Prepared for

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2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

FLORIDA POWER & LIGHT COMPANY, PLANT SMITH ASH POND

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Project Number FR8308

January 28, 2022

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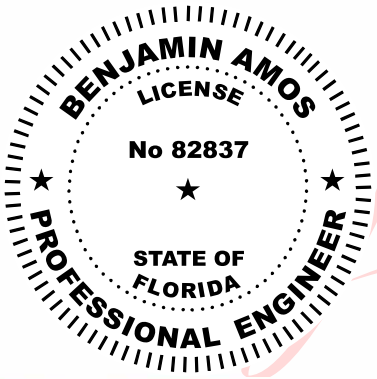
CERTIFICATION STATEMENT

This *2021 Annual Groundwater Monitoring and Corrective Action Report, Florida Power & Light 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.



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EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency ("USEPA") Coal Combustion Residuals ("CCR") rule (40 Code of Federal Regulations ("CFR") Part 257, Subpart D) ("CCR Rule"), this *2021 Annual Groundwater Monitoring and Corrective Action Report* documents CCR groundwater monitoring activities and remedy selection evaluations completed in 2021 at the Florida Power & Light Company's ("FPL", formerly Gulf Power Company) Plant Lansing Smith ("Plant Smith") Ash Pond.

Plant Smith ceased coal-fired operations in March 2016. In 2021, FPL completed necessary pre-closure activities and improvements in preparation to close the Ash Pond in accordance with a State of Florida-approved closure plan. Pre-closure activities included: (i) termination of process water and stormwater discharge to the Ash Pond; and (ii) the construction of a lined wastewater pond and pipelines to direct plant process water and stormwater to the newly constructed lined pond. A *Notification of Intent to Initiate Closure* was completed on May 7, 2021, and posted to the FPL CCR website before June 7, 2021. FPL has initiated closure activities including excavation of ash materials outside the limits of recently constructed lined ponds, including the perimeter dike system. Excavated ash is being placed and compacted in the final closure area in accordance with the State of Florida-approved closure plan.

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

- background wells: MW-02, MW-03, and MW-12;
- downgradient wells[1]: MW-06 and MW-07 and two additional wells installed in November 2021 (MW-13R and MW-14R); 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 relative to background concentrations. In accordance with the CCR Rule, FPL initiated an assessment monitoring program for the Ash Pond in March 2018 and continued assessment monitoring activities for the Ash

[1] MW-08, MW-09, MW-10, MW-11, MW-13, and MW-14 were abandoned in August 2020 to allow for pre-closure activities (i.e., removal of the perimeter dike system).

Pond through 2021. Semi-annual assessment monitoring groundwater sample collection events for all CCR Rule Appendix III and Appendix IV parameters were conducted in February and September 2021.

In 2021, analytical data from the February 2021 and September 2021 sampling events were evaluated in accordance with the *Statistical Analysis Plan* ("SAP"). Statistical analysis of data from the February 2021 and September 2021 sampling events indicated SSIs of the following CCR Rule Appendix III constituents above background levels: boron, calcium, chloride, sulfate, total dissolved solids ("TDS"), and pH (September 2021 only).

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

	Semi-annual Assessment Monitoring Event	
SSL Constituent	February 2021	September 2021
Radium 226 and 228 combined (total radium)	MW-06 MW-07	MW-06 MW-07
Arsenic[1]	--	--
Lithium[2]	--	--

[1] An arsenic SSL was previously identified at MW-11 which was abandoned in 2020 to facilitate closure activities. The arsenic SSL will be reassessed when closure activities allow MW-11 to be reinstalled.
[2] A lithium SSL was previously noted at MW-13 which was abandoned in 2020 to facilitate closure activities. MW-13R was installed in November 2021 as a replacement well for MW-13. The lithium SSL will be reassessed when enough monitoring data are available to perform statistical analysis on MW-13R.

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

FPL initiated assessment of corrective measures ("ACM") in January 2019. The *Assessment of Corrective Measures Report* was completed in June 2019. A public meeting was held in December 2020 to discuss the ACM. In 2021, FPL 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 completion of an assessment of monitored natural attenuation ("MNA") as a potential remedial component. Bench-scale and desktop evaluations indicate that MNA is a viable remedy for the arsenic and lithium SSLs at Plant Smith. A remedy selection report is currently being prepared.

As documented in the *2020 Annual Groundwater Monitoring and Corrective Action Report*, to facilitate Ash Pond closure, 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 November 2021, Ash Pond closure activities had progressed to an extent to allow FPL to install replacement monitoring wells for MW-13 and MW-14 (replacement wells MW-13R and MW-14R, respectively). Replacement wells MW-13R and MW-14R were sampled in November 2021 as part of ongoing CCR groundwater monitoring activities. In accordance with the SAP, replacement monitoring wells need at least 4 independent samples to evaluate the pooling recent sample data with historical sample data from MW-13 and MW-14. The other monitoring wells that were abandoned in 2020 will be replaced as Ash Pond closure progresses.

In 2021, FPL evaluated the nature and extent of lithium and arsenic in groundwater downgradient of the Ash Pond. Delineation activities were completed in 2021 and included sampling of MWI-12A and PZ-14. Samples collected from the delineation wells/piezometers indicate that the horizontal extent of arsenic and lithium SSLs remain delineated. Vertical delineation was previously considered complete, although vertical delineation locations continued to be sampled through 2020. The vertical delineation wells were abandoned in 2020 to facilitate Ash Pond closure activities. The need for additional vertical delineation activities will be reassessed as additional monitoring data from CCR monitoring wells becomes available and is evaluated per the SAP.

In 2022, the Ash Pond will remain in assessment monitoring.

Geosyntec consultants

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1.0 INTRODUCTION

1.1 Overview

On behalf of Florida Power & Light Company ("FPL", formerly Gulf Power Company), Geosyntec Consultants, Inc. ("Geosyntec") has prepared this *2021 Annual Groundwater Monitoring and Corrective Action Report* for FPL's Plant Lansing Smith ("Site" or "Plant Smith") Ash Pond. The purpose of this report is to present a summary of CCR groundwater monitoring and corrective action activities conducted in 2021 in accordance with annual reporting requirements of the CCR Rule, 40 CFR 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.

The 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 and was historically used to support coal-fired operation at Plant Smith that ceased in March 2016. In 2021, FPL completed necessary pre-closure activities and improvements in preparation to close the Ash Pond in accordance with a State of Florida-approved closure plan. Pre-closure activities included: (i) termination of process water and stormwater discharge to the Ash Pond; and (ii) the construction of a lined wastewater pond and pipelines to direct plant process water and stormwater to the newly constructed lined pond. A *Notification of Intent to Initiate Closure* was completed on May 7, 2021, and posted to the FPL CCR website before June 7, 2021. FPL has initiated closure activities including excavation of ash materials outside the limits of recently constructed lined ponds, including the perimeter dike system. Excavated ash is being placed and compacted in the final closure area in accordance with the State of Florida-approved closure plan.

Pursuant to the CCR Rule, FPL 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 currently comprised of the following:

- background wells: MW-02, MW-03, and MW-12;
- downgradient wells[2]: MW-06 and MW-07 and two additional well installed in November 2021 (MW-13R and MW-14R); and
- piezometers: MW-01, MW-04, and MW-05.

As previously reported (Geosyntec, 2020) in December 2018, FPL installed vertical and horizontal delineation wells/piezometers to evaluate the nature and extent of identified SSLs of CCR Rule Appendix IV constituents. In 2021, FPL continued to monitor

[2] MW-08, MW-09, MW-10, MW-11, MW-13, and MW-14 were abandoned in August 2020 to allow for pre-closure activities (i.e., removal of the perimeter dike system).

delineation at the following horizontal delineation wells/piezometers around the Ash Pond for CCR Rule Appendix IV constituents: MWI-12A and PZ-14.

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 2021.

2.1 Monitoring Well Installation and Maintenance

As documented in the *2020 Annual Groundwater Monitoring and Corrective Action Report* (Geosyntec, 2021a), 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 2**): MW-08, MW-09, MW-10, MW-11, MW-13, MW-14, PZ-11D, and PZ-13D.

In November 2021, closure activities had progressed to an extent along the western perimeter of the Ash Pond to allow for installation of replacement monitoring wells for MW-13 and MW-14 (MW-13R and MW-14R, respectively) (locations shown in **Figure 2**). Replacement wells MW-13R and MW-14R were sampled in November 2021. FPL will install replacement wells for the other abandoned monitoring wells as closure of the Ash Pond progresses.

2.2 Semi-Annual Assessment Monitoring Events

Semi-annual assessment monitoring events were conducted in February 2021 and September 2021, with MW-13R and MW-14R sampled in November 2021 following installation activities. During the 2021 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 February and September 2021, groundwater samples were collected from the locations shown on **Figure 3**. In November 2021, groundwater samples were collected from the replacement wells shown on **Figure 4**. A summary of groundwater sampling events completed in 2021 is provided in **Table 2**. Analytical data associated with these events are summarized in **Table 3**; laboratory analytical reports are included in **Appendix A.**

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**. **Figure 5** and **Figure 6** show the groundwater elevations during the February and September 2021 semi-annual assessment monitoring events, respectively. Groundwater elevations, and by extension groundwater flow patterns, were generally consistent with historical observations.

3.2 Groundwater Sampling

Groundwater samples were collected in general accordance with Florida Department of Environmental Protection ("FDEP") Standard Operating Procedures 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 horizontal 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 2021 semi-annual assessment monitoring events as follows:

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

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

Groundwater sample results (**Table 3**) from these locations indicate continued and complete horizontal delineation of both arsenic and lithium in 2021.

Vertical delineation was previously considered complete, although vertical delineation locations continued to be sampled through 2020. The vertical delineation locations (i.e., PZ-13D and PZ-11D) were abandoned in 2020 to facilitate Ash Pond closure activities. The need for additional vertical delineation activities will be reassessed as additional monitoring data from CCR monitoring wells becomes available and is evaluated per the SAP.

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 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 February 2021 and September 2021 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 2021.

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 February 2021 and September 2021 semi-annual assessment monitoring events in accordance with the SAP (Groundwater Stats Consulting ("GSC"), 2017). The SAP describes Site-specific statistical methods that are used to evaluate CCR groundwater data. Statistical analysis was not performed on CCR groundwater monitoring data collected in November 2021 from the replacement monitoring wells MW-13R and MW-14R. The SAP requires a minimum of 4 independent samples at each well prior to evaluating the pooling of recent sampling data with historical sample data from MW-13 and MW-14.

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 reports for the February 2021 and September 2021 semi-annual assessment monitoring events provided in **Appendix B** and **Appendix C**, respectively.

4.2 Statistical Analysis Results

Analytical data from the February 2021 and September 2021 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 February 2021 and September 2021 semi-annual assessment monitoring events differed from background levels. SSIs were identified for the following constituents: boron, calcium, chloride, sulfate, TDS, and pH (September 2021 only). As such, assessment monitoring will continue in 2022.

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	
	February 2021	September 2021
Radium 226 and 228 combined (total radium)	MW-06 MW-07	MW-06 MW-07
Arsenic[1]	--	--
Lithium[2]	--	--

[1] An arsenic SSL was previously identified at MW-11 which was abandoned in 2020 to facilitate closure activities. The arsenic SSL will be reassessed when closure activities allow MW-11 to be reinstalled.

[2] A lithium SSL was previously noted at MW-13 which was abandoned in 2020 to facilitate closure activities. MW-13R was installed in November 2021 as a replacement well for MW-13. The lithium SSL will be reassessed when enough monitoring data are available to perform statistical analysis on MW-13R.

5.0 ALTERNATE SOURCE DEMONSTRATION

In accordance with the CCR Rule, FPL prepared an 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:

- Parent radionuclides that decay into total radium (i.e., uranium and thorium) are naturally-occurring constituents in native sediments at Plant Smith;
- Interactions between saline groundwater and native sediments enriched in uranium and thorium (parent radionuclides to total radium) mobilizes total radium into groundwater; and
- 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 2021, FPL completed necessary pre-closure activities and improvements in preparation to close the Ash Pond in accordance with a State of Florida-approved closure plan. Pre-closure activities included: (i) termination of process water and stormwater discharge to the Ash Pond; and (ii) the construction of a lined wastewater pond and pipelines to direct plant process water and stormwater to the newly constructed lined pond. A *Notification of Intent to Initiate Closure* was completed on May 7, 2021, and posted to the FPL CCR website before June 7, 2021. FPL has initiated closure activities including excavation of ash materials outside the limits of recently constructed lined ponds, including the perimeter dike system. Excavated ash is being placed and compacted in the final closure area in accordance with the State of Florida-approved closure plan.

In accordance with the CCR Rule, FPL continued implementation of assessment monitoring in 2021. Statistical analysis of 2021 data identified SSLs of total radium downgradient of the Ash Pond. An ASD was prepared for the total radium SSLs which documents that another source caused the total radium SSLs. Arsenic and lithium SSLs were previously identified at wells that were abandoned in 2020; the arsenic and lithium SSLs will be reassessed when closure activities allow MW-11 to be reinstalled and when enough data has been collected from the reinstalled wells to perform statistical analysis. Monitoring data collected in 2021 indicate continued horizontal delineation of lithium and arsenic SSLs downgradient of the Ash Pond. Vertical delineation was previously considered complete and the need for additional vertical delineation will be assessed as additional monitoring data becomes available and is evaluated per the SAP.

As documented in the *2020 Annual Groundwater Monitoring and Corrective Action Report*, to facilitate Ash Pond closure, 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 November 2021, Ash Pond closure activities had progressed to an extent to allow FPL to install replacement monitoring wells for MW-13 and MW-14 (replacement wells MW-13R and MW-14R, respectively). Replacement wells MW-13R and MW-14R were sampled in November 2021 as part of ongoing CCR groundwater monitoring activities. In accordance with the SAP, replacement monitoring wells need at least 4 independent samples to evaluate pooling recent sample data with historical sample data from MW-13 and MW-14 for statistical analysis. The other monitoring wells that were abandoned in 2020 will be replaced as Ash Pond closure progresses.

An ACM was initiated in January 2019 and completed in June 2019 (Geosyntec, 2019b). A public meeting was held in December 2020 to discuss the ACM. Corrective measures evaluation and remedy selection is ongoing, as documented in the December 2021 *Remedy Selection Semi-Annual Progress Report* (Geosyntec, 2021b). Remedy evaluation activities included assessing temporal constituent concentration trends and completion of an assessment of MNA as a potential remedial component. Bench-scale and desktop evaluations indicate that MNA is a viable remedy for the arsenic and lithium SSLs at Plant Smith. A remedy selection report is currently being prepared.

Assessment monitoring will continue in 2022.

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

Geosyntec Consultants, 2021a. 2020 Annual Groundwater Monitoring Report, Gulf Power Company, Plant Smith, Ash Pond, January.

Geosyntec Consultants, 2021b. 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.

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
Florida Power & Light 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
MW-13R[4]	11/2/2021	462673.45	1590519.02	11.51	14.81	-7.50	-17.50	Downgradient
MW-14R[4]	11/2/2021	460706.93	1590247.87	5.59	8.89	-6.25	-16.25	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. Monitoring well/piezometer was abandoned in August 2020 to facilitate CCR unit closure.
4. Monitoring well was re-installed in November 2021 upon sufficient progression of CCR closure activities along the western perimeter of the Ash Pond to enable installation.

TABLE 2: SUMMARY OF 2021 GROUNDWATER SAMPLING EVENTS
Florida Power & Light Company - Plant Smith Ash Pond, Bay County, Florida

Monitoring Location	2021 Semi-Annual Assessment Monitoring Event 1	2021 Semi-Annual Assessment Monitoring Event 2
MW-02	2/9/2021	9/16/2021
MW-03	2/9/2021	9/16/2021
MW-06	2/9/2021	9/17/2021
MW-07	2/9/2021	9/17/2021
MW-12	2/9/2021	9/16/2021
MWI-12A	2/9/2021	9/17/2021
PZ-14	2/9/2021	9/17/2021
MW-13R[2,3]	NI[4]	11/19/2021
MW-14R[2,3]	NI[4]	11/19/2021

Notes:

1. Both assessment monitoring events include groundwater samples analyzed for CCR Rule Appendix III and Appendix IV constituents.
2. Monitoring well was re-installed in November 2021 upon sufficient progression of CCR closure activites along the western perimeter of the Ash Pond to enable installation.
3. Monitoring well was sampled only as part of Assessment Monitoring Event 2.
4. NI Indicates monitoring well not installed.

TABLE 3: SUMMARY OF 2021 GROUNDWATER LABORATORY ANALYTICAL DATA
Florida Power & Light 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	2/9/2021	0.0015 U	0.00039 U	0.015	0.00017 U	0.024 I	0.00028 U	9.1	20	0.0043	0.00056 U	1.3	0.06 I	0.00029 U	0.0019 U	0.00007 U	0.0045 U	5.48	0.00082 U	9.2	130	0.00012 U
MW-03	Background	2/9/2021	0.0015 U	0.00039 U	0.023	0.00017 U	0.018 U	0.00028 U	2.4	15	0.0021 I	0.00056 U	1.78	0.032 U	0.00029 U	0.0082	0.00007 U	0.0045 U	4.87	0.00082 U	1.4 U	66	0.00012 U
MW-12	Background	2/9/2021	0.0015 U	0.00039 U	0.011	0.00017 U	0.09	0.00028 U	26	150	0.0019 I	0.00056 U	2.16	0.11	0.00029 U	0.012	0.00007 U	0.0045 U	5.96	0.00082 U	1.4 U	500	0.00012 U
MW-06	Downgradient	2/9/2021	0.0015 U	0.0021	0.065	0.00017 U	7.5	0.00028 U	230	2500	0.0013 I	0.00056 U	22.1	0.04 I	0.00029 U	0.015 I	0.00007 U	0.0045 U	5.40	0.00082 U	360	5300	0.00012 U
MW-07	Downgradient	2/9/2021	0.0015 U	0.0025	0.085	0.00017 U	3	0.00028 U	250	2000	0.0051	0.00056 U	26.8	0.032 U	0.00029 U	0.0095 U	0.00007 U	0.017	6.35	0.00082 U	420	4200	0.00012 U
MWI-12A	Delineation	2/9/2021	0.0015 U	0.00054 I	0.051	0.00017 U	3.7	0.00028 U	59	140	0.002 I	0.00056 U	11.1	0.05 I	0.00029 U	0.0019 U	0.00007 U	0.018	6.29	0.00082 U	110	600	0.00012 U
PZ-14	Delineation	2/9/2021	0.0015 U	0.014	0.15	0.00017 U	11	0.00028 U	800	2500	0.0031	0.00056 U	19	0.49	0.00029 U	0.019 U	0.00007 U	0.0045 U	6.24	0.00082 U	1300	7300	0.00012 U
Semi-Annual Assessment Monitoring Event 2																							
MW-02	Background	9/16/2021	0.0015 U	0.0014	0.015	0.00017 U	0.045 I	0.00028 U	6.9	11	0.001 U	0.00056 U	2.57	0.07 U	0.00029 U	0.0019 U	0.00015 U	0.0045 U	5.47	0.00082 U	5	50	0.00012 U
MW-03	Background	9/16/2021	0.0015 U	0.00039 U	0.025	0.00017 U	0.018 U	0.00028 U	2.6	15	0.001 U	0.00056 U	1.24	0.07 U	0.00029 U	0.014	0.00015 U	0.0045 U	4.98	0.00082 U	1.4 U	76	0.00012 U
MW-12	Background	9/16/2021	0.0015 U	0.00064 I	0.012 V	0.00017 U	0.11	0.035	250	160	0.0032 V	0.26	2.61	0.11	0.00029 U	0.17	0.00015 U	0.0045 U	5.90	0.009	1.4 U	430	0.0043
MW-06	Downgradient	9/17/2021	0.0015 U	0.0027	0.071	0.0013 I	7.3	0.00028 U	230	2900	0.001 U	0.00056 U	27.9	0.07 U	0.00029 U	0.012	0.00015 U	0.0045 U	5.17	0.00082 U	300	5000	0.00012 U
MW-07	Downgradient	9/17/2021	0.0015 U	0.004	0.12	0.00017 U	2.8	0.00028 U	350	2400	0.0067	0.00056 U	35.2	0.07 U	0.00029 U	0.0019 U	0.00015 U	0.0045 U	6.60	0.00082 U	320	5600	0.00012 U
MWI-12A	Delineation	9/17/2021	0.0015 U	0.0033	0.022	0.00017 U	3.7	0.00028 U	73	49	0.001 U	0.00056 U	1.56	0.07 U	0.00029 U	0.014	0.00015 U	0.016	6.73	0.00082 U	48	430	0.00012 U
PZ-14	Delineation	9/17/2021	0.0015 U	0.0081	0.16	0.00017 U	12	0.00028 U	720	2200	0.001 U	0.00056 U	20.4	0.6	0.00029 U	0.0019 U	0.00015 U	0.0045 U	6.57	0.00082 U	1100	6300	0.00012 U
MW-13R[8]	Downgradient	11/19/2021	0.0015 U	0.0043	0.074	0.00092 U	13	0.00065 U	500	3800	0.0016 I	0.00056 U	36.1	0.07 U	0.00081 U	0.036	0.00015 U	0.0024 I	6.09	0.00082 U	470	7500	0.00046 U
MW-14R[8]	Downgradient	11/19/2021	0.0015 U	0.0012 U	0.032	0.00092 U	4	0.00065 U	74	240	0.0017 I	0.00056 U	5.04	0.27	0.00081 U	0.15	0.00015 U	0.018	7.39	0.00082 U	100	930	0.00046 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 in 2021 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.
8. Monitoring well was re-installed in November 2021 upon sufficient progression of CCR closure activities along the western perimeter of the Ash Pond to enable installation.

