<0.0005	<0.0005	<0.0005	<0.0005	
5/12/2017					<0.0005
3/20/2018	<0.0005		<0.0005		
3/21/2018		<0.0005		<0.0005	<0.0005
3/11/2019	<0.0005	<0.0005	<0.0005		
3/12/2019				<0.0005	<0.0005
5/5/2020	<0.0005	<0.0005	<0.0005		
5/6/2020				<0.0005	<0.0005
9/29/2020	<0.0005	<0.0005	<0.0005		
9/30/2020				<0.0005	<0.0005

Time Series

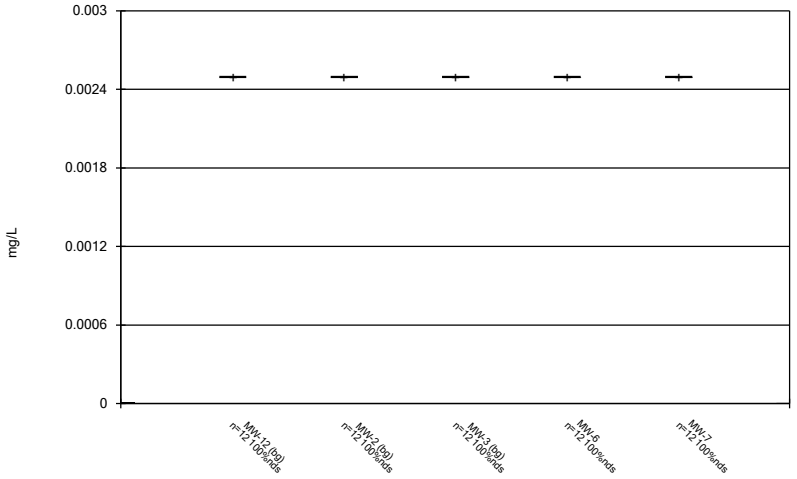
Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/14/2020 2:27 PM View: Descriptive

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	410	74	46		
2/23/2016				7600	3700
5/11/2016	410	200	42	7500	3700
6/27/2016	4200 (o)	42	24		
6/28/2016				7600	3700
8/29/2016	490	200	42	5100	3300
11/1/2016	540	220	64		
11/2/2016				6500	3800
1/4/2017	520	140	44		
1/5/2017				5500	3500
3/10/2017	490	160	16		
3/11/2017				7000	3500
5/11/2017	490	190	42	6000	
5/12/2017					3300
10/12/2017	470	150	30	5500	3000
3/20/2018	510		12		
3/21/2018		150		5400	3400
6/6/2018	460	160	46		
6/8/2018				6100	3200
11/19/2018	490	88 (D)	22	5500	6500
3/11/2019	440	72	12		
3/12/2019				5400	6800
5/28/2019	540	140	110		
5/29/2019				5800	8600
11/18/2019	560	170	52	6000	
11/19/2019					8200
5/5/2020	430	54	34		
5/6/2020				5000	6100
9/29/2020	580	40	36		
9/30/2020				5600	4300