TABLE 4: SUMMARY OF 2021 GROUNDWATER ELEVATIONS
Florida Power & Light 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	2/8/2021	4.97	5.78
MW-02	464419.66	1592286.78	13.29	2/8/2021	4.43	8.86
MW-03	464322.49	1594277.21	14.06	2/8/2021	5.59	8.47
MW-04	464027.17	1591388.60	15.05	2/8/2021	6.90	8.15
MW-05	463987.97	1592784.03	14.13	2/8/2021	5.75	8.38
MW-06	463858.80	1591389.13	23.82	2/8/2021	13.22	10.60
MW-07	463856.65	1592774.97	21.42	2/8/2021	12.05	9.37
MW-12	462362.00	1589322.96	11.14	2/8/2021	10.35	0.79
MWI-12A	461669.34	1593482.68	9.82	2/8/2021	6.78	3.04
PZ-14	462584.13	1590334.98	9.87	2/8/2021	2.09	7.78

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 2021 GROUNDWATER ELEVATIONS
Florida Power & Light 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	9/16/2021	5.10	5.65
MW-02	464419.66	1592286.78	13.29	9/16/2021	3.38	9.91
MW-03	464322.49	1594277.21	14.06	9/16/2021	5.02	9.04
MW-04	464027.17	1591388.60	15.05	9/16/2021	6.26	8.79
MW-05	463987.97	1592784.03	14.13	9/16/2021	4.90	9.23
MW-06	463858.80	1591389.13	23.82	9/16/2021	15.03	8.79
MW-07	463856.65	1592774.97	21.42	9/16/2021	12.02	9.40
MW-12	462362.00	1589322.96	11.14	9/16/2021	8.82	2.32
MWI-12A	461669.34	1593482.68	9.82	9/16/2021	6.50	3.32
PZ-14	462584.13	1590334.98	9.87	9/16/2021	1.85	8.02
MW-13R[4]	462673.45	1590519.02	14.81	11/19/2021	6.62	8.19
MW-14R[4]	460706.93	1590247.87	8.89	11/19/2021	6.63	2.26

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.
4. Monitoring well was re-installed in November 2021 upon sufficient progression of CCR closure activities along the western perimeter of the Ash Pond to enable installation.

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

Analyte	Units[1]	USEPA CCR Rule Specified Limit[1]	February 2021		September 2021	
			Background[3]	Site-Specific GWPS[1,4]	Background[3]	Site-Specific GWPS[1,4]
Antimony	mg/L	0.006	0.0025	0.006	0.0025	0.006
Arsenic	mg/L	0.01	0.0013	0.01	0.0014	0.01
Barium	mg/L	2	0.028	2	0.028	2
Beryllium	mg/L	0.004	0.0025	0.004	0.0025	0.004
Cadmium	mg/L	0.005	0.0025	0.005	0.0025	0.005
Chromium	mg/L	0.1	0.012	0.1	0.012	0.1
Cobalt[2]	mg/L	0.006	0.0025	0.006	0.0025	0.006
Fluoride	mg/L	4	0.21	4	0.21	4
Lead[2]	mg/L	0.015	0.0013	0.015	0.0013	0.015
Lithium[2]	mg/L	0.04	0.017	0.04	0.019	0.04
Mercury	mg/L	0.002	0.0002	0.002	0.0002	0.002
Molybdenum[2]	mg/L	0.1	0.015	0.1	0.015	0.1
Selenium	mg/L	0.05	0.0013	0.05	0.0013	0.05
Thallium	mg/L	0.002	0.0005	0.002	0.0005	0.002
Total Radium - 226+228[5]	pCi/L	5	4.64	5	4.64	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

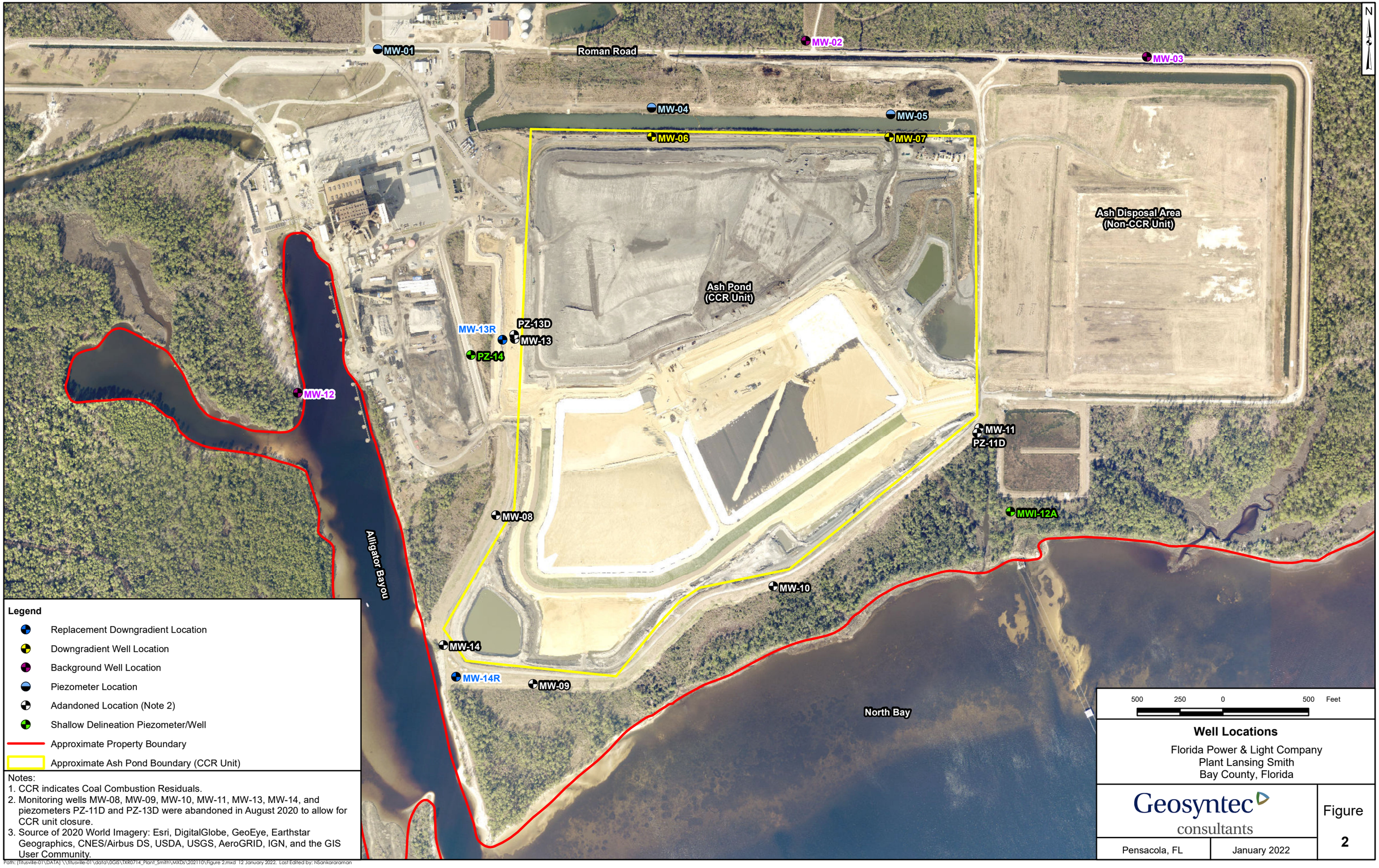
Florida Power & Light Company
Plant Lansing Smith
Bay County, Florida

Geosyntec consultants

Pensacola, FL | January 2022

Figure 1

Path: (Titusville-01\DATA) \\Titusville-01\Data\GIS\TXR0714_Plant_Smith\MXDs\202010\SiteLocationMap_PlantSmith.mxd 30 November 2021. Last Edited by: NSankararaman



Legend

- Replacement Downgradient Location
- 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.

Well Locations

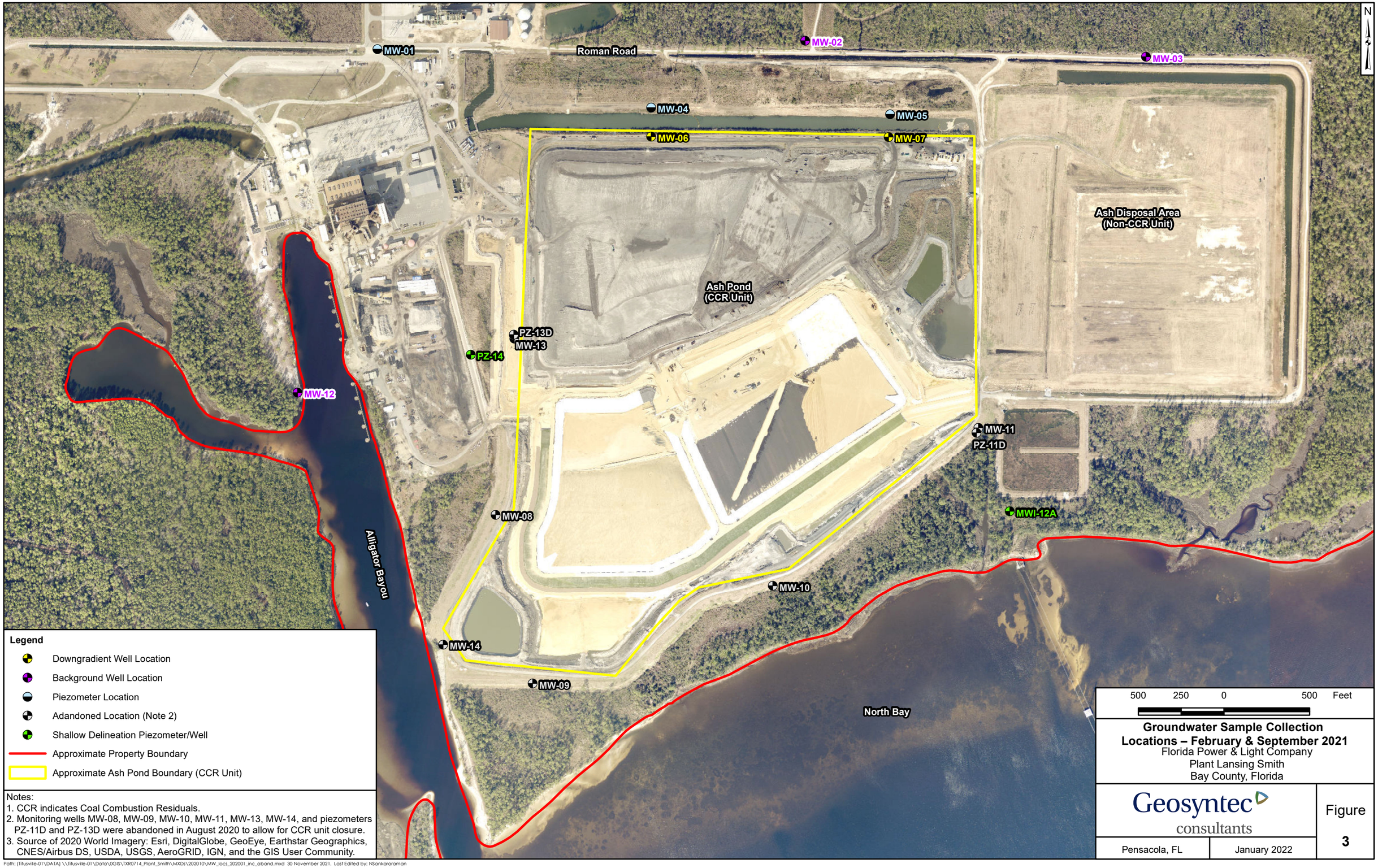
Florida Power & Light Company
Plant Lansing Smith
Bay County, Florida

Geosyntec consultants

Pensacola, FL | January 2022

Figure 2

Path: (Titusville-01\DATA) \\titusville-01\data\0GIS\TXR0714_Plant_Smith\MXDs\202110\Figure 2.mxd 12 January 2022. Last Edited by: NSankararaman



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.

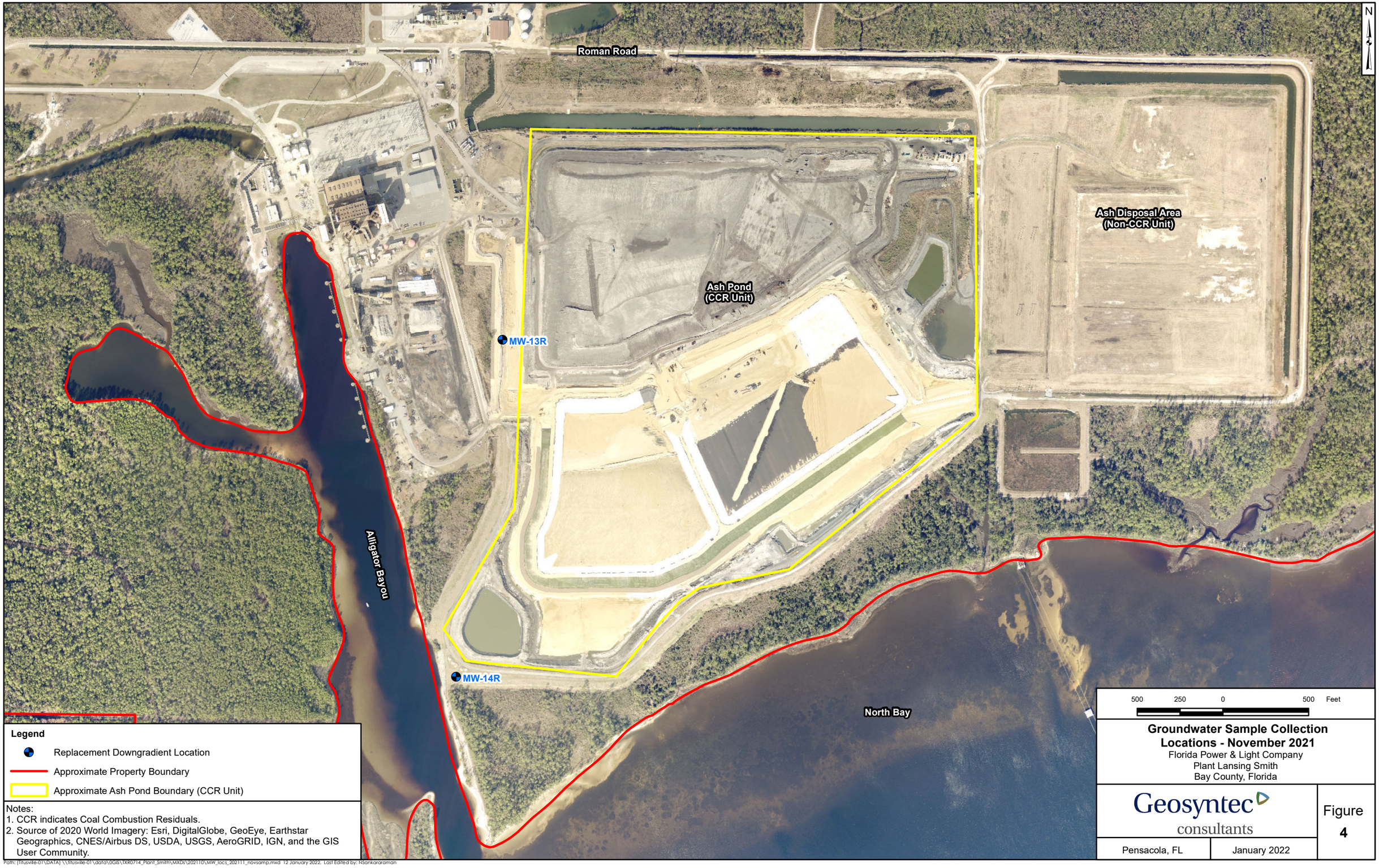
Groundwater Sample Collection Locations – February & September 2021
Florida Power & Light Company
Plant Lansing Smith
Bay County, Florida

Geosyntec consultants

Pensacola, FL | January 2022

Figure 3

Path: (Titusville-01\DATA) \\Titusville-01\Data\0GIS\TXR0714_Plant_Smith\MXDs\202010\MW_locs_202001_inc_aband.mxd 30 November 2021. Last Edited by: NSankararaman



Legend

- Replacement Downgradient Location
- Approximate Property Boundary
- Approximate Ash Pond Boundary (CCR Unit)

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.

Groundwater Sample Collection Locations - November 2021
Florida Power & Light Company
Plant Lansing Smith
Bay County, Florida

Geosyntec consultants

Pensacola, FL | January 2022

Figure 4

Path: {tifusville-01\DATA} \\tifusville-01\data\GIS\IXR0714_Plant_Smith\MXDs\202110\MW_locs_202111_novsamp.mxd 12 January 2022. Last Edited by: NSankararaman

MW-01
[5.78]
Roman Road
MW-02
[8.86]
MW-03
[8.47]
MW-04
[8.15]
MW-05
[8.38]
MW-06
[10.60]
MW-07
[9.37]
Ash Disposal Area
(Non-CCR Unit)
Ash Pond
(CCR Unit)
PZ-13D
MW-13
PZ-14
[7.78]
MW-12
[0.79]
MW-11
PZ-11D
MW-08
MWI-12A
[3.04]
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)
- [7.78] Groundwater Elevation (ft NAVD88)

Notes:
1. CCR indicates Coal Combustion Residuals.
2. Water level measurements collected on 8 February 2021.
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
8 February 2021

Florida Power & Light Company
Plant Lansing Smith
Bay County, Florida

Geosyntec consultants

Pensacola, FL | January 2022

Figure 5

Path: (\\tlusville-01\DATA) \\\tlusville-01\data\GIS\TXR0714_Plant_Smith\MXDs\202110\GW_elev_Feb2021.mxd 12 January 2022, Last Edited by: NSankararaman

MW-01 [5.65]
Roman Road
MW-02 [9.91]
MW-03 [9.04]
MW-04 [8.79]
MW-05 [9.23]
MW-06 [8.79]
MW-07 [9.40]
Ash Disposal Area (Non-CCR Unit)
Ash Pond (CCR Unit)
PZ-13D
MW-13
PZ-14 [8.02]
MW-12 [2.32]
MW-11
PZ-11D
MW-08
MWI-12A [3.32]
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)
- [8.02] Groundwater Elevation (ft NAVD88)

Notes:
1. CCR indicates Coal Combustion Residuals.
2. Water level measurements collected on 16 September 2021.
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
16 September 2021

Florida Power & Light Company
Plant Lansing Smith
Bay County, Florida

Geosyntec consultants

Pensacola, FL | January 2022

Figure 6

Path: (Titusville-01\DATA) \\titusville-01\data\GIS\TXR0714_Plant_Smith\MXDs\202110\GW_elev_Sep2021.mxd 12 January 2022. Last Edited by: NSankararaman

APPENDIX A

Laboratory Analytical, Field Sampling Reports, and Data Validation Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 400-199329-1
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 Whitmire

Authorized for release by:
3/4/2021 4:13:59 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Sample Summary 6
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Chronicle 10
QC Association 11
QC Sample Results 13
Chain of Custody 18
Receipt Checklists 19
Certification Summary 20

Job ID: 400-199329-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-199329-1

Metals
Method 6020: CRI recovery outside SOP's criteria. The sample is ND; therefore data is report. (CRI 400-520832/11)

Method 6020: The following samples were diluted due to the nature of the sample matrix: MW-06 (400-199329-1) and MW-07 (400-199329-2). Elevated reporting limits (RLs) are provided.

General Chemistry
Method SM 4500 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-06 (400-199329-1) and MW-07 (400-199329-2). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-06 (400-199329-1) and MW-07 (400-199329-2). Elevated reporting limits (RLs) are provided.

Detection Summary

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

Job ID: 400-199329-1
SDG: Downgradient

Client Sample ID: MW-06 — Lab Sample ID: 400-199329-1

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	0.065		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	7.5		1.0	0.36	mg/L	100		6020	Total Recoverable
Calcium	230		1.3	0.63	mg/L	25		6020	Total Recoverable
Chromium	0.0013	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Lithium	0.015	I	0.025	0.0095	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	5300		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2500		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	360		100	28	mg/L	20		SM 4500 SO4 E	Total/NA
Field pH	5.40				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-07 — Lab Sample ID: 400-199329-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0025		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.085		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	3.0		0.25	0.090	mg/L	25		6020	Total Recoverable
Calcium	250		1.3	0.63	mg/L	25		6020	Total Recoverable
Chromium	0.0051		0.0025	0.0010	mg/L	5		6020	Total Recoverable
Molybdenum	0.017		0.015	0.0045	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	4200		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2000		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Sulfate	420		100	28	mg/L	20		SM 4500 SO4 E	Total/NA
Field pH	6.35				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: 400-199329-1
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: 400-199329-1
SDG: Downgradient

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-199329-1	MW-06	Water	02/09/21 10:44	02/12/21 13:10	
400-199329-2	MW-07	Water	02/09/21 11:46	02/12/21 13:10	

Client Sample Results

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

Job ID: 400-199329-1
SDG: Downgradient

Client Sample ID: MW-06

Date Collected: 02/09/21 10:44
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199329-1

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		02/15/21 16:00	02/17/21 03:17	5
Arsenic	**0.0021**		0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 03:17	5
Barium	**0.065**		0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 03:17	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 03:17	5
Boron	**7.5**		1.0	0.36	mg/L		02/15/21 16:00	02/17/21 19:59	100
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 03:17	5
Calcium	**230**		1.3	0.63	mg/L		02/15/21 16:00	02/17/21 19:54	25
Chromium	**0.0013**	**I**	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 03:17	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 03:17	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 03:17	5
Lithium	**0.015**	**I**	0.025	0.0095	mg/L		02/15/21 16:00	02/17/21 19:54	25
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 03:17	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 03:17	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 03:17	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		02/15/21 09:50	02/15/21 16:37	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5300**		50	50	mg/L			02/13/21 18:24	1
Chloride	**2500**		200	140	mg/L			02/22/21 04:41	100
Fluoride	**0.040**	**I**	0.10	0.032	mg/L			03/01/21 12:08	1
Sulfate	**360**		100	28	mg/L			02/22/21 04:46	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.40**				SU			02/09/21 10:44	1

Client Sample Results

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

Job ID: 400-199329-1
SDG: Downgradient

Client Sample ID: MW-07

Date Collected: 02/09/21 11:46
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199329-2

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		02/15/21 16:00	02/17/21 03:22	5
Arsenic	**0.0025**		0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 03:22	5
Barium	**0.085**		0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 03:22	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 03:22	5
Boron	**3.0**		0.25	0.090	mg/L		02/15/21 16:00	02/17/21 20:04	25
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 03:22	5
Calcium	**250**		1.3	0.63	mg/L		02/15/21 16:00	02/17/21 20:04	25
Chromium	**0.0051**		0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 03:22	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 03:22	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 03:22	5
Lithium	0.0095	U	0.025	0.0095	mg/L		02/15/21 16:00	02/17/21 20:04	25
Molybdenum	**0.017**		0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 03:22	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 03:22	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 03:22	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		02/15/21 09:50	02/15/21 16:49	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4200**		50	50	mg/L			02/13/21 18:24	1
Chloride	**2000**		200	140	mg/L			02/22/21 04:41	100
Fluoride	0.032	U	0.10	0.032	mg/L			03/01/21 12:12	1
Sulfate	**420**		100	28	mg/L			02/22/21 04:07	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.35**				SU			02/09/21 11:46	1

Definitions/Glossary

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

Job ID: 400-199329-1
SDG: Downgradient

Qualifiers

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
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.
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: 400-199329-1
SDG: Downgradient

Client Sample ID: MW-06

Date Collected: 02/09/21 10:44
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199329-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 03:17	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	521039	02/17/21 19:54	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		100	521039	02/17/21 19:59	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 16:37	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	521272	02/22/21 04:41	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:08	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	521271	02/22/21 04:46	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	521057	02/09/21 10:44	EHS	TAL PEN

Client Sample ID: MW-07

Date Collected: 02/09/21 11:46
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199329-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 03:22	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	521039	02/17/21 20:04	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 16:49	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	521272	02/22/21 04:41	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:12	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	521271	02/22/21 04:07	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	521057	02/09/21 11:46	EHS	TAL PEN

Laboratory References:

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

QC Association Summary

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

Job ID: 400-199329-1
SDG: Downgradient

Metals

Prep Batch: 520494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	7470A	
400-199329-2	MW-07	Total/NA	Water	7470A	
MB 400-520494/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-520494/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-199329-1 MS	MW-06	Total/NA	Water	7470A	
400-199329-1 MSD	MW-06	Total/NA	Water	7470A	

Prep Batch: 520600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total Recoverable	Water	3005A	
400-199329-2	MW-07	Total Recoverable	Water	3005A	
MB 400-520600/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 400-520600/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-199323-E-1-C MS	Matrix Spike	Total Recoverable	Water	3005A	
400-199323-E-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 520825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	7470A	520494
400-199329-2	MW-07	Total/NA	Water	7470A	520494
MB 400-520494/14-A	Method Blank	Total/NA	Water	7470A	520494
LCS 400-520494/15-A	Lab Control Sample	Total/NA	Water	7470A	520494
400-199329-1 MS	MW-06	Total/NA	Water	7470A	520494
400-199329-1 MSD	MW-06	Total/NA	Water	7470A	520494

Analysis Batch: 520832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total Recoverable	Water	6020	520600
400-199329-2	MW-07	Total Recoverable	Water	6020	520600
MB 400-520600/1-A	Method Blank	Total Recoverable	Water	6020	520600
LCS 400-520600/2-A	Lab Control Sample	Total Recoverable	Water	6020	520600
400-199323-E-1-C MS	Matrix Spike	Total Recoverable	Water	6020	520600
400-199323-E-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	520600

Analysis Batch: 521039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total Recoverable	Water	6020	520600
400-199329-1	MW-06	Total Recoverable	Water	6020	520600
400-199329-2	MW-07	Total Recoverable	Water	6020	520600

General Chemistry

Analysis Batch: 520511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	SM 2540C	
400-199329-2	MW-07	Total/NA	Water	SM 2540C	
MB 400-520511/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-520511/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-199316-H-1 DU	Duplicate	Total/NA	Water	SM 2540C	

QC Association Summary

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

Job ID: 400-199329-1
SDG: Downgradient

General Chemistry

Analysis Batch: 521271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	SM 4500 SO4 E	
400-199329-2	MW-07	Total/NA	Water	SM 4500 SO4 E	
MB 400-521271/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-521271/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-521271/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-199330-B-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-199330-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 521272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	SM 4500 Cl- E	
400-199329-2	MW-07	Total/NA	Water	SM 4500 Cl- E	
MB 400-521272/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-521272/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-521272/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-199330-B-2 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-199330-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 522162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	SM 4500 F C	
400-199329-2	MW-07	Total/NA	Water	SM 4500 F C	
MB 400-522162/2	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-522162/5	Lab Control Sample	Total/NA	Water	SM 4500 F C	
240-144401-A-5 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
240-144401-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 521057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	Field Sampling	
400-199329-2	MW-07	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-520600/1-A
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		02/15/21 16:00	02/17/21 02:11	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 02:11	5
Barium	0.00070	U	0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 02:11	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 02:11	5
Boron	0.018	U	0.050	0.018	mg/L		02/15/21 16:00	02/17/21 02:11	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 02:11	5
Calcium	0.13	U	0.25	0.13	mg/L		02/15/21 16:00	02/17/21 02:11	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 02:11	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 02:11	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 02:11	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 02:11	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 02:11	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 02:11	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 02:11	5

Lab Sample ID: LCS 400-520600/2-A
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0502		mg/L		100	80 - 120
Arsenic	0.0500	0.0484		mg/L		97	80 - 120
Barium	0.0500	0.0513		mg/L		103	80 - 120
Beryllium	0.0500	0.0499		mg/L		100	80 - 120
Boron	0.100	0.0812		mg/L		81	80 - 120
Cadmium	0.0500	0.0546		mg/L		109	80 - 120
Calcium	5.00	4.95		mg/L		99	80 - 120
Chromium	0.0500	0.0539		mg/L		108	80 - 120
Cobalt	0.0500	0.0521		mg/L		104	80 - 120
Lead	0.0500	0.0516		mg/L		103	80 - 120
Lithium	0.0500	0.0460		mg/L		92	80 - 120
Molybdenum	0.0500	0.0528		mg/L		106	80 - 120
Selenium	0.0500	0.0504		mg/L		101	80 - 120
Thallium	0.0100	0.0100		mg/L		100	80 - 120

Lab Sample ID: 400-199323-E-1-C MS
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0015	U	0.0500	0.0501		mg/L		100	75 - 125
Arsenic	0.00076	I	0.0500	0.0490		mg/L		96	75 - 125
Barium	0.030		0.0500	0.0807		mg/L		101	75 - 125
Beryllium	0.00017	U	0.0500	0.0495		mg/L		99	75 - 125
Boron	0.15		0.100	0.250		mg/L		104	75 - 125
Cadmium	0.00028	U	0.0500	0.0535		mg/L		107	75 - 125
Calcium	79		5.00	84.4		mg/L		112	75 - 125
Chromium	0.0015	I	0.0500	0.0533		mg/L		104	75 - 125
Cobalt	0.00056	U	0.0500	0.0519		mg/L		104	75 - 125

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

Lab Sample ID: 400-199323-E-1-C MS
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.00029	U	0.0500	0.0519		mg/L		104	75 - 125
Molybdenum	0.0045	U	0.0500	0.0534		mg/L		107	75 - 125
Selenium	0.00082	U	0.0500	0.0519		mg/L		104	75 - 125
Thallium	0.00012	U	0.0100	0.00992		mg/L		99	75 - 125

Lab Sample ID: 400-199323-E-1-D MSD
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 520600

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	0.0509		mg/L		102	75 - 125	2	20
Arsenic	0.00076	I	0.0500	0.0503		mg/L		99	75 - 125	3	20
Barium	0.030		0.0500	0.0803		mg/L		100	75 - 125	1	20
Beryllium	0.00017	U	0.0500	0.0496		mg/L		99	75 - 125	0	20
Boron	0.15		0.100	0.240		mg/L		94	75 - 125	4	20
Cadmium	0.00028	U	0.0500	0.0518		mg/L		104	75 - 125	3	20
Calcium	79		5.00	84.6		mg/L		115	75 - 125	0	20
Chromium	0.0015	I	0.0500	0.0534		mg/L		104	75 - 125	0	20
Cobalt	0.00056	U	0.0500	0.0510		mg/L		102	75 - 125	2	20
Lead	0.00029	U	0.0500	0.0518		mg/L		104	75 - 125	0	20
Molybdenum	0.0045	U	0.0500	0.0537		mg/L		107	75 - 125	0	20
Selenium	0.00082	U	0.0500	0.0508		mg/L		102	75 - 125	2	20
Thallium	0.00012	U	0.0100	0.0101		mg/L		101	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-520494/14-A
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 520494

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		02/15/21 09:50	02/15/21 16:34	1

Lab Sample ID: LCS 400-520494/15-A
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.000970		mg/L		96	80 - 120

Lab Sample ID: 400-199329-1 MS
Matrix: Water
Analysis Batch: 520825

Client Sample ID: MW-06
Prep Type: Total/NA
Prep Batch: 520494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000070	U	0.00201	0.00197		mg/L		98	80 - 120

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

Lab Sample ID: 400-199329-1 MSD
Matrix: Water
Analysis Batch: 520825

Client Sample ID: MW-06
Prep Type: Total/NA
Prep Batch: 520494

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	0.00202		mg/L		100	80 - 120	3	20

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

Lab Sample ID: MB 400-520511/1
Matrix: Water
Analysis Batch: 520511

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			02/13/21 18:24	1

Lab Sample ID: LCS 400-520511/2
Matrix: Water
Analysis Batch: 520511

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	286		mg/L		98	78 - 122

Lab Sample ID: 400-199316-H-1 DU
Matrix: Water
Analysis Batch: 520511

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	820		818		mg/L		0.2	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-521272/6
Matrix: Water
Analysis Batch: 521272

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			02/22/21 04:38	1

Lab Sample ID: LCS 400-521272/7
Matrix: Water
Analysis Batch: 521272

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	28.2		mg/L		94	90 - 110

Lab Sample ID: MRL 400-521272/3
Matrix: Water
Analysis Batch: 521272

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	2.18		mg/L		109	50 - 150

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-199330-B-2 MS
Matrix: Water
Analysis Batch: 521272

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	15		10.0	23.4		mg/L		88	73 - 120		

Lab Sample ID: 400-199330-B-2 MSD
Matrix: Water
Analysis Batch: 521272

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	15		10.0	23.3		mg/L		87	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-522162/2
Matrix: Water
Analysis Batch: 522162

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			03/01/21 11:31	1

Lab Sample ID: LCS 400-522162/5
Matrix: Water
Analysis Batch: 522162

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	4.26		mg/L		107	90 - 110		

Lab Sample ID: 240-144401-A-5 MS
Matrix: Water
Analysis Batch: 522162

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	1.2		1.00	2.32		mg/L		108	75 - 125		

Lab Sample ID: 240-144401-A-5 MSD
Matrix: Water
Analysis Batch: 522162

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	1.2		1.00	2.28		mg/L		104	75 - 125	2	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-521271/6
Matrix: Water
Analysis Batch: 521271

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			02/22/21 03:54	1

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-521271/7
Matrix: Water
Analysis Batch: 521271

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	14.0		mg/L		94	90 - 110

Lab Sample ID: MRL 400-521271/3
Matrix: Water
Analysis Batch: 521271

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	4.93	I	mg/L		99	50 - 150

Lab Sample ID: 400-199330-B-2 MS
Matrix: Water
Analysis Batch: 521271

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	10.4		mg/L		104	77 - 128

Lab Sample ID: 400-199330-B-2 MSD
Matrix: Water
Analysis Batch: 521271

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	10.6		mg/L		106	77 - 128	2	5

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

Chain of Custody Record

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400-199329 COC

Client Information	Sampler: Brett Sykes	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-100836-29464.1
Client Contact: Barry Evans	Phone: 850 380 3458	E-Mail: Cheyenne.Whitmire@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:			Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No			
Phone: 850-444-6427(Tel)	PO #: 2000339513			
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117			
Project Name: CCR Smith Plant	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	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		
MW-06	2/8/21	1044	G	Water			X	X	X	X	X	X	X		
MW-07	2/9/21	1146	G	Water			X	X	X	X	X	X	X		
				Water											
				Water											

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 2/12/21 1310	Company RDH	Received by:	Date/Time: 2/12/21 1310	Company ENPW
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: 2.4°C, 1.7°C TR8

Ver: 11/01/2020

3/4/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-199329-1
SDG Number: Downgradient

Login Number: 199329
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	2.4°C 1.7°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: 400-199329-1
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	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
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	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810-186	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
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	06-30-21

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-199329-2
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:
3/19/2021 2:11:28 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

Review your project results through TotalAccess

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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

Job ID: 400-199329-2
SDG: Downgradient

Job ID: 400-199329-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-199329-2

RAD

Method 9315: Radium-226 Batch 499724. 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 (400-199329-1), MW-07 (400-199329-2), (LCS 160-499724/1-A), (MB 160-499724/21-A), (160-41293-C-1-A), (160-41293-C-1-B MS) and (160-41293-C-1-C MSD).

Method 9320: Prep Batch 499735. 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 (400-199329-1), MW-07 (400-199329-2), (LCS 160-499735/1-A), (MB 160-499735/21-A), (160-41293-C-1-D), (160-41293-C-1-E MS) and (160-41293-C-1-F MSD)

Method PrecSep_0: Radium 228 Prep Batch 160-499735. The following samples were prepared at a reduced aliquot due to matrix: MW-07 (400-199329-2). Samples 400-199331-2 and 400-199329-2 were yellow in appearance and had a strong odor. Sample 400-199331-1 was yellow and appearance. Sample 480-181293-2 was black and cloudy. During the in-growth process, the following sample needed to be filtered due to sediment present in the sample. This is an indicator of matrix interference.

Method PrecSep-21: Radium 226 Prep Batch 160-499724. The following samples were prepared at a reduced aliquot due to matrix: MW-07 (400-199329-2). Samples 400-199331-2 and 400-199329-2 were yellow in appearance and had a strong odor. Sample 400-199331-1 was yellow and appearance. Sample 480-181293-2 was black and cloudy. During the in-growth process, the following sample needed to be filtered due to sediment present in the sample. This is an indicator of matrix interference.

Method Summary

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

Job ID: 400-199329-2
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: 400-199329-2
SDG: Downgradient

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-199329-1	MW-06	Water	02/09/21 10:44	02/12/21 13:10	
400-199329-2	MW-07	Water	02/09/21 11:46	02/12/21 13:10	

Client Sample ID: MW-06

Date Collected: 02/09/21 10:44
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199329-1

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	9.18		0.532	0.983	1.00	0.135	pCi/L	02/24/21 11:26	03/18/21 10:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	12.9		0.781	1.42	1.00	0.308	pCi/L	02/24/21 13:06	03/08/21 12:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*40 - 110*	*02/24/21 13:06*	*03/08/21 12:49*	*1*
Y Carrier	*86.0*		*40 - 110*	*02/24/21 13:06*	*03/08/21 12:49*	*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	22.1		0.945	1.73	5.00	0.308	pCi/L		03/18/21 19:22	1

Client Sample Results

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

Job ID: 400-199329-2
SDG: Downgradient

Client Sample ID: MW-07
Date Collected: 02/09/21 11:46
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199329-2
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	22.0		0.910	2.18	1.00	0.132	pCi/L	02/24/21 11:26	03/18/21 10:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.82		0.641	0.780	1.00	0.582	pCi/L	02/24/21 13:06	03/08/21 13:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*1*
Y Carrier	*86.0*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*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		1.11	2.32	5.00	0.582	pCi/L		03/18/21 19:22	1

Definitions/Glossary

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

Job ID: 400-199329-2
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
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: 400-199329-2
SDG: Downgradient

Client Sample ID: MW-06
Date Collected: 02/09/21 10:44
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199329-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:39	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501105	03/08/21 12:49	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Client Sample ID: MW-07
Date Collected: 02/09/21 11:46
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199329-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:39	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501106	03/08/21 13:07	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Laboratory References:

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

QC Association Summary

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

Job ID: 400-199329-2
SDG: Downgradient

Rad

Prep Batch: 499724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	PrecSep-21	
400-199329-2	MW-07	Total/NA	Water	PrecSep-21	
MB 160-499724/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-499724/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-41293-C-1-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
160-41293-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 499735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199329-1	MW-06	Total/NA	Water	PrecSep_0	
400-199329-2	MW-07	Total/NA	Water	PrecSep_0	
MB 160-499735/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-499735/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-41293-C-1-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
160-41293-C-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-499724/21-A
Matrix: Water
Analysis Batch: 502446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499724

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.004162	U	0.0545	0.0545	1.00	0.112	pCi/L	02/24/21 11:26	03/18/21 10:43	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:43*	*1*

Lab Sample ID: LCS 160-499724/1-A
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499724

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.91		1.13	1.00	0.0905	pCi/L	96	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.8*		*40 - 110*

Lab Sample ID: 160-41293-C-1-B MS
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499724

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.765		11.3	12.24		1.25	1.00	0.102	pCi/L	101	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*92.5*		*40 - 110*

Lab Sample ID: 160-41293-C-1-C MSD
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499724

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	0.765		11.3	11.81		1.21	1.00	0.103	pCi/L	97	75 - 138	0.17	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*96.1*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-499735/21-A
Matrix: Water
Analysis Batch: 501106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499735

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2620	U	0.293	0.294	1.00	0.481	pCi/L	02/24/21 13:06	03/08/21 13:06	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110	02/24/21 13:06	03/08/21 13:06	1
Y Carrier	83.7		40 - 110	02/24/21 13:06	03/08/21 13:06	1

Lab Sample ID: LCS 160-499735/1-A
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499735

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			7.37	6.057		0.779	1.00	0.314	pCi/L	82	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	92.8		40 - 110
Y Carrier	87.9		40 - 110

Lab Sample ID: 160-41293-C-1-E MS
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499735

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	1.72		7.37	8.324		0.999	1.00	0.362	pCi/L	90	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	92.5		40 - 110
Y Carrier	87.5		40 - 110

Lab Sample ID: 160-41293-C-1-F MSD
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499735

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	1.72		7.37	8.380		0.995	1.00	0.350	pCi/L	90	45 - 150	0.03	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	96.1		40 - 110
Y Carrier	87.9		40 - 110

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

Chain of Custody Record

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400-199329 COC

Client Information	Sampler: Brett Sykes	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-100836-29464.1
Client Contact: Barry Evans	Phone: 850 380 3458	E-Mail: Cheyenne.Whitmire@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:			Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No			
Phone: 850-444-6427(Tel)	PO #: 2000339513			
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117			
Project Name: CCR Smith Plant	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	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		
MW-06	2/8/21	1044	G	Water			X	X	X	X	X	X	X		
MW-07	2/9/21	1146	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: 2/12/21 1310	Company RDH	Received by:	Date/Time: 2/12/21 1310	Company ETAPen
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: 2.4°C, 1.7°C IR8

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-199329-2
SDG Number: Downgradient

Login Number: 199329
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	2.4°C 1.7°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: 400-199329-2
SDG Number: Downgradient

Login Number: 199329
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/23/21 12:00 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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-199329-2
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	12-08-21
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	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
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	03-01-22
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

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-199330-1
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:
3/4/2021 4:14:22 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-199330-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-199330-1

Metals
Method 6020: CRI recovery outside SOP's criteria. The sample is ND; therefore data is report. (CRI 400-520832/11)

Method 6020: The continuing calibration verification (CCV) associated with batch 400-520832 recovered above the upper control limit for Lithium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 400-520832/163).