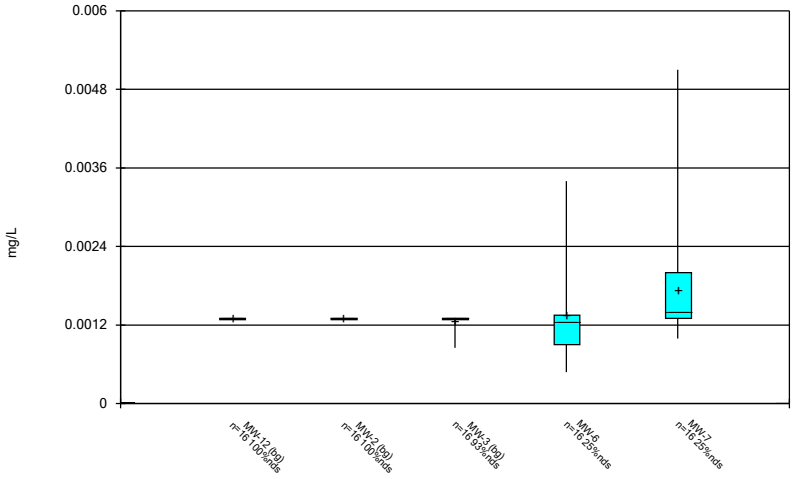
Box Plots

Box & Whiskers Plot



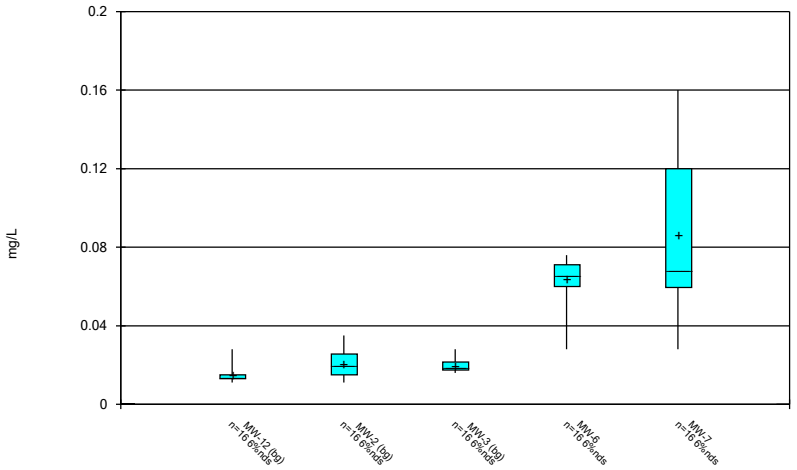
Constituent: Antimony Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



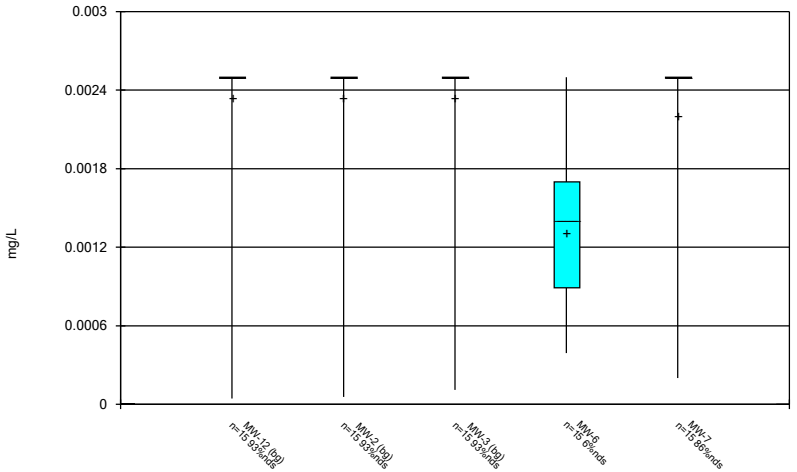
Constituent: Arsenic Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



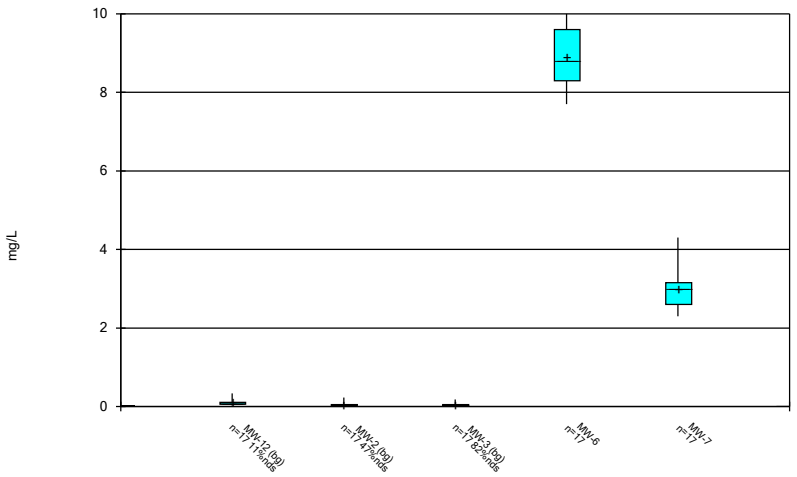
Constituent: Barium Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



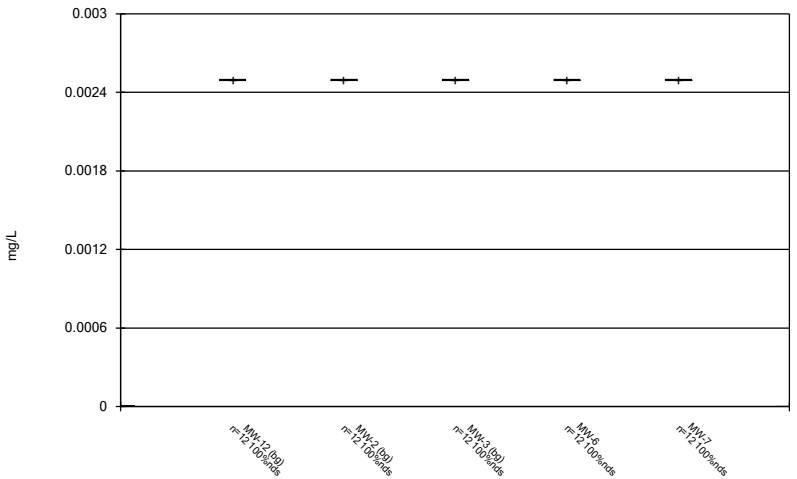
Constituent: Beryllium Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



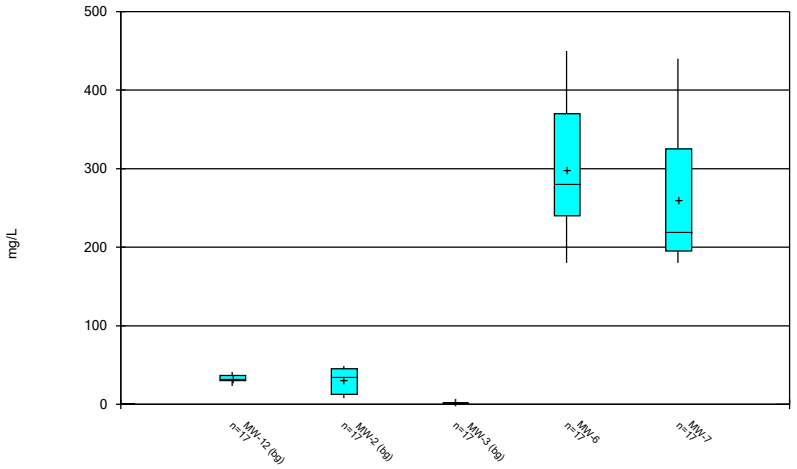
Constituent: Boron Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



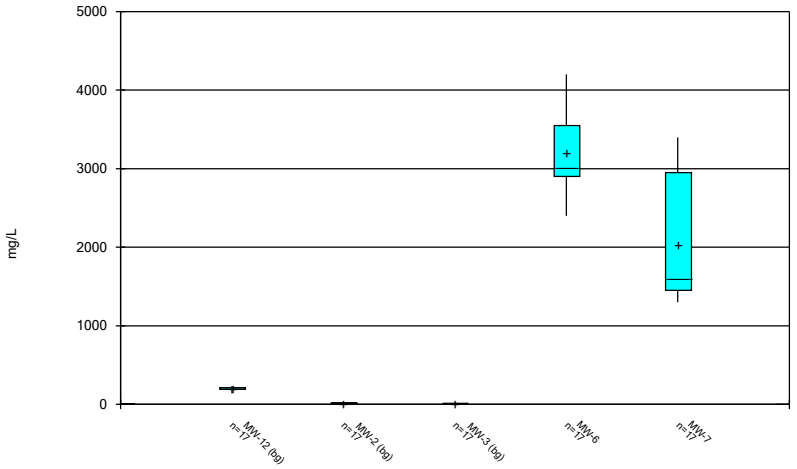
Constituent: Cadmium Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