General Chemistry
Method SM 2540C: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for analytical batch 400-520511 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 SM 4500 Cl- E: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-12 (400-199330-4). Elevated reporting limits (RLs) are provided.

Detection Summary

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

Job ID: 400-199330-1
SDG: Upgradient

Client Sample ID: MW-2 — Lab Sample ID: 400-199330-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.015		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.024	I	0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	9.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0043		0.0025	0.0010	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	130		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	20		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	9.2		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.48				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 400-199330-2

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	2.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0021	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Lithium	0.0082		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	66		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
Field pH	4.87				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 400-199330-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00074	I	0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.023		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Calcium	2.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0020	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Lithium	0.012		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	82		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
Field pH	4.87				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 400-199330-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.011		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.090		0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	26		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0019	I	0.0025	0.0010	mg/L	5		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: 400-199330-1
SDG: Upgradient

Client Sample ID: MW-12 (Continued)

Lab Sample ID: 400-199330-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.012		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	500		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	150		10	7.0	mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.11		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Field pH	5.96				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: 400-199330-1
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: 400-199330-1
SDG: Upgradient

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-199330-1	MW-2	Water	02/09/21 08:03	02/12/21 13:10	
400-199330-2	MW-3	Water	02/09/21 08:05	02/12/21 13:10	
400-199330-3	DUP-01	Water	02/09/21 07:05	02/12/21 13:10	
400-199330-4	MW-12	Water	02/09/21 11:50	02/12/21 13:10	

Client Sample Results

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

Job ID: 400-199330-1
SDG: Upgradient

Client Sample ID: MW-2

Date Collected: 02/09/21 08:03
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-1

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		02/15/21 16:00	02/17/21 03:36	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 03:36	5
Barium	**0.015**		0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 03:36	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 03:36	5
Boron	**0.024**	**I**	0.050	0.018	mg/L		02/15/21 16:00	02/17/21 03:36	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 03:36	5
Calcium	**9.1**		0.25	0.13	mg/L		02/15/21 16:00	02/17/21 03:36	5
Chromium	**0.0043**		0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 03:36	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 03:36	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 03:36	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 03:36	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 03:36	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 03:36	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 03:36	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		02/15/21 09:50	02/15/21 17:04	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**130**		5.0	5.0	mg/L			02/13/21 18:24	1
Chloride	**20**		2.0	1.4	mg/L			02/22/21 04:38	1
Fluoride	**0.060**	**I**	0.10	0.032	mg/L			03/01/21 12:16	1
Sulfate	**9.2**		5.0	1.4	mg/L			02/22/21 04:00	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.48**				SU			02/09/21 08:03	1

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

Job ID: 400-199330-1
SDG: Upgradient

Client Sample ID: MW-3

Date Collected: 02/09/21 08:05
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-2

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		02/15/21 16:00	02/17/21 03:41	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 03:41	5
Barium	**0.023**		0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 03:41	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 03:41	5
Boron	0.018	U	0.050	0.018	mg/L		02/15/21 16:00	02/17/21 03:41	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 03:41	5
Calcium	**2.4**		0.25	0.13	mg/L		02/15/21 16:00	02/17/21 03:41	5
Chromium	**0.0021**	**I**	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 03:41	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 03:41	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 03:41	5
Lithium	**0.0082**		0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 20:13	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 03:41	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 03:41	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 03:41	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		02/15/21 09:50	02/15/21 17:05	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**66**		5.0	5.0	mg/L			02/13/21 18:24	1
Chloride	**15**		2.0	1.4	mg/L			02/22/21 04:38	1
Fluoride	0.032	U	0.10	0.032	mg/L			03/01/21 12:20	1
Sulfate	1.4	U	5.0	1.4	mg/L			02/22/21 04:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.87**				SU			02/09/21 08:05	1

Client Sample Results

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

Job ID: 400-199330-1
SDG: Upgradient

Client Sample ID: DUP-01
Date Collected: 02/09/21 07:05
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-3
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		02/15/21 16:00	02/17/21 03:45	5
Arsenic	**0.00074**	**I**	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 03:45	5
Barium	**0.023**		0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 03:45	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 03:45	5
Boron	0.018	U	0.050	0.018	mg/L		02/15/21 16:00	02/17/21 03:45	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 03:45	5
Calcium	**2.4**		0.25	0.13	mg/L		02/15/21 16:00	02/17/21 03:45	5
Chromium	**0.0020**	**I**	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 03:45	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 03:45	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 03:45	5
Lithium	**0.012**		0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 20:18	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 03:45	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 03:45	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 03:45	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		02/15/21 09:50	02/15/21 17:11	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**82**		5.0	5.0	mg/L			02/13/21 18:24	1
Chloride	**15**		2.0	1.4	mg/L			02/22/21 04:38	1
Fluoride	0.032	U	0.10	0.032	mg/L			03/01/21 12:24	1
Sulfate	1.4	U	5.0	1.4	mg/L			02/22/21 04:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.87**				SU			02/09/21 07:05	1

Client Sample Results

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

Job ID: 400-199330-1
SDG: Upgradient

Client Sample ID: MW-12
Date Collected: 02/09/21 11:50
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-4
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		02/15/21 16:00	02/17/21 03:50	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 03:50	5
Barium	**0.011**		0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 03:50	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 03:50	5
Boron	**0.090**		0.050	0.018	mg/L		02/15/21 16:00	02/17/21 03:50	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 03:50	5
Calcium	**26**		0.25	0.13	mg/L		02/15/21 16:00	02/17/21 03:50	5
Chromium	**0.0019**	**I**	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 03:50	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 03:50	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 03:50	5
Lithium	**0.012**		0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 20:22	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 03:50	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 03:50	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 03:50	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		02/15/21 09:50	02/15/21 17:13	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**500**		5.0	5.0	mg/L			02/13/21 18:24	1
Chloride	**150**		10	7.0	mg/L			02/22/21 04:53	5
Fluoride	**0.11**		0.10	0.032	mg/L			03/01/21 12:28	1
Sulfate	1.4	U	5.0	1.4	mg/L			02/22/21 04:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.96**				SU			02/09/21 11:50	1

Definitions/Glossary

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

Job ID: 400-199330-1
SDG: Upgradient

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: 400-199330-1
SDG: Upgradient

Client Sample ID: MW-2
Date Collected: 02/09/21 08:03
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 03:36	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 17:04	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	521272	02/22/21 04:38	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:16	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	521271	02/22/21 04:00	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	521057	02/09/21 08:03	EHS	TAL PEN

Client Sample ID: MW-3
Date Collected: 02/09/21 08:05
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 03:41	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	521039	02/17/21 20:13	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 17:05	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	521272	02/22/21 04:38	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:20	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	521271	02/22/21 04:01	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	521057	02/09/21 08:05	EHS	TAL PEN

Client Sample ID: DUP-01
Date Collected: 02/09/21 07:05
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 03:45	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	521039	02/17/21 20:18	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 17:11	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	521272	02/22/21 04:38	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:24	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	521271	02/22/21 04:01	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	521057	02/09/21 07:05	EHS	TAL PEN

Lab Chronicle

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

Job ID: 400-199330-1
SDG: Upgradient

Client Sample ID: MW-12
Date Collected: 02/09/21 11:50
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 03:50	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	521039	02/17/21 20:22	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 17:13	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		5	521272	02/22/21 04:53	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:28	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	521271	02/22/21 04:01	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	521057	02/09/21 11:50	EHS	TAL PEN

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

Metals

Prep Batch: 520494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	7470A	
400-199330-2	MW-3	Total/NA	Water	7470A	
400-199330-3	DUP-01	Total/NA	Water	7470A	
400-199330-4	MW-12	Total/NA	Water	7470A	
MB 400-520494/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-520494/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-199329-C-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-199329-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 520600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total Recoverable	Water	3005A	
400-199330-2	MW-3	Total Recoverable	Water	3005A	
400-199330-3	DUP-01	Total Recoverable	Water	3005A	
400-199330-4	MW-12	Total Recoverable	Water	3005A	
MB 400-520600/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 400-520600/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-199323-E-1-C MS	Matrix Spike	Total Recoverable	Water	3005A	
400-199323-E-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 520825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	7470A	520494
400-199330-2	MW-3	Total/NA	Water	7470A	520494
400-199330-3	DUP-01	Total/NA	Water	7470A	520494
400-199330-4	MW-12	Total/NA	Water	7470A	520494
MB 400-520494/14-A	Method Blank	Total/NA	Water	7470A	520494
LCS 400-520494/15-A	Lab Control Sample	Total/NA	Water	7470A	520494
400-199329-C-1-B MS	Matrix Spike	Total/NA	Water	7470A	520494
400-199329-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	520494

Analysis Batch: 520832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total Recoverable	Water	6020	520600
400-199330-2	MW-3	Total Recoverable	Water	6020	520600
400-199330-3	DUP-01	Total Recoverable	Water	6020	520600
400-199330-4	MW-12	Total Recoverable	Water	6020	520600
MB 400-520600/1-A	Method Blank	Total Recoverable	Water	6020	520600
LCS 400-520600/2-A	Lab Control Sample	Total Recoverable	Water	6020	520600
400-199323-E-1-C MS	Matrix Spike	Total Recoverable	Water	6020	520600
400-199323-E-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	520600

Analysis Batch: 521039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-2	MW-3	Total Recoverable	Water	6020	520600
400-199330-3	DUP-01	Total Recoverable	Water	6020	520600
400-199330-4	MW-12	Total Recoverable	Water	6020	520600

General Chemistry

Analysis Batch: 520511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	SM 2540C	
400-199330-2	MW-3	Total/NA	Water	SM 2540C	
400-199330-3	DUP-01	Total/NA	Water	SM 2540C	
400-199330-4	MW-12	Total/NA	Water	SM 2540C	
MB 400-520511/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-520511/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-199316-H-1 DU	Duplicate	Total/NA	Water	SM 2540C	
400-199395-D-9 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 521271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	SM 4500 SO4 E	
400-199330-2	MW-3	Total/NA	Water	SM 4500 SO4 E	
400-199330-3	DUP-01	Total/NA	Water	SM 4500 SO4 E	
400-199330-4	MW-12	Total/NA	Water	SM 4500 SO4 E	
MB 400-521271/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-521271/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-521271/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-199330-2 MS	MW-3	Total/NA	Water	SM 4500 SO4 E	
400-199330-2 MSD	MW-3	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 521272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	SM 4500 Cl- E	
400-199330-2	MW-3	Total/NA	Water	SM 4500 Cl- E	
400-199330-3	DUP-01	Total/NA	Water	SM 4500 Cl- E	
400-199330-4	MW-12	Total/NA	Water	SM 4500 Cl- E	
MB 400-521272/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-521272/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-521272/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-199330-2 MS	MW-3	Total/NA	Water	SM 4500 Cl- E	
400-199330-2 MSD	MW-3	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 522162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	SM 4500 F C	
400-199330-2	MW-3	Total/NA	Water	SM 4500 F C	
400-199330-3	DUP-01	Total/NA	Water	SM 4500 F C	
400-199330-4	MW-12	Total/NA	Water	SM 4500 F C	
MB 400-522162/2	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-522162/5	Lab Control Sample	Total/NA	Water	SM 4500 F C	
240-144401-A-5 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
240-144401-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 521057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	Field Sampling	
400-199330-2	MW-3	Total/NA	Water	Field Sampling	
400-199330-3	DUP-01	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 521057 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-4	MW-12	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-520600/1-A
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		02/15/21 16:00	02/17/21 02:11	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 02:11	5
Barium	0.00070	U	0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 02:11	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 02:11	5
Boron	0.018	U	0.050	0.018	mg/L		02/15/21 16:00	02/17/21 02:11	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 02:11	5
Calcium	0.13	U	0.25	0.13	mg/L		02/15/21 16:00	02/17/21 02:11	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 02:11	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 02:11	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 02:11	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 02:11	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 02:11	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 02:11	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 02:11	5

Lab Sample ID: LCS 400-520600/2-A
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0502		mg/L		100	80 - 120
Arsenic	0.0500	0.0484		mg/L		97	80 - 120
Barium	0.0500	0.0513		mg/L		103	80 - 120
Beryllium	0.0500	0.0499		mg/L		100	80 - 120
Boron	0.100	0.0812		mg/L		81	80 - 120
Cadmium	0.0500	0.0546		mg/L		109	80 - 120
Calcium	5.00	4.95		mg/L		99	80 - 120
Chromium	0.0500	0.0539		mg/L		108	80 - 120
Cobalt	0.0500	0.0521		mg/L		104	80 - 120
Lead	0.0500	0.0516		mg/L		103	80 - 120
Lithium	0.0500	0.0460		mg/L		92	80 - 120
Molybdenum	0.0500	0.0528		mg/L		106	80 - 120
Selenium	0.0500	0.0504		mg/L		101	80 - 120
Thallium	0.0100	0.0100		mg/L		100	80 - 120

Lab Sample ID: 400-199323-E-1-C MS
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0015	U	0.0500	0.0501		mg/L		100	75 - 125
Arsenic	0.00076	I	0.0500	0.0490		mg/L		96	75 - 125
Barium	0.030		0.0500	0.0807		mg/L		101	75 - 125
Beryllium	0.00017	U	0.0500	0.0495		mg/L		99	75 - 125
Boron	0.15		0.100	0.250		mg/L		104	75 - 125
Cadmium	0.00028	U	0.0500	0.0535		mg/L		107	75 - 125
Calcium	79		5.00	84.4		mg/L		112	75 - 125
Chromium	0.0015	I	0.0500	0.0533		mg/L		104	75 - 125
Cobalt	0.00056	U	0.0500	0.0519		mg/L		104	75 - 125

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

Lab Sample ID: 400-199323-E-1-C MS
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.00029	U	0.0500	0.0519		mg/L		104	75 - 125
Lithium	0.0019	U	0.0500	0.0459		mg/L		92	75 - 125
Molybdenum	0.0045	U	0.0500	0.0534		mg/L		107	75 - 125
Selenium	0.00082	U	0.0500	0.0519		mg/L		104	75 - 125
Thallium	0.00012	U	0.0100	0.00992		mg/L		99	75 - 125

Lab Sample ID: 400-199323-E-1-D MSD
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 520600

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	0.0509		mg/L		102	75 - 125	2	20
Arsenic	0.00076	I	0.0500	0.0503		mg/L		99	75 - 125	3	20
Barium	0.030		0.0500	0.0803		mg/L		100	75 - 125	1	20
Beryllium	0.00017	U	0.0500	0.0496		mg/L		99	75 - 125	0	20
Boron	0.15		0.100	0.240		mg/L		94	75 - 125	4	20
Cadmium	0.00028	U	0.0500	0.0518		mg/L		104	75 - 125	3	20
Calcium	79		5.00	84.6		mg/L		115	75 - 125	0	20
Chromium	0.0015	I	0.0500	0.0534		mg/L		104	75 - 125	0	20
Cobalt	0.00056	U	0.0500	0.0510		mg/L		102	75 - 125	2	20
Lead	0.00029	U	0.0500	0.0518		mg/L		104	75 - 125	0	20
Molybdenum	0.0045	U	0.0500	0.0537		mg/L		107	75 - 125	0	20
Selenium	0.00082	U	0.0500	0.0508		mg/L		102	75 - 125	2	20
Thallium	0.00012	U	0.0100	0.0101		mg/L		101	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-520494/14-A
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 520494

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		02/15/21 09:50	02/15/21 16:34	1

Lab Sample ID: LCS 400-520494/15-A
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.000970		mg/L		96	80 - 120

Lab Sample ID: 400-199329-C-1-B MS
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 520494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000070	U	0.00201	0.00197		mg/L		98	80 - 120

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

Lab Sample ID: 400-199329-C-1-C MSD
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 520494

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	0.00202		mg/L		100	80 - 120	3	20

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

Lab Sample ID: MB 400-520511/1
Matrix: Water
Analysis Batch: 520511

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			02/13/21 18:24	1

Lab Sample ID: LCS 400-520511/2
Matrix: Water
Analysis Batch: 520511

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	286		mg/L		98	78 - 122

Lab Sample ID: 400-199316-H-1 DU
Matrix: Water
Analysis Batch: 520511

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	820		818		mg/L		0.2	5

Lab Sample ID: 400-199395-D-9 DU
Matrix: Water
Analysis Batch: 520511

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	800		466	J3	mg/L		53	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-521272/6
Matrix: Water
Analysis Batch: 521272

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			02/22/21 04:38	1

Lab Sample ID: LCS 400-521272/7
Matrix: Water
Analysis Batch: 521272

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	28.2		mg/L		94	90 - 110

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-521272/3
Matrix: Water
Analysis Batch: 521272

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	2.18		mg/L		109	50 - 150		

Lab Sample ID: 400-199330-2 MS
Matrix: Water
Analysis Batch: 521272

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	15		10.0	23.4		mg/L		88	73 - 120		

Lab Sample ID: 400-199330-2 MSD
Matrix: Water
Analysis Batch: 521272

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	15		10.0	23.3		mg/L		87	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-522162/2
Matrix: Water
Analysis Batch: 522162

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			03/01/21 11:31	1

Lab Sample ID: LCS 400-522162/5
Matrix: Water
Analysis Batch: 522162

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	4.26		mg/L		107	90 - 110		

Lab Sample ID: 240-144401-A-5 MS
Matrix: Water
Analysis Batch: 522162

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	1.2		1.00	2.32		mg/L		108	75 - 125		

Lab Sample ID: 240-144401-A-5 MSD
Matrix: Water
Analysis Batch: 522162

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	1.2		1.00	2.28		mg/L		104	75 - 125	2	4

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

Job ID: 400-199330-1
SDG: Upgradient

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-521271/6
Matrix: Water
Analysis Batch: 521271

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			02/22/21 03:54	1

Lab Sample ID: LCS 400-521271/7
Matrix: Water
Analysis Batch: 521271

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	14.0		mg/L		94	90 - 110		

Lab Sample ID: MRL 400-521271/3
Matrix: Water
Analysis Batch: 521271

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	4.93	I	mg/L		99	50 - 150		

Lab Sample ID: 400-199330-2 MS
Matrix: Water
Analysis Batch: 521271

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	1.4	U	10.0	10.4		mg/L		104	77 - 128		

Lab Sample ID: 400-199330-2 MSD
Matrix: Water
Analysis Batch: 521271

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.4	U	10.0	10.6		mg/L		106	77 - 128	2	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 ENVIRONMENT

400-199330 COC

Client Information

Client Contact:	Kristi Mitchell
Company:	Gulf Power Company
Address:	BIN 731 One Energy Place
City:	Pensacola
State, Zip:	FL, 32520
Phone:	850-444-6427(Tel)
Email:	krmitche@southernco.com
Project Name:	CCR Smith Plant
Site:	
Sampler:	Brett Surles / Phillip Evans
Phone:	850 380 3458
Due Date Requested:	
TAT Requested (days):	
PO #:	Purchase Order not required
WO #:	
Project #:	40006609
SSOW#:	
Lab PM:	Whitmire, Cheyenne R
E-Mail:	cheyenne.whitmire@testamericainc.com
Carrier Tracking No(s):	
COC No:	400-53432-23565.1
Page:	Page 1 of 1
Job #:	

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:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD	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		
MW-2	2/9/21	0803	~~0803~~ G	Water			X	X	X	X		
MW-3	2/9/21	0805	G	Water			X	X	X	X		
~~MW-6~~ DUP-01	2/9/21	0705	G	Water			X	X	X	X		
~~MW-7~~				Water								
~~MW-8~~				Water								
~~MW-9~~				Water								
~~MW-10~~				Water								
~~MW-11~~				Water								
MW-12	2/9/21	1150	G	Water			X	X	X	X		
~~MW-13~~				Water								
~~MW-14~~				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]	2/12/21 1310	RDT	[signature]	2/12/21 1310	EIA PEN

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

Cooler Temperature(s) °C and Other Remarks: 2.4°C, 1.7°C IR8

3/4/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-199330-1
SDG Number: Upgradient

Login Number: 199330
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	2.4°C 1.7°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: 400-199330-1
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	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
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	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810-186	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
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	06-30-21

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-199330-2
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:
3/19/2021 2:36:32 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-199330-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-199330-2

RAD

Method 9315: Radium-226 Batch 499724. 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-2 (400-199330-1), MW-3 (400-199330-2), DUP-01 (400-199330-3), MW-12 (400-199330-4), (LCS 160-499724/1-A), (MB 160-499724/21-A), (160-41293-C-1-A), (160-41293-C-1-B MS) and (160-41293-C-1-C MSD)