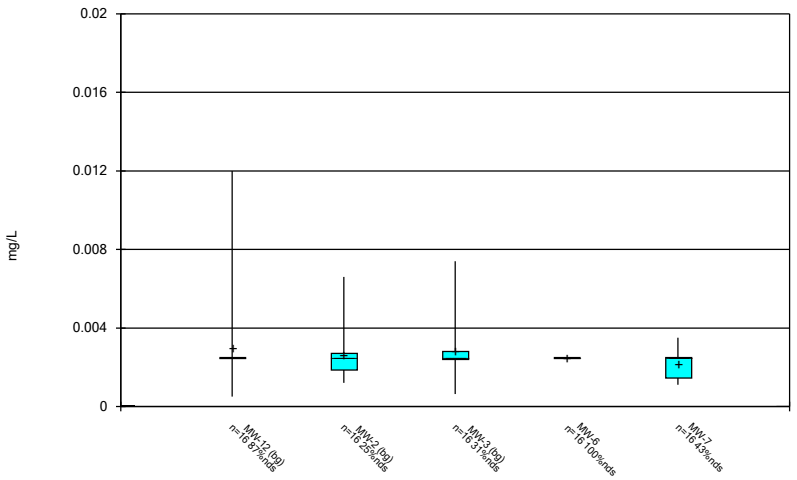
Constituent: Calcium Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



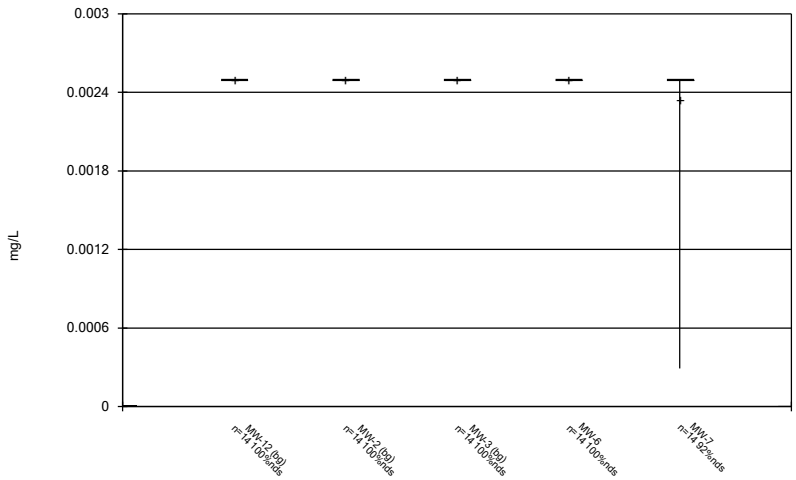
Constituent: Chloride Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



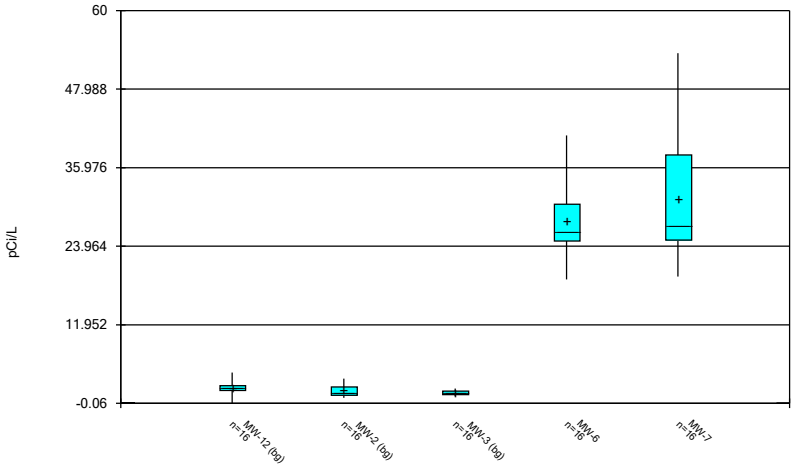
Constituent: Chromium Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



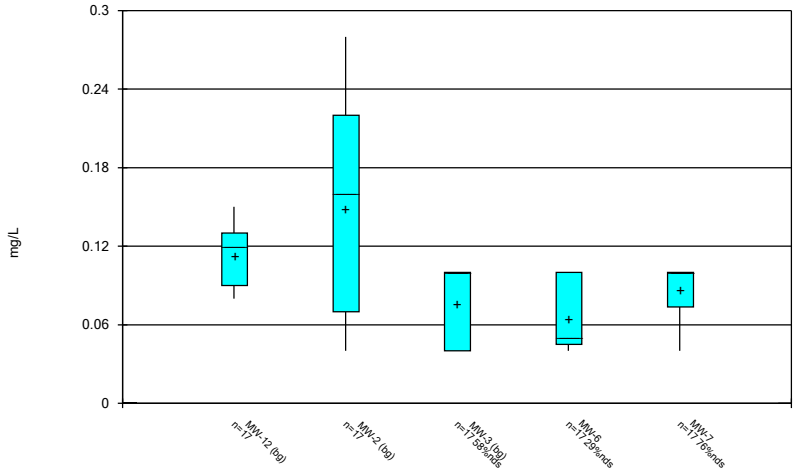
Constituent: Cobalt Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