Method 9320: Prep Batch 499735. 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-2 (400-199330-1), MW-3 (400-199330-2), DUP-01 (400-199330-3), MW-12 (400-199330-4), (LCS 160-499735/1-A), (MB 160-499735/21-A), (160-41293-C-1-D), (160-41293-C-1-E MS) and (160-41293-C-1-F MSD)

Method Summary

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

Job ID: 400-199330-2
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: 400-199330-2
SDG: Upgradient

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-199330-1	MW-2	Water	02/09/21 08:03	02/12/21 13:10	
400-199330-2	MW-3	Water	02/09/21 08:05	02/12/21 13:10	
400-199330-3	DUP-01	Water	02/09/21 07:05	02/12/21 13:10	
400-199330-4	MW-12	Water	02/09/21 11:50	02/12/21 13:10	

Client Sample ID: MW-2

Date Collected: 02/09/21 08:03
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-1

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	**1.15**		0.192	0.218	1.00	0.104	pCi/L	02/24/21 11:26	03/18/21 10:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.150	U	0.245	0.246	1.00	0.414	pCi/L	02/24/21 13:06	03/08/21 13:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*1*
Y Carrier	*86.7*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*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	**1.30**		0.311	0.329	5.00	0.414	pCi/L		03/18/21 19:22	1

Client Sample ID: MW-3
Date Collected: 02/09/21 08:05
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-2
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	**1.48**		0.216	0.254	1.00	0.111	pCi/L	02/24/21 11:26	03/18/21 10:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.7*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.297	U	0.263	0.264	1.00	0.422	pCi/L	02/24/21 13:06	03/08/21 13:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.7*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*1*
Y Carrier	*86.4*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*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	**1.78**		0.340	0.366	5.00	0.422	pCi/L		03/18/21 19:22	1

Client Sample ID: DUP-01
Date Collected: 02/09/21 07:05
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-3
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	**1.38**		0.200	0.235	1.00	0.0943	pCi/L	02/24/21 11:26	03/18/21 10:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.3*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0751	U	0.225	0.225	1.00	0.415	pCi/L	02/24/21 13:06	03/08/21 13:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.3*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*1*
Y Carrier	*86.7*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*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	**1.31**		0.301	0.325	5.00	0.415	pCi/L		03/18/21 19:22	1

Client Sample ID: MW-12

Date Collected: 02/09/21 11:50
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-4

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	**1.77**		0.229	0.279	1.00	0.107	pCi/L	02/24/21 11:26	03/18/21 10:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.6*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.394	U	0.276	0.279	1.00	0.432	pCi/L	02/24/21 13:06	03/08/21 13:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.6*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*1*
Y Carrier	*86.7*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:07*	*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	**2.16**		0.359	0.395	5.00	0.432	pCi/L		03/18/21 19:22	1

Definitions/Glossary

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

Job ID: 400-199330-2
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
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: 400-199330-2
SDG: Upgradient

Client Sample ID: MW-2
Date Collected: 02/09/21 08:03
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:39	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501106	03/08/21 13:07	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Client Sample ID: MW-3
Date Collected: 02/09/21 08:05
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:40	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501106	03/08/21 13:07	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Client Sample ID: DUP-01
Date Collected: 02/09/21 07:05
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:42	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501106	03/08/21 13:07	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Client Sample ID: MW-12
Date Collected: 02/09/21 11:50
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199330-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:40	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501106	03/08/21 13:07	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Laboratory References:

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

QC Association Summary

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

Job ID: 400-199330-2
SDG: Upgradient

Rad

Prep Batch: 499724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	PrecSep-21	
400-199330-2	MW-3	Total/NA	Water	PrecSep-21	
400-199330-3	DUP-01	Total/NA	Water	PrecSep-21	
400-199330-4	MW-12	Total/NA	Water	PrecSep-21	
MB 160-499724/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-499724/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-41293-C-1-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
160-41293-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 499735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199330-1	MW-2	Total/NA	Water	PrecSep_0	
400-199330-2	MW-3	Total/NA	Water	PrecSep_0	
400-199330-3	DUP-01	Total/NA	Water	PrecSep_0	
400-199330-4	MW-12	Total/NA	Water	PrecSep_0	
MB 160-499735/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-499735/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-41293-C-1-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
160-41293-C-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-499724/21-A
Matrix: Water
Analysis Batch: 502446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499724

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.004162	U	0.0545	0.0545	1.00	0.112	pCi/L	02/24/21 11:26	03/18/21 10:43	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:43*	*1*

Lab Sample ID: LCS 160-499724/1-A
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499724

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.91		1.13	1.00	0.0905	pCi/L	96	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.8*		*40 - 110*

Lab Sample ID: 160-41293-C-1-B MS
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499724

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.765		11.3	12.24		1.25	1.00	0.102	pCi/L	101	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*92.5*		*40 - 110*

Lab Sample ID: 160-41293-C-1-C MSD
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499724

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	0.765		11.3	11.81		1.21	1.00	0.103	pCi/L	97	75 - 138	0.17	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*96.1*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-499735/21-A
Matrix: Water
Analysis Batch: 501106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499735

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2620	U	0.293	0.294	1.00	0.481	pCi/L	02/24/21 13:06	03/08/21 13:06	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110	02/24/21 13:06	03/08/21 13:06	1
Y Carrier	83.7		40 - 110	02/24/21 13:06	03/08/21 13:06	1

Lab Sample ID: LCS 160-499735/1-A
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499735

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			7.37	6.057		0.779	1.00	0.314	pCi/L	82	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	92.8		40 - 110
Y Carrier	87.9		40 - 110

Lab Sample ID: 160-41293-C-1-E MS
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499735

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	1.72		7.37	8.324		0.999	1.00	0.362	pCi/L	90	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	92.5		40 - 110
Y Carrier	87.5		40 - 110

Lab Sample ID: 160-41293-C-1-F MSD
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499735

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	1.72		7.37	8.380		0.995	1.00	0.350	pCi/L	90	45 - 150	0.03	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	96.1		40 - 110
Y Carrier	87.9		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

400-199330 COC

Client Information	Sampler: Brett Sugles / Phillip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-53432-23565.1
Client Contact: Kristi Mitchell	Phone: 850 380 3458	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: 850-444-6427(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:

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	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		
MW-2	2/9/21	0803	~~0803~~ G	Water			X	X	X	X		
MW-3	2/9/21	0805	G	Water			X	X	X	X		
~~MW-6~~ Dup-01	2/9/21	0705	G	Water			X	X	X	X		
~~MW-7~~				Water								
~~MW-8~~				Water								
~~MW-9~~				Water								
~~MW-10~~				Water								
~~MW-11~~				Water								
MW-12	2/9/21	1150	G	Water			X	X	X	X		
~~MW-13~~				Water								
~~MW-14~~				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: 2/12/21 1310	Company GPC	Received by:	Date/Time: 2/12/21 1310	Company GA PC
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: 2.4°C, 1.7°C IR8

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-199330-2
SDG Number: Upgradient

Login Number: 199330
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	2.4°C 1.7°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: 400-199330-2
SDG Number: Upgradient

Login Number: 199330
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/23/21 12:00 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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-199330-2
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	12-08-21
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	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
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	03-01-22
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: 400-199331-1
Laboratory Sample Delivery Group: Delineation
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:
3/4/2021 4:14:44 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-199331-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-199331-1

Metals
Method 6020: CRI recovery outside SOP's criteria. The sample is ND; therefore data is report. (CRI 400-520832/11)

Method 6020: The following samples were diluted due to the nature of the sample matrix: MWI-12A (400-199331-1) and PZ-14 (400-199331-2). Elevated reporting limits (RLs) are provided.

General Chemistry
Method SM 2540C: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for analytical batch 400-520511 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 SM 4500 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MWI-12A (400-199331-1) and PZ-14 (400-199331-2). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MWI-12A (400-199331-1) and PZ-14 (400-199331-2). Elevated reporting limits (RLs) are provided.

Detection Summary

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

Job ID: 400-199331-1
SDG: Delineation

Client Sample ID: MWI-12A — Lab Sample ID: 400-199331-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00054	I	0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.051		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	3.7		0.25	0.090	mg/L	25		6020	Total Recoverable
Calcium	59		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0020	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Molybdenum	0.018		0.015	0.0045	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	600		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	140		10	7.0	mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.050	I	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	110		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA
Field pH	6.29				SU	1		Field Sampling	Total/NA

Client Sample ID: PZ-14 — Lab Sample ID: 400-199331-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.014		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.15		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	11		1.0	0.36	mg/L	100		6020	Total Recoverable
Calcium	800		2.5	1.3	mg/L	50		6020	Total Recoverable
Chromium	0.0031		0.0025	0.0010	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	7300		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2500		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Fluoride	0.49		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	1300		250	70	mg/L	50		SM 4500 SO4 E	Total/NA
Field pH	6.24				SU	1		Field Sampling	Total/NA

Client Sample ID: EB-01 — Lab Sample ID: 400-199331-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.026	I	0.050	0.018	mg/L	5		6020	Total Recoverable

Client Sample ID: FB-01 — Lab Sample ID: 400-199331-4

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

Job ID: 400-199331-1
SDG: Delineation

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: 400-199331-1
SDG: Delineation

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-199331-1	MWI-12A	Water	02/09/21 13:55	02/12/21 13:10	
400-199331-2	PZ-14	Water	02/09/21 14:00	02/12/21 13:10	
400-199331-3	EB-01	Water	02/09/21 12:45	02/12/21 13:10	
400-199331-4	FB-01	Water	02/09/21 13:30	02/12/21 13:10	

Client Sample Results

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

Job ID: 400-199331-1
SDG: Delineation

Client Sample ID: MWI-12A

Date Collected: 02/09/21 13:55
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-1

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		02/15/21 16:00	02/17/21 03:55	5
Arsenic	**0.00054**	**I**	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 03:55	5
Barium	**0.051**		0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 03:55	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 03:55	5
Boron	**3.7**		0.25	0.090	mg/L		02/15/21 16:00	02/17/21 20:27	25
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 03:55	5
Calcium	**59**		0.25	0.13	mg/L		02/15/21 16:00	02/17/21 03:55	5
Chromium	**0.0020**	**I**	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 03:55	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 03:55	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 03:55	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 03:55	5
Molybdenum	**0.018**		0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 03:55	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 03:55	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 03:55	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		02/15/21 09:50	02/15/21 17:15	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**600**		5.0	5.0	mg/L			02/13/21 18:24	1
Chloride	**140**		10	7.0	mg/L			02/22/21 04:53	5
Fluoride	**0.050**	**I**	0.10	0.032	mg/L			03/01/21 12:39	1
Sulfate	**110**		25	7.0	mg/L			02/22/21 04:31	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.29**				SU			02/09/21 13:55	1

Client Sample Results

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

Job ID: 400-199331-1
SDG: Delineation

Client Sample ID: PZ-14

Date Collected: 02/09/21 14:00
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-2

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		02/15/21 16:00	02/17/21 03:59	5
Arsenic	**0.014**		0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 03:59	5
Barium	**0.15**		0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 03:59	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 03:59	5
Boron	**11**		1.0	0.36	mg/L		02/15/21 16:00	02/17/21 20:46	100
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 03:59	5
Calcium	**800**		2.5	1.3	mg/L		02/15/21 16:00	02/17/21 20:32	50
Chromium	**0.0031**		0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 03:59	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 03:59	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 03:59	5
Lithium	0.019	U	0.050	0.019	mg/L		02/15/21 16:00	02/17/21 20:32	50
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 03:59	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 03:59	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 03:59	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		02/15/21 09:50	02/15/21 17:17	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**7300**		50	50	mg/L			02/13/21 18:24	1
Chloride	**2500**		200	140	mg/L			02/22/21 04:41	100
Fluoride	**0.49**		0.10	0.032	mg/L			03/01/21 12:43	1
Sulfate	**1300**		250	70	mg/L			02/22/21 04:31	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.24**				SU			02/09/21 14:00	1

Client Sample Results

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

Job ID: 400-199331-1
SDG: Delineation

Client Sample ID: EB-01
Date Collected: 02/09/21 12:45
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-3
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		02/15/21 16:00	02/17/21 04:04	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 04:04	5
Barium	0.00070	U	0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 04:04	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 04:04	5
Boron	**0.026**	**I**	0.050	0.018	mg/L		02/15/21 16:00	02/17/21 04:04	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 04:04	5
Calcium	0.13	U	0.25	0.13	mg/L		02/15/21 16:00	02/17/21 04:04	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 04:04	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 04:04	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 04:04	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 04:04	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 04:04	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 04:04	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 04:04	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		02/15/21 09:50	02/15/21 17:19	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			02/13/21 18:24	1
Chloride	1.4	U	2.0	1.4	mg/L			02/22/21 04:40	1
Fluoride	0.032	U	0.10	0.032	mg/L			03/01/21 12:47	1
Sulfate	1.4	U	5.0	1.4	mg/L			02/22/21 04:01	1

Client Sample Results

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

Job ID: 400-199331-1
SDG: Delineation

Client Sample ID: FB-01

Date Collected: 02/09/21 13:30
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-4

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		02/15/21 16:00	02/17/21 04:09	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 04:09	5
Barium	0.00070	U	0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 04:09	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 04:09	5
Boron	0.018	U	0.050	0.018	mg/L		02/15/21 16:00	02/17/21 04:09	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 04:09	5
Calcium	0.13	U	0.25	0.13	mg/L		02/15/21 16:00	02/17/21 04:09	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 04:09	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 04:09	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 04:09	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 04:09	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 04:09	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 04:09	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 04:09	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		02/15/21 09:50	02/15/21 17:20	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			02/13/21 18:24	1
Chloride	1.4	U	2.0	1.4	mg/L			02/22/21 04:40	1
Fluoride	0.032	U	0.10	0.032	mg/L			03/01/21 12:51	1
Sulfate	1.4	U	5.0	1.4	mg/L			02/22/21 04:01	1

Definitions/Glossary

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

Job ID: 400-199331-1
SDG: Delineation

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: MWI-12A

Lab Sample ID: 400-199331-1

Date Collected: 02/09/21 13:55

Matrix: Water

Date Received: 02/12/21 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 03:55	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	521039	02/17/21 20:27	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 17:15	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		5	521272	02/22/21 04:53	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:39	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	521271	02/22/21 04:31	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	521057	02/09/21 13:55	EHS	TAL PEN

Client Sample ID: PZ-14

Lab Sample ID: 400-199331-2

Date Collected: 02/09/21 14:00

Matrix: Water

Date Received: 02/12/21 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 03:59	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		50	521039	02/17/21 20:32	LDC	TAL PEN
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		100	521039	02/17/21 20:46	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 17:17	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	521272	02/22/21 04:41	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:43	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	521271	02/22/21 04:31	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	521057	02/09/21 14:00	EHS	TAL PEN

Client Sample ID: EB-01

Lab Sample ID: 400-199331-3

Date Collected: 02/09/21 12:45

Matrix: Water

Date Received: 02/12/21 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 04:04	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 17:19	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	521272	02/22/21 04:40	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:47	CAC	TAL PEN

Lab Chronicle

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

Job ID: 400-199331-1
SDG: Delineation

Client Sample ID: EB-01
Date Collected: 02/09/21 12:45
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		1	521271	02/22/21 04:01	DN1	TAL PEN

Client Sample ID: FB-01
Date Collected: 02/09/21 13:30
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			520600	02/15/21 16:00	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	520832	02/17/21 04:09	LDC	TAL PEN
Total/NA	Prep	7470A			520494	02/15/21 09:50	NET	TAL PEN
Total/NA	Analysis	7470A		1	520825	02/15/21 17:20	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	520511	02/13/21 18:24	DEK	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	521272	02/22/21 04:40	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	522162	03/01/21 12:51	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	521271	02/22/21 04:01	DN1	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 520494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	7470A	
400-199331-2	PZ-14	Total/NA	Water	7470A	
400-199331-3	EB-01	Total/NA	Water	7470A	
400-199331-4	FB-01	Total/NA	Water	7470A	
MB 400-520494/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-520494/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-199329-C-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-199329-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 520600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total Recoverable	Water	3005A	
400-199331-2	PZ-14	Total Recoverable	Water	3005A	
400-199331-3	EB-01	Total Recoverable	Water	3005A	
400-199331-4	FB-01	Total Recoverable	Water	3005A	
MB 400-520600/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 400-520600/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-199323-E-1-C MS	Matrix Spike	Total Recoverable	Water	3005A	
400-199323-E-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 520825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	7470A	520494
400-199331-2	PZ-14	Total/NA	Water	7470A	520494
400-199331-3	EB-01	Total/NA	Water	7470A	520494
400-199331-4	FB-01	Total/NA	Water	7470A	520494
MB 400-520494/14-A	Method Blank	Total/NA	Water	7470A	520494
LCS 400-520494/15-A	Lab Control Sample	Total/NA	Water	7470A	520494
400-199329-C-1-B MS	Matrix Spike	Total/NA	Water	7470A	520494
400-199329-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	520494

Analysis Batch: 520832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total Recoverable	Water	6020	520600
400-199331-2	PZ-14	Total Recoverable	Water	6020	520600
400-199331-3	EB-01	Total Recoverable	Water	6020	520600
400-199331-4	FB-01	Total Recoverable	Water	6020	520600
MB 400-520600/1-A	Method Blank	Total Recoverable	Water	6020	520600
LCS 400-520600/2-A	Lab Control Sample	Total Recoverable	Water	6020	520600
400-199323-E-1-C MS	Matrix Spike	Total Recoverable	Water	6020	520600
400-199323-E-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	520600

Analysis Batch: 521039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total Recoverable	Water	6020	520600
400-199331-2	PZ-14	Total Recoverable	Water	6020	520600
400-199331-2	PZ-14	Total Recoverable	Water	6020	520600

General Chemistry

Analysis Batch: 520511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	SM 2540C	
400-199331-2	PZ-14	Total/NA	Water	SM 2540C	
400-199331-3	EB-01	Total/NA	Water	SM 2540C	
400-199331-4	FB-01	Total/NA	Water	SM 2540C	
MB 400-520511/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-520511/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-199316-H-1 DU	Duplicate	Total/NA	Water	SM 2540C	
400-199395-D-9 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 521271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	SM 4500 SO4 E	
400-199331-2	PZ-14	Total/NA	Water	SM 4500 SO4 E	
400-199331-3	EB-01	Total/NA	Water	SM 4500 SO4 E	
400-199331-4	FB-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-521271/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-521271/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-521271/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-199330-B-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-199330-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 521272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	SM 4500 Cl- E	
400-199331-2	PZ-14	Total/NA	Water	SM 4500 Cl- E	
400-199331-3	EB-01	Total/NA	Water	SM 4500 Cl- E	
400-199331-4	FB-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-521272/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-521272/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-521272/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-199330-B-2 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-199330-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 522162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	SM 4500 F C	
400-199331-2	PZ-14	Total/NA	Water	SM 4500 F C	
400-199331-3	EB-01	Total/NA	Water	SM 4500 F C	
400-199331-4	FB-01	Total/NA	Water	SM 4500 F C	
MB 400-522162/2	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-522162/5	Lab Control Sample	Total/NA	Water	SM 4500 F C	
240-144401-A-5 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
240-144401-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 521057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	Field Sampling	
400-199331-2	PZ-14	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-520600/1-A
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		02/15/21 16:00	02/17/21 02:11	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		02/15/21 16:00	02/17/21 02:11	5
Barium	0.00070	U	0.0025	0.00070	mg/L		02/15/21 16:00	02/17/21 02:11	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		02/15/21 16:00	02/17/21 02:11	5
Boron	0.018	U	0.050	0.018	mg/L		02/15/21 16:00	02/17/21 02:11	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		02/15/21 16:00	02/17/21 02:11	5
Calcium	0.13	U	0.25	0.13	mg/L		02/15/21 16:00	02/17/21 02:11	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		02/15/21 16:00	02/17/21 02:11	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		02/15/21 16:00	02/17/21 02:11	5
Lead	0.00029	U	0.0013	0.00029	mg/L		02/15/21 16:00	02/17/21 02:11	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		02/15/21 16:00	02/17/21 02:11	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		02/15/21 16:00	02/17/21 02:11	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		02/15/21 16:00	02/17/21 02:11	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		02/15/21 16:00	02/17/21 02:11	5

Lab Sample ID: LCS 400-520600/2-A
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0502		mg/L		100	80 - 120
Arsenic	0.0500	0.0484		mg/L		97	80 - 120
Barium	0.0500	0.0513		mg/L		103	80 - 120
Beryllium	0.0500	0.0499		mg/L		100	80 - 120
Boron	0.100	0.0812		mg/L		81	80 - 120
Cadmium	0.0500	0.0546		mg/L		109	80 - 120
Calcium	5.00	4.95		mg/L		99	80 - 120
Chromium	0.0500	0.0539		mg/L		108	80 - 120
Cobalt	0.0500	0.0521		mg/L		104	80 - 120
Lead	0.0500	0.0516		mg/L		103	80 - 120
Lithium	0.0500	0.0460		mg/L		92	80 - 120
Molybdenum	0.0500	0.0528		mg/L		106	80 - 120
Selenium	0.0500	0.0504		mg/L		101	80 - 120
Thallium	0.0100	0.0100		mg/L		100	80 - 120

Lab Sample ID: 400-199323-E-1-C MS
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0015	U	0.0500	0.0501		mg/L		100	75 - 125
Arsenic	0.00076	I	0.0500	0.0490		mg/L		96	75 - 125
Barium	0.030		0.0500	0.0807		mg/L		101	75 - 125
Beryllium	0.00017	U	0.0500	0.0495		mg/L		99	75 - 125
Boron	0.15		0.100	0.250		mg/L		104	75 - 125
Cadmium	0.00028	U	0.0500	0.0535		mg/L		107	75 - 125
Calcium	79		5.00	84.4		mg/L		112	75 - 125
Chromium	0.0015	I	0.0500	0.0533		mg/L		104	75 - 125
Cobalt	0.00056	U	0.0500	0.0519		mg/L		104	75 - 125

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

Lab Sample ID: 400-199323-E-1-C MS
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 520600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.00029	U	0.0500	0.0519		mg/L		104	75 - 125
Lithium	0.0019	U	0.0500	0.0459		mg/L		92	75 - 125
Molybdenum	0.0045	U	0.0500	0.0534		mg/L		107	75 - 125
Selenium	0.00082	U	0.0500	0.0519		mg/L		104	75 - 125
Thallium	0.00012	U	0.0100	0.00992		mg/L		99	75 - 125

Lab Sample ID: 400-199323-E-1-D MSD
Matrix: Water
Analysis Batch: 520832

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 520600

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	0.0509		mg/L		102	75 - 125	2	20
Arsenic	0.00076	I	0.0500	0.0503		mg/L		99	75 - 125	3	20
Barium	0.030		0.0500	0.0803		mg/L		100	75 - 125	1	20
Beryllium	0.00017	U	0.0500	0.0496		mg/L		99	75 - 125	0	20
Boron	0.15		0.100	0.240		mg/L		94	75 - 125	4	20
Cadmium	0.00028	U	0.0500	0.0518		mg/L		104	75 - 125	3	20
Calcium	79		5.00	84.6		mg/L		115	75 - 125	0	20
Chromium	0.0015	I	0.0500	0.0534		mg/L		104	75 - 125	0	20
Cobalt	0.00056	U	0.0500	0.0510		mg/L		102	75 - 125	2	20
Lead	0.00029	U	0.0500	0.0518		mg/L		104	75 - 125	0	20
Lithium	0.0019	U	0.0500	0.0453		mg/L		91	75 - 125	1	20
Molybdenum	0.0045	U	0.0500	0.0537		mg/L		107	75 - 125	0	20
Selenium	0.00082	U	0.0500	0.0508		mg/L		102	75 - 125	2	20
Thallium	0.00012	U	0.0100	0.0101		mg/L		101	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-520494/14-A
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 520494

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		02/15/21 09:50	02/15/21 16:34	1

Lab Sample ID: LCS 400-520494/15-A
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.000970		mg/L		96	80 - 120

Lab Sample ID: 400-199329-C-1-B MS
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 520494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000070	U	0.00201	0.00197		mg/L		98	80 - 120

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

Lab Sample ID: 400-199329-C-1-C MSD
Matrix: Water
Analysis Batch: 520825

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 520494

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	0.00202		mg/L		100	80 - 120	3	20

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

Lab Sample ID: MB 400-520511/1
Matrix: Water
Analysis Batch: 520511

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			02/13/21 18:24	1

Lab Sample ID: LCS 400-520511/2
Matrix: Water
Analysis Batch: 520511

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	286		mg/L		98	78 - 122

Lab Sample ID: 400-199316-H-1 DU
Matrix: Water
Analysis Batch: 520511

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	820		818		mg/L		0.2	5

Lab Sample ID: 400-199395-D-9 DU
Matrix: Water
Analysis Batch: 520511

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	800		466	J3	mg/L		53	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-521272/6
Matrix: Water
Analysis Batch: 521272

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			02/22/21 04:38	1

Lab Sample ID: LCS 400-521272/7
Matrix: Water
Analysis Batch: 521272

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	28.2		mg/L		94	90 - 110

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-521272/3
Matrix: Water
Analysis Batch: 521272

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	2.18		mg/L		109	50 - 150		

Lab Sample ID: 400-199330-B-2 MS
Matrix: Water
Analysis Batch: 521272

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	15		10.0	23.4		mg/L		88	73 - 120		

Lab Sample ID: 400-199330-B-2 MSD
Matrix: Water
Analysis Batch: 521272

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	15		10.0	23.3		mg/L		87	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-522162/2
Matrix: Water
Analysis Batch: 522162

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			03/01/21 11:31	1

Lab Sample ID: LCS 400-522162/5
Matrix: Water
Analysis Batch: 522162

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	4.26		mg/L		107	90 - 110		

Lab Sample ID: 240-144401-A-5 MS
Matrix: Water
Analysis Batch: 522162

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	1.2		1.00	2.32		mg/L		108	75 - 125		

Lab Sample ID: 240-144401-A-5 MSD
Matrix: Water
Analysis Batch: 522162

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	1.2		1.00	2.28		mg/L		104	75 - 125	2	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-521271/6
Matrix: Water
Analysis Batch: 521271

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			02/22/21 03:54	1

Lab Sample ID: LCS 400-521271/7
Matrix: Water
Analysis Batch: 521271

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	14.0		mg/L		94	90 - 110		

Lab Sample ID: MRL 400-521271/3
Matrix: Water
Analysis Batch: 521271

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	4.93	I	mg/L		99	50 - 150		

Lab Sample ID: 400-199330-B-2 MS
Matrix: Water
Analysis Batch: 521271

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	10.4		mg/L		104	77 - 128		

Lab Sample ID: 400-199330-B-2 MSD
Matrix: Water
Analysis Batch: 521271

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	10.6		mg/L		106	77 - 128	2	5

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

Chain of Custody Record

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400-199331 COC

Client Information	Sampler: Bret Sickles / Phillip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-100837-31203.1
Client Contact: Barry Evans	Phone: 850 380 3458	E-Mail: Cheyenne.Whitmire@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:			Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No			
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	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:

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	2/9/21	1355	G	Water			X	X	X	X	X	X	X		
PZ-14		1400		Water											
~~MW-11 HORIZONTAL~~ EB-01		1245		Water											
~~MW-13 HORIZONTAL~~ FB-01	2/9/21	1330	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: 2/12/21 1310	Company RDH	Received by:	Date/Time: 2/12/21 1310	Company GAPC
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: 2.4°C, 1.7°C IR 8

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-199331-1
SDG Number: Delineation

Login Number: 199331
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	2.4°C 1.7°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: 400-199331-1
SDG: Delineation

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	01-12-22
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	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810-186	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
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	06-30-21

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-199331-2
Laboratory Sample Delivery Group: Delineation
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:
3/19/2021 2:40:01 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

Review your project results through TotalAccess

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-199331-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-199331-2

RAD

Method 9315: Radium-226 Batch 499724. 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 (400-199331-1), PZ-14 (400-199331-2), EB-01 (400-199331-3), FB-01 (400-199331-4), (LCS 160-499724/1-A), (MB 160-499724/21-A), (160-41293-C-1-A), (160-41293-C-1-B MS) and (160-41293-C-1-C MSD)

Method 9320: Prep Batch 499735. 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 (400-199331-1), PZ-14 (400-199331-2), EB-01 (400-199331-3), FB-01 (400-199331-4), (LCS 160-499735/1-A), (MB 160-499735/21-A), (160-41293-C-1-D), (160-41293-C-1-E MS) and (160-41293-C-1-F MSD)

Method PrecSep_0: Radium 228 Prep Batch 160-499735. The following samples were prepared at a reduced aliquot due to matrix: MWI-12A (400-199331-1) and PZ-14 (400-199331-2). Samples 400-199331-2 and 400-199329-2 were yellow in appearance and had a strong odor. Sample 400-199331-1 was yellow and appearance. Sample 480-181293-2 was black and cloudy. During the in-growth process, the following sample needed to be filtered due to sediment present in the sample. This is an indicator of matrix interference.

Method PrecSep-21: Radium 226 Prep Batch 160-499724. The following samples were prepared at a reduced aliquot due to matrix: MWI-12A (400-199331-1) and PZ-14 (400-199331-2). Samples 400-199331-2 and 400-199329-2 were yellow in appearance and had a strong odor. Sample 400-199331-1 was yellow and appearance. Sample 480-181293-2 was black and cloudy. During the in-growth process, the following sample needed to be filtered due to sediment present in the sample. This is an indicator of matrix interference.

Method Summary

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

Job ID: 400-199331-2
SDG: Delineation

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: 400-199331-2
SDG: Delineation

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-199331-1	MWI-12A	Water	02/09/21 13:55	02/12/21 13:10	
400-199331-2	PZ-14	Water	02/09/21 14:00	02/12/21 13:10	
400-199331-3	EB-01	Water	02/09/21 12:45	02/12/21 13:10	
400-199331-4	FB-01	Water	02/09/21 13:30	02/12/21 13:10	

Client Sample ID: MWI-12A

Date Collected: 02/09/21 13:55
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-1

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	10.2		0.658	1.13	1.00	0.170	pCi/L	02/24/21 11:26	03/18/21 10:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.938		0.391	0.401	1.00	0.552	pCi/L	02/24/21 13:06	03/08/21 13:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:08*	*1*
Y Carrier	*86.7*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:08*	*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	11.1		0.765	1.20	5.00	0.552	pCi/L		03/18/21 19:22	1

Client Sample Results

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

Job ID: 400-199331-2
SDG: Delineation

Client Sample ID: PZ-14
Date Collected: 02/09/21 14:00
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-2
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	9.28		0.616	1.04	1.00	0.171	pCi/L	02/24/21 11:26	03/18/21 10:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	9.69		0.831	1.22	1.00	0.535	pCi/L	02/24/21 13:06	03/08/21 13:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:08*	*1*
Y Carrier	*87.9*		*40 - 110*	*02/24/21 13:06*	*03/08/21 13:08*	*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	19.0		1.03	1.60	5.00	0.535	pCi/L		03/18/21 19:22	1

Client Sample ID: EB-01
Date Collected: 02/09/21 12:45
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-3
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	0.0721	U	0.0870	0.0873	1.00	0.143	pCi/L	02/24/21 11:26	03/18/21 10:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.5*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0271	U	0.253	0.253	1.00	0.448	pCi/L	02/24/21 13:06	03/08/21 12:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.5*		*40 - 110*	*02/24/21 13:06*	*03/08/21 12:56*	*1*
Y Carrier	*88.2*		*40 - 110*	*02/24/21 13:06*	*03/08/21 12:56*	*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	0.0993	U	0.268	0.268	5.00	0.448	pCi/L		03/18/21 19:22	1

Client Sample ID: FB-01

Date Collected: 02/09/21 13:30
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-4

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	-0.00288	U	0.0454	0.0454	1.00	0.0977	pCi/L	02/24/21 11:26	03/18/21 10:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0823	U	0.238	0.239	1.00	0.415	pCi/L	02/24/21 13:06	03/08/21 12:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*02/24/21 13:06*	*03/08/21 12:56*	*1*
Y Carrier	*84.9*		*40 - 110*	*02/24/21 13:06*	*03/08/21 12:56*	*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	0.0794	U	0.242	0.243	5.00	0.415	pCi/L		03/18/21 19:22	1

Definitions/Glossary

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

Job ID: 400-199331-2
SDG: Delineation

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: 400-199331-2
SDG: Delineation

Client Sample ID: MWI-12A
Date Collected: 02/09/21 13:55
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:40	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501106	03/08/21 13:08	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Client Sample ID: PZ-14
Date Collected: 02/09/21 14:00
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:41	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501106	03/08/21 13:08	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Client Sample ID: EB-01
Date Collected: 02/09/21 12:45
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:41	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501105	03/08/21 12:56	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Client Sample ID: FB-01
Date Collected: 02/09/21 13:30
Date Received: 02/12/21 13:10

Lab Sample ID: 400-199331-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499724	02/24/21 11:26	JEC	TAL SL
Total/NA	Analysis	9315		1	502452	03/18/21 10:34	ANW	TAL SL
Total/NA	Prep	PrecSep_0			499735	02/24/21 13:06	JEC	TAL SL
Total/NA	Analysis	9320		1	501105	03/08/21 12:56	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	502483	03/18/21 19:22	SCB	TAL SL

Laboratory References:

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

QC Association Summary

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

Job ID: 400-199331-2
SDG: Delineation

Rad

Prep Batch: 499724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	PrecSep-21	
400-199331-2	PZ-14	Total/NA	Water	PrecSep-21	
400-199331-3	EB-01	Total/NA	Water	PrecSep-21	
400-199331-4	FB-01	Total/NA	Water	PrecSep-21	
MB 160-499724/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-499724/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-41293-C-1-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
160-41293-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 499735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-199331-1	MWI-12A	Total/NA	Water	PrecSep_0	
400-199331-2	PZ-14	Total/NA	Water	PrecSep_0	
400-199331-3	EB-01	Total/NA	Water	PrecSep_0	
400-199331-4	FB-01	Total/NA	Water	PrecSep_0	
MB 160-499735/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-499735/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-41293-C-1-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
160-41293-C-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-499724/21-A
Matrix: Water
Analysis Batch: 502446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499724

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.004162	U	0.0545	0.0545	1.00	0.112	pCi/L	02/24/21 11:26	03/18/21 10:43	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*40 - 110*	*02/24/21 11:26*	*03/18/21 10:43*	*1*

Lab Sample ID: LCS 160-499724/1-A
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499724

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.91		1.13	1.00	0.0905	pCi/L	96	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.8*		*40 - 110*

Lab Sample ID: 160-41293-C-1-B MS
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499724

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.765		11.3	12.24		1.25	1.00	0.102	pCi/L	101	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*92.5*		*40 - 110*

Lab Sample ID: 160-41293-C-1-C MSD
Matrix: Water
Analysis Batch: 502452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499724

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	0.765		11.3	11.81		1.21	1.00	0.103	pCi/L	97	75 - 138	0.17	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*96.1*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-499735/21-A
Matrix: Water
Analysis Batch: 501106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499735

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2620	U	0.293	0.294	1.00	0.481	pCi/L	02/24/21 13:06	03/08/21 13:06	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110	02/24/21 13:06	03/08/21 13:06	1
Y Carrier	83.7		40 - 110	02/24/21 13:06	03/08/21 13:06	1

Lab Sample ID: LCS 160-499735/1-A
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499735

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			7.37	6.057		0.779	1.00	0.314	pCi/L	82	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	92.8		40 - 110
Y Carrier	87.9		40 - 110

Lab Sample ID: 160-41293-C-1-E MS
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499735

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	1.72		7.37	8.324		0.999	1.00	0.362	pCi/L	90	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	92.5		40 - 110
Y Carrier	87.5		40 - 110

Lab Sample ID: 160-41293-C-1-F MSD
Matrix: Water
Analysis Batch: 501105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499735

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	1.72		7.37	8.380		0.995	1.00	0.350	pCi/L	90	45 - 150	0.03	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	96.1		40 - 110
Y Carrier	87.9		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

400-199331 COC

Client Information	Sampler: Bret Sickles / Phillip Evans	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-100837-31203.1
Client Contact: Barry Evans	Phone: 850 380 3458	E-Mail: Cheyenne.Whitmire@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:			Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No			
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	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:

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	2/9/21	1355	G	Water			X	X	X	X	X	X	X		
PZ-14		1400		Water											
~~MW-11 HORIZONTAL~~ EB-01		1245		Water											
~~MW-13 HORIZONTAL~~ FB-01	2/9/21	1330	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: 2/12/21 1310	Company RDH	Received by: Date/Time: 2/12/21 1310 Company GAPC
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: 2.4°C, 1.7°C IR 8

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-199331-2
SDG Number: Delineation

Login Number: 199331
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	2.4°C 1.7°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: 400-199331-2
SDG Number: Delineation

Login Number: 199331
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/23/21 12:00 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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-199331-2
SDG: Delineation

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	12-08-21
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	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
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	03-01-22
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

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-208540-1
Laboratory Sample Delivery Group: Downgradient B
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:
9/30/2021 5:45:04 PM

Cheyenne Whitmire, Project Manager II
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LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Certification Summary 24

Job ID: 400-208540-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-208540-1

Metals

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-548090 and analytical batch 400-548635 was outside control limits. Sample matrix interference is suspected.

Method 6020: The continuing calibration verification (CCV) associated with batch 400-548621 recovered above the upper control limit for Molybdenum and Lithium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-06 (400-208540-1), MW-07 (400-208540-2), FB-01 (400-208540-3) and (MB 400-548090/1-A ^5).

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-548090 and analytical batch 400-548621 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: CRI recovery outside SOP's criteria for Boron (45%). The sample is 10x CRI; therefore data is reported. MW-06 (400-208540-1)

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-548090 and analytical batch 400-549080 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

General Chemistry

Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-548417 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-06 (400-208540-1) and MW-07 (400-208540-2). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-06 (400-208540-1) and MW-07 (400-208540-2). Elevated reporting limits (RLs) are provided.

Detection Summary

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

Job ID: 400-208540-1
SDG: Downgradient B

Client Sample ID: MW-06 — Lab Sample ID: 400-208540-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0027		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.071		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Beryllium	0.0013	I	0.0025	0.00017	mg/L	5		6020	Total Recoverable
Boron	7.3		0.50	0.18	mg/L	50		6020	Total Recoverable
Calcium	230		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.012		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	5000		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2900		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Sulfate	300		50	14	mg/L	10		SM 4500 SO4 E	Total/NA
Field pH	5.17				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-07 — Lab Sample ID: 400-208540-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0040		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.12		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	2.8		0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	350		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0067		0.0025	0.0010	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	320		50	14	mg/L	10		SM 4500 SO4 E	Total/NA
Field pH	6.60				SU	1		Field Sampling	Total/NA

Client Sample ID: FB-01 — Lab Sample ID: 400-208540-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.024	I	0.050	0.018	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	32		5.0	5.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

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

Job ID: 400-208540-1
SDG: Downgradient B

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: 400-208540-1
SDG: Downgradient B

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-208540-1	MW-06	Water	09/17/21 08:45	09/17/21 14:45
400-208540-2	MW-07	Water	09/17/21 09:00	09/17/21 14:45
400-208540-3	FB-01	Water	09/17/21 08:50	09/17/21 14:45

Client Sample Results

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

Job ID: 400-208540-1
SDG: Downgradient B

Client Sample ID: MW-06

Date Collected: 09/17/21 08:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-1

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		09/20/21 16:40	09/24/21 01:32	5
Arsenic	**0.0027**		0.0013	0.00039	mg/L		09/20/21 16:40	09/24/21 21:35	5
Barium	**0.071**		0.0025	0.00070	mg/L		09/20/21 16:40	09/24/21 06:28	5
Beryllium	**0.0013**	**I**	0.0025	0.00017	mg/L		09/20/21 16:40	09/24/21 01:32	5
Boron	**7.3**		0.50	0.18	mg/L		09/20/21 16:40	09/27/21 18:56	50
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/20/21 16:40	09/24/21 01:32	5
Calcium	**230**		0.25	0.13	mg/L		09/20/21 16:40	09/24/21 01:32	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/20/21 16:40	09/24/21 06:28	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/20/21 16:40	09/24/21 01:32	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/20/21 16:40	09/24/21 01:32	5
Lithium	**0.012**		0.0050	0.0019	mg/L		09/20/21 16:40	09/24/21 06:28	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/20/21 16:40	09/24/21 01:32	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/20/21 16:40	09/24/21 01:32	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/20/21 16:40	09/24/21 01:32	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:29	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5000**		50	50	mg/L			09/22/21 16:35	1
Chloride	**2900**		200	140	mg/L			09/28/21 01:23	100
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 17:10	1
Sulfate	**300**		50	14	mg/L			09/28/21 01:52	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.17**				SU			09/17/21 08:45	1

Client Sample Results

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

Job ID: 400-208540-1
SDG: Downgradient B

Client Sample ID: MW-07

Date Collected: 09/17/21 09:00
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-2

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		09/20/21 16:40	09/24/21 01:58	5
Arsenic	**0.0040**		0.0013	0.00039	mg/L		09/20/21 16:40	09/24/21 22:00	5
Barium	**0.12**		0.0025	0.00070	mg/L		09/20/21 16:40	09/24/21 06:51	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/20/21 16:40	09/24/21 01:58	5
Boron	**2.8**		0.050	0.018	mg/L		09/20/21 16:40	09/24/21 22:00	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/20/21 16:40	09/24/21 01:58	5
Calcium	**350**		0.25	0.13	mg/L		09/20/21 16:40	09/24/21 01:58	5
Chromium	**0.0067**		0.0025	0.0010	mg/L		09/20/21 16:40	09/24/21 06:51	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/20/21 16:40	09/24/21 01:58	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/20/21 16:40	09/24/21 01:58	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/20/21 16:40	09/24/21 01:58	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/20/21 16:40	09/24/21 01:58	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/20/21 16:40	09/24/21 01:58	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/20/21 16:40	09/24/21 01:58	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:31	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5600**		50	50	mg/L			09/22/21 16:35	1
Chloride	**2400**		100	70	mg/L			09/28/21 01:02	50
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 17:06	1
Sulfate	**320**		50	14	mg/L			09/28/21 01:52	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.60**				SU			09/17/21 09:00	1

Client Sample Results

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

Job ID: 400-208540-1
SDG: Downgradient B

Client Sample ID: FB-01

Date Collected: 09/17/21 08:50
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-3

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		09/20/21 16:40	09/24/21 02:13	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		09/20/21 16:40	09/24/21 02:13	5
Barium	0.00070	U	0.0025	0.00070	mg/L		09/20/21 16:40	09/24/21 22:06	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/20/21 16:40	09/24/21 02:13	5
Boron	**0.024**	**I**	0.050	0.018	mg/L		09/20/21 16:40	09/24/21 02:13	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/20/21 16:40	09/24/21 02:13	5
Calcium	0.13	U	0.25	0.13	mg/L		09/20/21 16:40	09/24/21 02:13	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/20/21 16:40	09/24/21 06:58	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/20/21 16:40	09/24/21 02:13	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/20/21 16:40	09/24/21 02:13	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/20/21 16:40	09/24/21 02:13	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/20/21 16:40	09/24/21 02:13	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/20/21 16:40	09/24/21 02:13	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/20/21 16:40	09/24/21 02:13	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:33	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**32**		5.0	5.0	mg/L			09/22/21 16:35	1
Chloride	1.4	U	2.0	1.4	mg/L			09/28/21 00:59	1
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 17:02	1
Sulfate	1.4	U	5.0	1.4	mg/L			09/28/21 01:20	1

Definitions/Glossary

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

Job ID: 400-208540-1
SDG: Downgradient B

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.