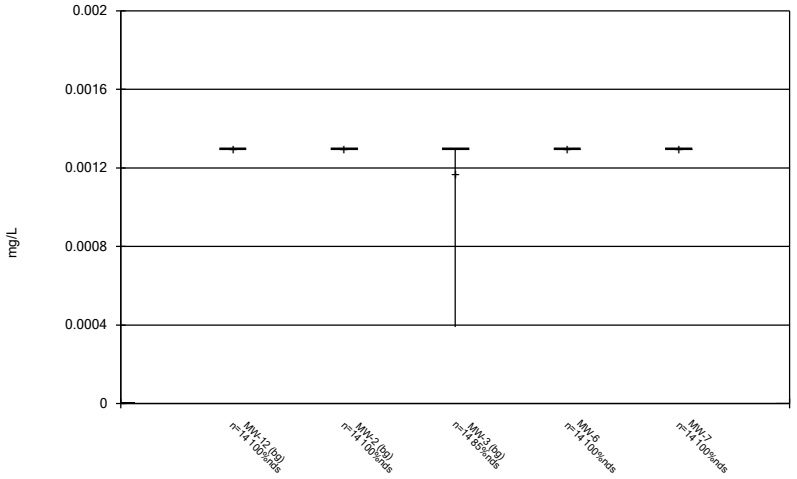
Constituent: Combined Radium 226 + 228 Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



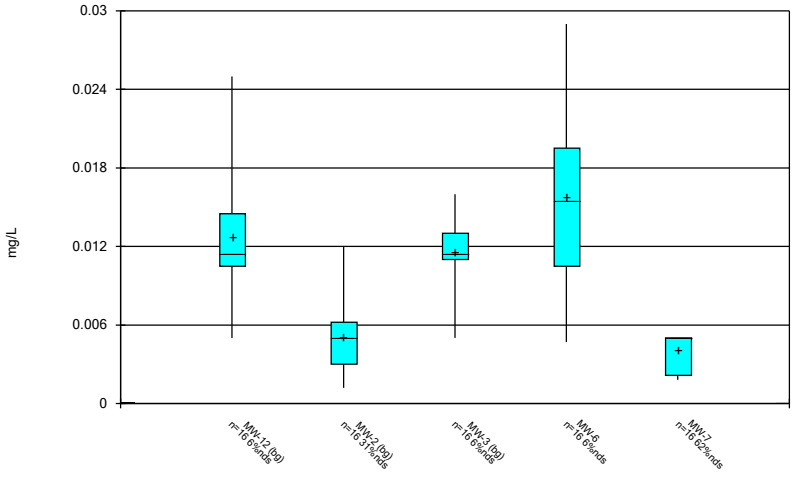
Constituent: Fluoride Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



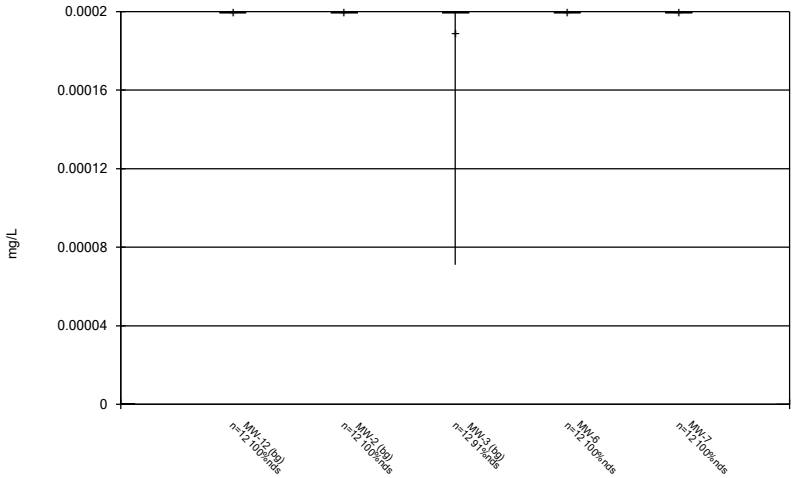
Constituent: Lead Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