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: 400-208540-1
SDG: Downgradient B

Client Sample ID: MW-06
Date Collected: 09/17/21 08:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548621	09/24/21 01:32	LDC	TAL PEN
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548885	09/24/21 21:35	KW	TAL PEN
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		50	549080	09/27/21 18:56	KW	TAL PEN
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548635	09/24/21 06:28	KW	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:29	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548417	09/22/21 16:35	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	549075	09/28/21 01:23	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 17:10	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	549078	09/28/21 01:52	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/17/21 08:45	FS	TAL PEN

Client Sample ID: MW-07
Date Collected: 09/17/21 09:00
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548621	09/24/21 01:58	LDC	TAL PEN
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548885	09/24/21 22:00	KW	TAL PEN
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548635	09/24/21 06:51	KW	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:31	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548417	09/22/21 16:35	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		50	549075	09/28/21 01:02	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 17:06	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	549078	09/28/21 01:52	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/17/21 09:00	FS	TAL PEN

Client Sample ID: FB-01
Date Collected: 09/17/21 08:50
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548621	09/24/21 02:13	LDC	TAL PEN
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548885	09/24/21 22:06	KW	TAL PEN

Lab Chronicle

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

Job ID: 400-208540-1
SDG: Downgradient B

Client Sample ID: FB-01

Date Collected: 09/17/21 08:50
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548090	09/20/21 16:40	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	548635	09/24/21 06:58	KW	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:33	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548417	09/22/21 16:35	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	549075	09/28/21 00:59	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 17:02	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	549078	09/28/21 01:20	DN1	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 547998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	7470A	
400-208540-2	MW-07	Total/NA	Water	7470A	
400-208540-3	FB-01	Total/NA	Water	7470A	
MB 400-547998/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-547998/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-208477-E-4-C MS	Matrix Spike	Total/NA	Water	7470A	
400-208477-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 548090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total Recoverable	Water	3005A	
400-208540-2	MW-07	Total Recoverable	Water	3005A	
400-208540-3	FB-01	Total Recoverable	Water	3005A	
MB 400-548090/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-548090/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
400-208540-1 MS	MW-06	Total Recoverable	Water	3005A	
400-208540-1 MSD	MW-06	Total Recoverable	Water	3005A	

Analysis Batch: 548148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	7470A	547998
400-208540-2	MW-07	Total/NA	Water	7470A	547998
400-208540-3	FB-01	Total/NA	Water	7470A	547998
MB 400-547998/14-A	Method Blank	Total/NA	Water	7470A	547998
LCS 400-547998/15-A	Lab Control Sample	Total/NA	Water	7470A	547998
400-208477-E-4-C MS	Matrix Spike	Total/NA	Water	7470A	547998
400-208477-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	547998

Analysis Batch: 548621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total Recoverable	Water	6020	548090
400-208540-2	MW-07	Total Recoverable	Water	6020	548090
400-208540-3	FB-01	Total Recoverable	Water	6020	548090
MB 400-548090/1-A ^5	Method Blank	Total Recoverable	Water	6020	548090
LCS 400-548090/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	548090
400-208540-1 MS	MW-06	Total Recoverable	Water	6020	548090
400-208540-1 MSD	MW-06	Total Recoverable	Water	6020	548090

Analysis Batch: 548635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total Recoverable	Water	6020	548090
400-208540-2	MW-07	Total Recoverable	Water	6020	548090
400-208540-3	FB-01	Total Recoverable	Water	6020	548090
MB 400-548090/1-A ^5	Method Blank	Total Recoverable	Water	6020	548090
LCS 400-548090/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	548090
400-208540-1 MS	MW-06	Total Recoverable	Water	6020	548090
400-208540-1 MSD	MW-06	Total Recoverable	Water	6020	548090

Analysis Batch: 548885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total Recoverable	Water	6020	548090

Metals (Continued)

Analysis Batch: 548885 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-2	MW-07	Total Recoverable	Water	6020	548090
400-208540-3	FB-01	Total Recoverable	Water	6020	548090
MB 400-548090/1-A ^5	Method Blank	Total Recoverable	Water	6020	548090
LCS 400-548090/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	548090
400-208540-1 MS	MW-06	Total Recoverable	Water	6020	548090
400-208540-1 MSD	MW-06	Total Recoverable	Water	6020	548090

Analysis Batch: 549080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total Recoverable	Water	6020	548090
400-208540-1 MS	MW-06	Total Recoverable	Water	6020	548090
400-208540-1 MSD	MW-06	Total Recoverable	Water	6020	548090

General Chemistry

Analysis Batch: 548417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	SM 2540C	
400-208540-2	MW-07	Total/NA	Water	SM 2540C	
400-208540-3	FB-01	Total/NA	Water	SM 2540C	
MB 400-548417/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-548417/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-208509-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 548769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	SM 4500 F C	
400-208540-2	MW-07	Total/NA	Water	SM 4500 F C	
400-208540-3	FB-01	Total/NA	Water	SM 4500 F C	
MB 400-548769/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-548769/7	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-207993-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-207993-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-208550-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-208550-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 549075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	SM 4500 Cl- E	
400-208540-2	MW-07	Total/NA	Water	SM 4500 Cl- E	
400-208540-3	FB-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-549075/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-549075/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-549075/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-208546-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-208546-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 549078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	SM 4500 SO4 E	
400-208540-2	MW-07	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 549078 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-3	FB-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-549078/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-549078/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-549078/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-208546-B-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-208546-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Field Service / Mobile Lab

Analysis Batch: 549331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	Field Sampling	
400-208540-2	MW-07	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-548090/1-A ^5
Matrix: Water
Analysis Batch: 548621

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		09/20/21 16:40	09/24/21 01:22	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/20/21 16:40	09/24/21 01:22	5
Boron	0.018	U	0.050	0.018	mg/L		09/20/21 16:40	09/24/21 01:22	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/20/21 16:40	09/24/21 01:22	5
Calcium	0.13	U	0.25	0.13	mg/L		09/20/21 16:40	09/24/21 01:22	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/20/21 16:40	09/24/21 01:22	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/20/21 16:40	09/24/21 01:22	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/20/21 16:40	09/24/21 01:22	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/20/21 16:40	09/24/21 01:22	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/20/21 16:40	09/24/21 01:22	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/20/21 16:40	09/24/21 01:22	5

Lab Sample ID: MB 400-548090/1-A ^5
Matrix: Water
Analysis Batch: 548635

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00070	U	0.0025	0.00070	mg/L		09/20/21 16:40	09/24/21 05:58	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/20/21 16:40	09/24/21 05:58	5

Lab Sample ID: MB 400-548090/1-A ^5
Matrix: Water
Analysis Batch: 548885

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00039	U	0.0013	0.00039	mg/L		09/20/21 16:40	09/24/21 21:25	5

Lab Sample ID: LCS 400-548090/2-A ^5
Matrix: Water
Analysis Batch: 548621

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0565		mg/L		113	80 - 120
Beryllium	0.0500	0.0582		mg/L		116	80 - 120
Boron	0.100	0.100		mg/L		100	80 - 120
Cadmium	0.0500	0.0559		mg/L		112	80 - 120
Calcium	5.00	5.29		mg/L		106	80 - 120
Cobalt	0.0500	0.0579		mg/L		116	80 - 120
Lead	0.0500	0.0565		mg/L		113	80 - 120
Selenium	0.0500	0.0561		mg/L		112	80 - 120
Thallium	0.0100	0.0110		mg/L		110	80 - 120

Lab Sample ID: LCS 400-548090/2-A ^5
Matrix: Water
Analysis Batch: 548635

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.0500	0.0506		mg/L		101	80 - 120
Chromium	0.0500	0.0531		mg/L		106	80 - 120

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

Lab Sample ID: LCS 400-548090/2-A ^5
Matrix: Water
Analysis Batch: 548635

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.0500	0.0410		mg/L		82	80 - 120
Molybdenum	0.0500	0.0573		mg/L		115	80 - 120

Lab Sample ID: LCS 400-548090/2-A ^5
Matrix: Water
Analysis Batch: 548885

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0527		mg/L		105	80 - 120

Lab Sample ID: 400-208540-1 MS
Matrix: Water
Analysis Batch: 548621

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0015	U	0.0500	0.0481		mg/L		96	75 - 125
Beryllium	0.0013	I	0.0500	0.0504		mg/L		98	75 - 125
Cadmium	0.00028	U	0.0500	0.0464		mg/L		93	75 - 125
Calcium	230		5.00	217	J3	mg/L		-206	75 - 125
Cobalt	0.00056	U	0.0500	0.0466		mg/L		93	75 - 125
Lead	0.00029	U	0.0500	0.0468		mg/L		94	75 - 125
Selenium	0.00082	U	0.0500	0.0178	J3	mg/L		36	75 - 125
Thallium	0.00012	U	0.0100	0.00913		mg/L		91	75 - 125

Lab Sample ID: 400-208540-1 MS
Matrix: Water
Analysis Batch: 548635

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.071		0.0500	0.124		mg/L		105	75 - 125
Chromium	0.0010	U	0.0500	0.0506		mg/L		101	75 - 125
Lithium	0.012		0.0500	0.0558		mg/L		87	75 - 125
Molybdenum	0.0045	U	0.0500	0.0609		mg/L		122	75 - 125

Lab Sample ID: 400-208540-1 MS
Matrix: Water
Analysis Batch: 548885

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0027		0.0500	0.0542		mg/L		103	75 - 125

Lab Sample ID: 400-208540-1 MS
Matrix: Water
Analysis Batch: 549080

Client Sample ID: MW-06
Prep Type: Total Recoverable
Prep Batch: 548090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	7.3		0.100	7.67	J3	mg/L		333	75 - 125

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

Lab Sample ID: 400-208540-1 MSD — **Client Sample ID: MW-06**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 548621 — **Prep Batch: 548090**

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	0.0424		mg/L		85	75 - 125	13	20
Beryllium	0.0013	I	0.0500	0.0435		mg/L		85	75 - 125	15	20
Cadmium	0.00028	U	0.0500	0.0420		mg/L		84	75 - 125	10	20
Calcium	230		5.00	191	J3	mg/L		-737	75 - 125	13	20
Cobalt	0.00056	U	0.0500	0.0410		mg/L		82	75 - 125	13	20
Lead	0.00029	U	0.0500	0.0419		mg/L		84	75 - 125	11	20
Selenium	0.00082	U	0.0500	0.0138	J3	mg/L		28	75 - 125	26	20
Thallium	0.00012	U	0.0100	0.00811		mg/L		81	75 - 125	12	20

Lab Sample ID: 400-208540-1 MSD — **Client Sample ID: MW-06**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 548635 — **Prep Batch: 548090**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	0.071		0.0500	0.101	J3	mg/L		59	75 - 125	20	20
Chromium	0.0010	U	0.0500	0.0413		mg/L		83	75 - 125	20	20
Lithium	0.012		0.0500	0.0432	J3	mg/L		62	75 - 125	25	20
Molybdenum	0.0045	U	0.0500	0.0488	J3	mg/L		98	75 - 125	22	20

Lab Sample ID: 400-208540-1 MSD — **Client Sample ID: MW-06**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 548885 — **Prep Batch: 548090**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0027		0.0500	0.0552		mg/L		105	75 - 125	2	20

Lab Sample ID: 400-208540-1 MSD — **Client Sample ID: MW-06**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 549080 — **Prep Batch: 548090**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	7.3		0.100	7.87	J3	mg/L		527	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-547998/14-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548148 — **Prep Batch: 547998**

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:05	1

Lab Sample ID: LCS 400-547998/15-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548148 — **Prep Batch: 547998**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00101	0.000998		mg/L		99	80 - 120		

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

Lab Sample ID: 400-208477-E-4-C MS
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00201	0.00200		mg/L		99	80 - 120

Lab Sample ID: 400-208477-E-4-D MSD
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547998

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00201	0.00194		mg/L		96	80 - 120	3	20

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

Lab Sample ID: MB 400-548417/1
Matrix: Water
Analysis Batch: 548417

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			09/22/21 16:35	1

Lab Sample ID: LCS 400-548417/2
Matrix: Water
Analysis Batch: 548417

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	310		mg/L		106	78 - 122

Lab Sample ID: 400-208509-A-1 DU
Matrix: Water
Analysis Batch: 548417

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	92		102	J3	mg/L		10	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-549075/6
Matrix: Water
Analysis Batch: 549075

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			09/28/21 00:58	1

Lab Sample ID: LCS 400-549075/7
Matrix: Water
Analysis Batch: 549075

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	30.2		mg/L		101	90 - 110

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-549075/3
Matrix: Water
Analysis Batch: 549075

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	1.42	I	mg/L		71	50 - 150

Lab Sample ID: 400-208546-B-1 MS
Matrix: Water
Analysis Batch: 549075

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	11		10.0	22.0		mg/L		109	73 - 120

Lab Sample ID: 400-208546-B-1 MSD
Matrix: Water
Analysis Batch: 549075

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	11		10.0	22.0		mg/L		109	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-548769/3
Matrix: Water
Analysis Batch: 548769

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 16:11	1

Lab Sample ID: LCS 400-548769/7
Matrix: Water
Analysis Batch: 548769

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	5.28		mg/L		106	90 - 110

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-549078/6
Matrix: Water
Analysis Batch: 549078

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			09/28/21 01:14	1

Lab Sample ID: LCS 400-549078/7
Matrix: Water
Analysis Batch: 549078

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	14.3		mg/L		95	90 - 110

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: MRL 400-549078/3
Matrix: Water
Analysis Batch: 549078

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	4.44	I	mg/L		89	50 - 150		

Lab Sample ID: 400-208546-B-2 MS
Matrix: Water
Analysis Batch: 549078

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	10.0		mg/L		100	77 - 128		

Lab Sample ID: 400-208546-B-2 MSD
Matrix: Water
Analysis Batch: 549078

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	10.3		mg/L		103	77 - 128	3	5

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

Chain of Custody Record

Trevor B.

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400-208540 COC

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R		COC No: 400-104633-29464.1
Client Contact: Barry Evans	Phone: 850-338-0192	E-Mail: Cheyenne.Whitmire@Eurofinset.com		Page: Page 1 of 1
Company: Gulf Power Company	PWSID:			Job #:
Address: BIN 731 One Energy Place	Due Date Requested:	Analysis Requested		
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No			
Phone: 850-444-6427(Tel)	PO #: 2000339513			
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117			
Project Name: CCR Smith Plant	Project #: 40006609			
Site: Florida	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N	D	N	N		
MW-06	9/17/21	0845	G	Water			X	X	X	X	X	X			
MW-07	9/17/21	0900	G	Water			X	X	X	X	X	X			
FB-01	9/17/21	0850	G	Water			X	X	X	X	X	X			
[redacted]				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: 9-17-21 1445	Company RDH	Received by: Kathy Ramey
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Date/Time: 9/17/21 1445 Company ETA
Date/Time: Company
Date/Time: Company

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

Cooler Temperature(s) °C and Other Remarks: 4.7°C, 0.9°, 1.2° IR 9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-208540-1
SDG Number: Downgradient B

Login Number: 208540
List Number: 1
Creator: Avery, Kathy R

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.	N/A	
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	4.7°C, 0.9°C, 1.2°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: 400-208540-1
SDG: Downgradient B

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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-208540-2
Laboratory Sample Delivery Group: Downgradient B
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:
11/5/2021 4:45:57 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-208540-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-208540-2

RAD

Method 9315: Radium-226 prep batch 160-529150. The method blank counted on a failed detector. The detector passed the day prior (10/27/2021) and the day following (10/29/2021) the sample count. The method blank activity is below the MDC and RL, therefore the lab does not believe this excursion adversely affects the data. The data have been reported with this narrative. (MB 160-529150/24-A)

Method 9315: Radium-226 prep batch 160-529150. 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 (400-208540-1), MW-07 (400-208540-2), FB-01 (400-208540-3), (LCS 160-529150/1-A), (MB 160-529150/24-A), (410-55331-E-4-A), (410-55331-F-4-B MS) and (410-55331-D-4-C MSD)

Method 9320: Radium 228 batch 534195. 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 (400-208540-1), MW-07 (400-208540-2), FB-01 (400-208540-3), (LCS 160-534195/1-A), (LCSD 160-534195/2-A) and (MB 160-534195/19-A)

Method PrecSep_0: Radium-228 Prep Batch 529155. The following samples were prepared at a reduced aliquot due to Matrix: MW-06 (400-208540-1) and MW-07 (400-208540-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 529155. Insufficient sample volume was available to perform a sample duplicate for the following samples: FB-01 (400-208540-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-534195. The following samples were prepared at a reduced aliquot due to Matrix: MW-06 (400-208540-1) and MW-07 (400-208540-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-534195. Insufficient sample volume was available to perform a sample duplicate for the following samples: FB-01 (400-208540-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 529150. The following samples were prepared at a reduced aliquot due to Matrix: MW-06 (400-208540-1) and MW-07 (400-208540-2). 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 529150. Insufficient sample volume was available to perform a sample duplicate for the following samples: FB-01 (400-208540-3). 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: 400-208540-2
SDG: Downgradient B

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: 400-208540-2
SDG: Downgradient B

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-208540-1	MW-06	Water	09/17/21 08:45	09/17/21 14:45
400-208540-2	MW-07	Water	09/17/21 09:00	09/17/21 14:45
400-208540-3	FB-01	Water	09/17/21 08:50	09/17/21 14:45

Client Sample Results

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

Job ID: 400-208540-2
SDG: Downgradient B

Client Sample ID: MW-06

Date Collected: 09/17/21 08:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-1

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	11.7		1.07	1.50	1.00	0.351	pCi/L	09/28/21 11:44	10/28/21 15:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*40 - 110*	*09/28/21 11:44*	*10/28/21 15:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	16.2		1.01	1.80	1.00	0.481	pCi/L	10/29/21 09:01	11/04/21 13:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:04*	*1*
Y Carrier	*83.0*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:04*	*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	27.9		1.47	2.34	5.00	0.481	pCi/L		11/05/21 14:44	1

Client Sample ID: MW-07

Date Collected: 09/17/21 09:00
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-2

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	29.0		1.73	3.13	1.00	0.354	pCi/L	09/28/21 11:44	10/28/21 15:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.5*		*40 - 110*	*09/28/21 11:44*	*10/28/21 15:53*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.24		0.787	0.974	1.00	0.638	pCi/L	10/29/21 09:01	11/04/21 13:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.8*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:04*	*1*
Y Carrier	*84.5*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:04*	*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	35.2		1.90	3.28	5.00	0.638	pCi/L		11/05/21 14:44	1

Client Sample ID: FB-01

Date Collected: 09/17/21 08:50
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-3

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	0.181	U	0.245	0.245	1.00	0.412	pCi/L	09/28/21 11:44	10/28/21 15:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*45.5*		*40 - 110*	*09/28/21 11:44*	*10/28/21 15:53*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.127	U	0.226	0.226	1.00	0.384	pCi/L	10/29/21 09:01	11/04/21 13:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:05*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:05*	*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	0.309	U	0.333	0.333	5.00	0.412	pCi/L		11/05/21 14:44	1

Definitions/Glossary

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

Job ID: 400-208540-2
SDG: Downgradient B

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: 400-208540-2
SDG: Downgradient B

Client Sample ID: MW-06
Date Collected: 09/17/21 08:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 15:54	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535031	11/04/21 13:04	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:44	MLK	TAL SL

Client Sample ID: MW-07
Date Collected: 09/17/21 09:00
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 15:53	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535031	11/04/21 13:04	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:44	MLK	TAL SL

Client Sample ID: FB-01
Date Collected: 09/17/21 08:50
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208540-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 15:53	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535031	11/04/21 13:05	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:44	MLK	TAL SL

Laboratory References:

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

QC Association Summary

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

Job ID: 400-208540-2
SDG: Downgradient B

Rad

Prep Batch: 529150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	PrecSep-21	
400-208540-2	MW-07	Total/NA	Water	PrecSep-21	
400-208540-3	FB-01	Total/NA	Water	PrecSep-21	
MB 160-529150/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-529150/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
410-55331-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
410-55331-F-4-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	

Prep Batch: 534195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208540-1	MW-06	Total/NA	Water	PrecSep_0	
400-208540-2	MW-07	Total/NA	Water	PrecSep_0	
400-208540-3	FB-01	Total/NA	Water	PrecSep_0	
MB 160-534195/19-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-534195/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-534195/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-529150/24-A
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 529150

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1326	U	0.199	0.199	1.00	0.342	pCi/L	09/28/21 11:44	10/28/21 15:53	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*09/28/21 11:44*	*10/28/21 15:53*	*1*

Lab Sample ID: LCS 160-529150/1-A
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 529150

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	15.22		1.90	1.00	0.425	pCi/L	101	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.1*		*40 - 110*

Lab Sample ID: 410-55331-D-4-C MSD
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 529150

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	0.681		22.7	23.98		2.88	1.00	0.540	pCi/L	103	75 - 138	0.44	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*78.8*		*40 - 110*

Lab Sample ID: 410-55331-F-4-B MS
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 529150

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.681		22.6	21.53		2.69	1.00	0.516	pCi/L	92	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*74.3*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-534195/19-A
Matrix: Water
Analysis Batch: 535180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 534195

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.9073		0.376	0.385	1.00	0.510	pCi/L	10/29/21 09:01	11/04/21 13:15	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		40 - 110	10/29/21 09:01	11/04/21 13:15	1
Y Carrier	84.1		40 - 110	10/29/21 09:01	11/04/21 13:15	1

Lab Sample ID: LCS 160-534195/1-A
Matrix: Water
Analysis Batch: 535031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 534195

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			12.2	12.52		1.47	1.00	0.531	pCi/L	102	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	85.2		40 - 110

Lab Sample ID: LCSD 160-534195/2-A
Matrix: Water
Analysis Batch: 535031

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 534195

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			12.2	12.38		1.45	1.00	0.545	pCi/L	101	75 - 125	0.05	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	102		40 - 110
Y Carrier	83.7		40 - 110

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

Chain of Custody Record

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400-208540 COC

Trevor B.