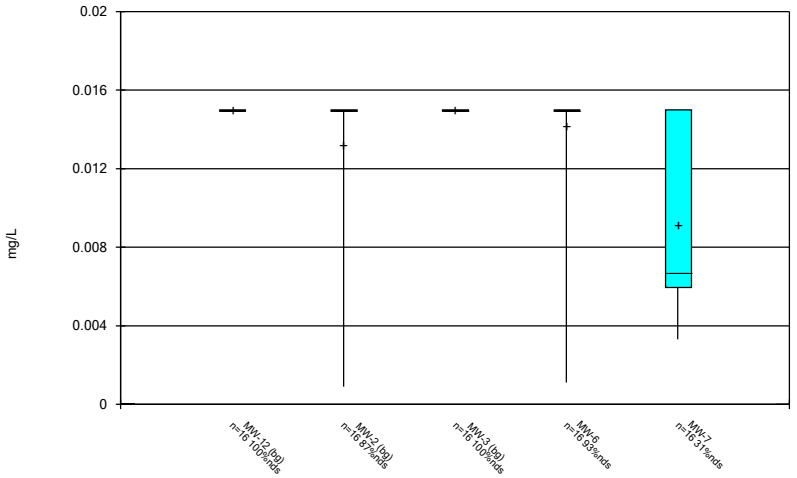
Constituent: Lithium Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



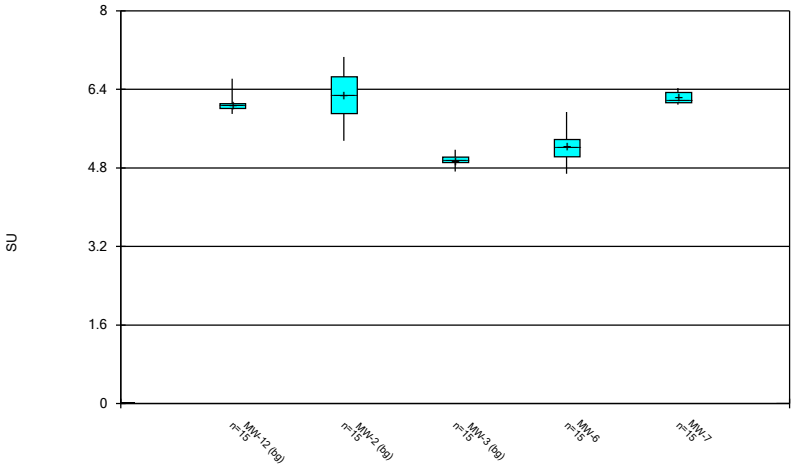
Constituent: Mercury Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



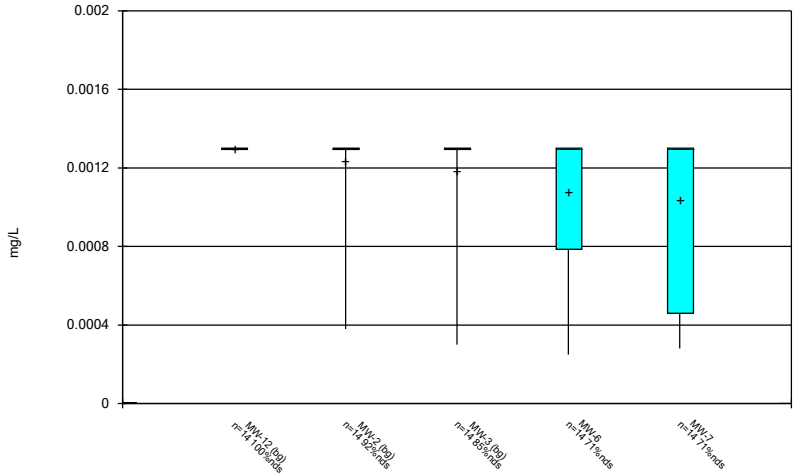
Constituent: Molybdenum Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



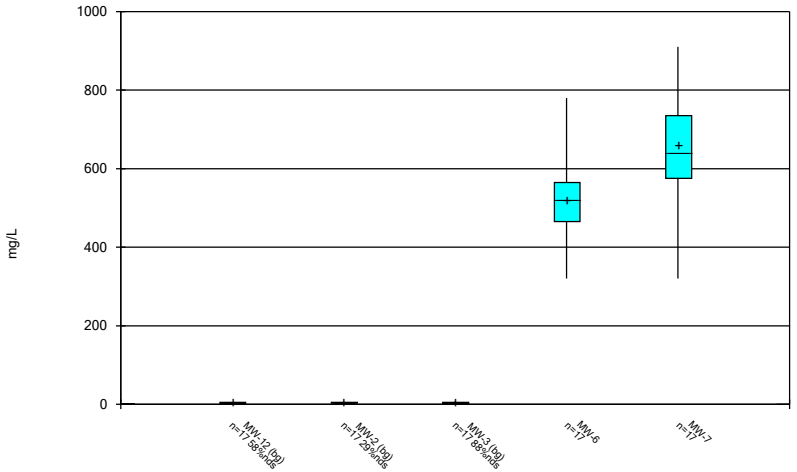
Constituent: pH Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



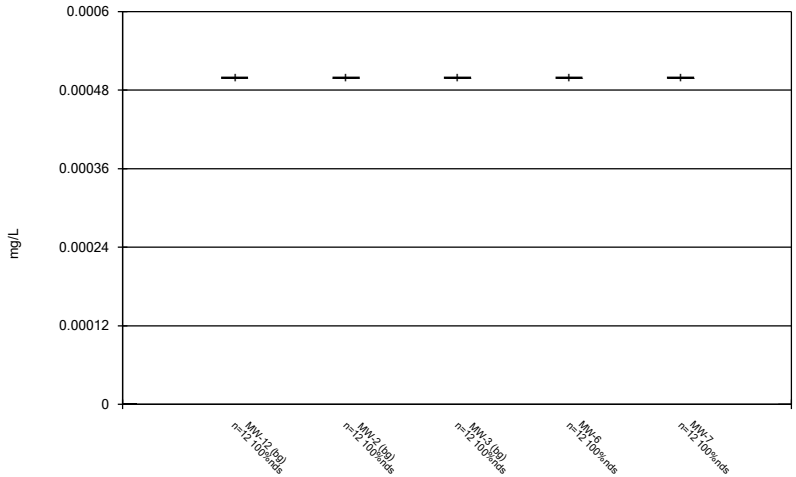
Constituent: Selenium Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



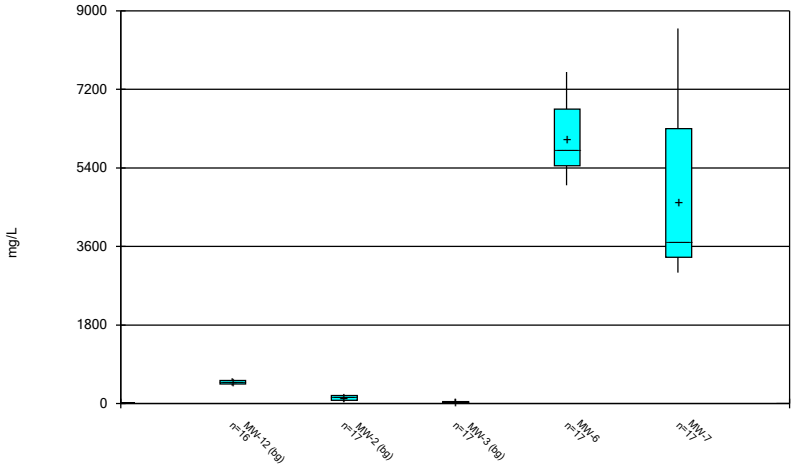
Constituent: Sulfate Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 12/14/2020 2:27 PM View: Descriptive
Plant Smith Client: Geosyntec Data: Plant Smith CCR