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	COC No: 400-104633-29464.1
Client Contact: Barry Evans	Phone: 850-336 0192	E-Mail: Cheyenne.Whitmire@Eurofinset.com	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:		Job #:
Address: BIN 731 One Energy Place	Due Date Requested:		
City: Pensacola	TAT Requested (days):		
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No		
Phone: 850-444-6427(Tel)	PO #: 2000339513		
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117		
Project Name: CCR Smith Plant	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)	4500_F_C - Fluoride	6020, 7470A	2540C - TDS	SM4500_SO4_E - Sulfate	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N	D	N	N		
MW-06	9/17/21	0845	G	Water			X	X	X	X	X	X			
MW-07	9/17/21	0900	G	Water			X	X	X	X	X	X			
FB-01	9/17/21	0850	G	Water			X	X	X	X	X	X			
[redacted]				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: [signature]	Date/Time: 9-17-21 1445	Company: RDH	Received by: Kathy R Avery	Date/Time: 9-17-21 1445	Company: 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: 4.7°C, 0.9°C, 1.2°C IR 9		

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-208540-2
SDG Number: Downgradient B

Login Number: 208540
List Number: 1
Creator: Avery, Kathy R

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.	N/A	
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	4.7°C, 0.9°C, 1.2°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: 400-208540-2
SDG Number: Downgradient B

Login Number: 208540
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/21/21 12:24 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: 400-208540-2
SDG: Downgradient B

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	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21 *
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-208546-1
Laboratory Sample Delivery Group: Upgradient A
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:
9/30/2021 5:45:37 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-208546-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-208546-1

Metals

Method 6020: The method blank for preparation batch 400-548503 and analytical batch 400-549080 contained Chromium above the method detection limit. This target analyte concentration was less than the practical quantitation limit (PQL); therefore, re-extraction and_or re-analysis of samples was not performed.

Method 6020: The continuing calibration verification (CCV) associated with batch 400-549080 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-02 (400-208546-1), MW-03 (400-208546-2) and DUP-01 (400-208546-4).

Method 6020: The method blank for preparation batch 400-548503 and analytical batch 400-549428 contained Barium above the method detection limit. This target analyte concentration was less than the practical quantitation limit (PQL); therefore, re-extraction and_or re-analysis of samples was not performed.

General Chemistry

Method SM 4500 Cl- E: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-12 (400-208546-3). Elevated reporting limits (RLs) are provided.

Detection Summary

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

Job ID: 400-208546-1
SDG: Upgradient A

Client Sample ID: MW-02 — Lab Sample ID: 400-208546-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0014		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.015		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.045	I	0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	6.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	50		0.10	0.10	mg/L	1		SM 2540C	Total/NA
Chloride	11		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	5.0		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.47				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-03 — Lab Sample ID: 400-208546-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.025		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Calcium	2.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.014		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	76		0.10	0.10	mg/L	1		SM 2540C	Total/NA
Chloride	15		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.98				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 400-208546-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00064	I	0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.012	V	0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.11		0.050	0.018	mg/L	5		6020	Total Recoverable
Cadmium	0.035		0.0025	0.00028	mg/L	5		6020	Total Recoverable
Calcium	250		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0032	V	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Cobalt	0.26		0.0025	0.00056	mg/L	5		6020	Total Recoverable
Lithium	0.17		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Selenium	0.0090		0.0013	0.00082	mg/L	5		6020	Total Recoverable
Thallium	0.0043		0.00050	0.00012	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	430		0.10	0.10	mg/L	1		SM 2540C	Total/NA
Chloride	160		20	14	mg/L	10		SM 4500 Cl- E	Total/NA
Fluoride	0.11		0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
Field pH	5.90				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: 400-208546-1
SDG: Upgradient A

Client Sample ID: DUP-01 — Lab Sample ID: 400-208546-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.015		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.032	I	0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	8.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0020	I	0.0050	0.0019	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	100		0.10	0.10	mg/L	1		SM 2540C	Total/NA
Chloride	11		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	5.1		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.47				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: 400-208546-1
SDG: Upgradient A

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: 400-208546-1
SDG: Upgradient A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-208546-1	MW-02	Water	09/16/21 14:20	09/17/21 14:45
400-208546-2	MW-03	Water	09/16/21 14:45	09/17/21 14:45
400-208546-3	MW-12	Water	09/16/21 13:15	09/17/21 14:45
400-208546-4	DUP-01	Water	09/16/21 13:20	09/17/21 14:45

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

Job ID: 400-208546-1
SDG: Upgradient A

Client Sample ID: MW-02

Date Collected: 09/16/21 14:20
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-1

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		09/23/21 11:42	09/27/21 21:08	5
Arsenic	**0.0014**		0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 17:48	5
Barium	**0.015**		0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 17:48	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 21:08	5
Boron	**0.045**	**I**	0.050	0.018	mg/L		09/23/21 11:42	09/29/21 17:48	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 21:08	5
Calcium	**6.9**		0.25	0.13	mg/L		09/23/21 11:42	09/29/21 17:48	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 21:08	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 21:08	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/27/21 21:08	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 21:08	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 21:08	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 21:08	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 21:08	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:21	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**50**		0.10	0.10	mg/L			09/21/21 16:18	1
Chloride	**11**		2.0	1.4	mg/L			09/28/21 00:58	1
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 16:54	1
Sulfate	**5.0**		5.0	1.4	mg/L			09/28/21 01:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.47**				SU			09/16/21 14:20	1

Client Sample Results

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

Job ID: 400-208546-1
SDG: Upgradient A

Client Sample ID: MW-03

Date Collected: 09/16/21 14:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-2

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		09/23/21 11:42	09/27/21 21:13	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 17:53	5
Barium	**0.025**		0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 17:53	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 21:13	5
Boron	0.018	U	0.050	0.018	mg/L		09/23/21 11:42	09/29/21 17:53	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 21:13	5
Calcium	**2.6**		0.25	0.13	mg/L		09/23/21 11:42	09/29/21 17:53	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 21:13	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 21:13	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/27/21 21:13	5
Lithium	**0.014**		0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 21:13	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 21:13	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 21:13	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 21:13	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:23	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**76**		0.10	0.10	mg/L			09/21/21 16:18	1
Chloride	**15**		2.0	1.4	mg/L			09/28/21 00:58	1
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 16:58	1
Sulfate	1.4	U	5.0	1.4	mg/L			09/28/21 01:20	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.98**				SU			09/16/21 14:45	1

Client Sample Results

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

Job ID: 400-208546-1
SDG: Upgradient A

Client Sample ID: MW-12
Date Collected: 09/16/21 13:15
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-3
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		09/23/21 11:42	09/27/21 20:38	5
Arsenic	**0.00064**	**I**	0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 16:57	5
Barium	**0.012**	**V**	0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 16:57	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/29/21 16:57	5
Boron	**0.11**		0.050	0.018	mg/L		09/23/21 11:42	09/29/21 16:57	5
Cadmium	**0.035**		0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 20:38	5
Calcium	**250**		0.25	0.13	mg/L		09/23/21 11:42	09/27/21 20:38	5
Chromium	**0.0032**	**V**	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 20:38	5
Cobalt	**0.26**		0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 20:38	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/29/21 16:57	5
Lithium	**0.17**		0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 20:38	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 20:38	5
Selenium	**0.0090**		0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 20:38	5
Thallium	**0.0043**		0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 20:38	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:25	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**430**		0.10	0.10	mg/L			09/21/21 16:18	1
Chloride	**160**		20	14	mg/L			09/28/21 01:08	10
Fluoride	**0.11**		0.10	0.070	mg/L			09/24/21 16:46	1
Sulfate	1.4	U	5.0	1.4	mg/L			09/28/21 01:20	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.90**				SU			09/16/21 13:15	1

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

Job ID: 400-208546-1
SDG: Upgradient A

Client Sample ID: DUP-01

Date Collected: 09/16/21 13:20
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-4

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		09/23/21 11:42	09/27/21 20:43	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 17:02	5
Barium	**0.015**		0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 17:02	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 20:43	5
Boron	**0.032**	**I**	0.050	0.018	mg/L		09/23/21 11:42	09/29/21 17:02	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 20:43	5
Calcium	**8.1**		0.25	0.13	mg/L		09/23/21 11:42	09/29/21 17:02	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 20:43	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 20:43	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/27/21 20:43	5
Lithium	**0.0020**	**I**	0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 20:43	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 20:43	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 20:43	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 20:43	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:27	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**100**		0.10	0.10	mg/L			09/21/21 16:18	1
Chloride	**11**		2.0	1.4	mg/L			09/28/21 00:59	1
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 16:50	1
Sulfate	**5.1**		5.0	1.4	mg/L			09/28/21 01:20	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.47**				SU			09/16/21 13:20	1

Definitions/Glossary

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

Job ID: 400-208546-1
SDG: Upgradient A

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.
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.
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: 400-208546-1
SDG: Upgradient A

Client Sample ID: MW-02
Date Collected: 09/16/21 14:20
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549080	09/27/21 21:08	KW	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549428	09/29/21 17:48	LDC	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:21	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548254	09/21/21 16:18	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	549075	09/28/21 00:58	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 16:54	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	549078	09/28/21 01:14	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/16/21 14:20	FS	TAL PEN

Client Sample ID: MW-03
Date Collected: 09/16/21 14:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549080	09/27/21 21:13	KW	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549428	09/29/21 17:53	LDC	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:23	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548254	09/21/21 16:18	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	549075	09/28/21 00:58	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 16:58	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	549078	09/28/21 01:20	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/16/21 14:45	FS	TAL PEN

Client Sample ID: MW-12
Date Collected: 09/16/21 13:15
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549080	09/27/21 20:38	KW	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549428	09/29/21 16:57	LDC	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:25	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548254	09/21/21 16:18	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		10	549075	09/28/21 01:08	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 16:46	KAK	TAL PEN

Lab Chronicle

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

Job ID: 400-208546-1
SDG: Upgradient A

Client Sample ID: MW-12
Date Collected: 09/16/21 13:15
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		1	549078	09/28/21 01:20	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/16/21 13:15	FS	TAL PEN

Client Sample ID: DUP-01
Date Collected: 09/16/21 13:20
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549080	09/27/21 20:43	KW	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549428	09/29/21 17:02	LDC	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:27	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548254	09/21/21 16:18	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	549075	09/28/21 00:59	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 16:50	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	549078	09/28/21 01:20	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/16/21 13:20	FS	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 547998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	7470A	
400-208546-2	MW-03	Total/NA	Water	7470A	
400-208546-3	MW-12	Total/NA	Water	7470A	
400-208546-4	DUP-01	Total/NA	Water	7470A	
MB 400-547998/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-547998/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-208477-E-4-C MS	Matrix Spike	Total/NA	Water	7470A	
400-208477-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 548148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	7470A	547998
400-208546-2	MW-03	Total/NA	Water	7470A	547998
400-208546-3	MW-12	Total/NA	Water	7470A	547998
400-208546-4	DUP-01	Total/NA	Water	7470A	547998
MB 400-547998/14-A	Method Blank	Total/NA	Water	7470A	547998
LCS 400-547998/15-A	Lab Control Sample	Total/NA	Water	7470A	547998
400-208477-E-4-C MS	Matrix Spike	Total/NA	Water	7470A	547998
400-208477-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	547998

Prep Batch: 548503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total Recoverable	Water	3005A	
400-208546-2	MW-03	Total Recoverable	Water	3005A	
400-208546-3	MW-12	Total Recoverable	Water	3005A	
400-208546-4	DUP-01	Total Recoverable	Water	3005A	
MB 400-548503/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-548503/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
280-153070-B-2-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
280-153070-B-2-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 549080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total Recoverable	Water	6020	548503
400-208546-2	MW-03	Total Recoverable	Water	6020	548503
400-208546-3	MW-12	Total Recoverable	Water	6020	548503
400-208546-4	DUP-01	Total Recoverable	Water	6020	548503
MB 400-548503/1-A ^5	Method Blank	Total Recoverable	Water	6020	548503
LCS 400-548503/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	548503
280-153070-B-2-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	548503
280-153070-B-2-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	548503

Analysis Batch: 549428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total Recoverable	Water	6020	548503
400-208546-2	MW-03	Total Recoverable	Water	6020	548503
400-208546-3	MW-12	Total Recoverable	Water	6020	548503
400-208546-4	DUP-01	Total Recoverable	Water	6020	548503
MB 400-548503/1-A ^5	Method Blank	Total Recoverable	Water	6020	548503
LCS 400-548503/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	548503

General Chemistry

Analysis Batch: 548254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	SM 2540C	
400-208546-2	MW-03	Total/NA	Water	SM 2540C	
400-208546-3	MW-12	Total/NA	Water	SM 2540C	
400-208546-4	DUP-01	Total/NA	Water	SM 2540C	
MB 400-548254/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-548254/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-208492-A-10 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 548769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	SM 4500 F C	
400-208546-2	MW-03	Total/NA	Water	SM 4500 F C	
400-208546-3	MW-12	Total/NA	Water	SM 4500 F C	
400-208546-4	DUP-01	Total/NA	Water	SM 4500 F C	
MB 400-548769/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-548769/7	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-207993-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-207993-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-208550-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-208550-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 549075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	SM 4500 Cl- E	
400-208546-2	MW-03	Total/NA	Water	SM 4500 Cl- E	
400-208546-3	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-208546-4	DUP-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-549075/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-549075/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-549075/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-208546-1 MS	MW-02	Total/NA	Water	SM 4500 Cl- E	
400-208546-1 MSD	MW-02	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 549078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	SM 4500 SO4 E	
400-208546-2	MW-03	Total/NA	Water	SM 4500 SO4 E	
400-208546-3	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-208546-4	DUP-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-549078/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-549078/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-549078/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-208546-1 MS	MW-02	Total/NA	Water	SM 4500 SO4 E	
400-208546-1 MSD	MW-02	Total/NA	Water	SM 4500 SO4 E	
400-208546-2 MS	MW-03	Total/NA	Water	SM 4500 SO4 E	
400-208546-2 MSD	MW-03	Total/NA	Water	SM 4500 SO4 E	

Field Service / Mobile Lab

Analysis Batch: 549331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	Field Sampling	
400-208546-2	MW-03	Total/NA	Water	Field Sampling	
400-208546-3	MW-12	Total/NA	Water	Field Sampling	
400-208546-4	DUP-01	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-548503/1-A ^5
Matrix: Water
Analysis Batch: 549080

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		09/23/21 11:42	09/27/21 19:11	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 19:11	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 19:11	5
Chromium	0.00111	I	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 19:11	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 19:11	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 19:11	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 19:11	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 19:11	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 19:11	5

Lab Sample ID: MB 400-548503/1-A ^5
Matrix: Water
Analysis Batch: 549428

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00039	U	0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 16:46	5
Barium	0.00140	I	0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 16:46	5
Boron	0.018	U	0.050	0.018	mg/L		09/23/21 11:42	09/29/21 16:46	5
Calcium	0.13	U	0.25	0.13	mg/L		09/23/21 11:42	09/29/21 16:46	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/29/21 16:46	5

Lab Sample ID: LCS 400-548503/2-A ^5
Matrix: Water
Analysis Batch: 549080

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0475		mg/L		95	80 - 120
Beryllium	0.0500	0.0511		mg/L		102	80 - 120
Cadmium	0.0500	0.0479		mg/L		96	80 - 120
Chromium	0.0500	0.0482		mg/L		96	80 - 120
Cobalt	0.0500	0.0485		mg/L		97	80 - 120
Lead	0.0500	0.0450		mg/L		90	80 - 120
Lithium	0.0500	0.0482		mg/L		96	80 - 120
Molybdenum	0.0500	0.0482		mg/L		96	80 - 120
Selenium	0.0500	0.0458		mg/L		92	80 - 120
Thallium	0.0100	0.00910		mg/L		91	80 - 120

Lab Sample ID: LCS 400-548503/2-A ^5
Matrix: Water
Analysis Batch: 549428

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0500		mg/L		100	80 - 120
Barium	0.0500	0.0532		mg/L		106	80 - 120
Boron	0.100	0.0937		mg/L		94	80 - 120
Calcium	5.00	5.31		mg/L		106	80 - 120

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

Lab Sample ID: 280-153070-B-2-B MS ^5
Matrix: Water
Analysis Batch: 549080

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0015	U	0.0500	0.0465		mg/L		93	75 - 125
Arsenic	0.0027		0.0500	0.0586		mg/L		112	75 - 125
Barium	0.018	V	0.0500	0.0713	V	mg/L		107	75 - 125
Beryllium	0.00026	I	0.0500	0.0522		mg/L		104	75 - 125
Boron	0.018	U	0.100	0.112		mg/L		112	75 - 125
Cadmium	0.00028	U	0.0500	0.0498		mg/L		100	75 - 125
Calcium	1.1	V	5.00	6.01	V	mg/L		99	75 - 125
Chromium	0.0010	U	0.0500	0.0526		mg/L		105	75 - 125
Cobalt	0.0012	I	0.0500	0.0523		mg/L		102	75 - 125
Lead	0.0013	V	0.0500	0.0487		mg/L		95	75 - 125
Lithium	0.0019	U	0.0500	0.0515		mg/L		103	75 - 125
Molybdenum	0.0045	U	0.0500	0.0508		mg/L		102	75 - 125
Selenium	0.0018		0.0500	0.0484		mg/L		93	75 - 125
Thallium	0.00012	U	0.0100	0.00948		mg/L		95	75 - 125

Lab Sample ID: 280-153070-B-2-C MSD ^5
Matrix: Water
Analysis Batch: 549080

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 548503

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	0.0445		mg/L		89	75 - 125	4	20
Arsenic	0.0027		0.0500	0.0612		mg/L		117	75 - 125	4	20
Barium	0.018	V	0.0500	0.0700	V	mg/L		104	75 - 125	2	20
Beryllium	0.00026	I	0.0500	0.0508		mg/L		101	75 - 125	3	20
Boron	0.018	U	0.100	0.112		mg/L		112	75 - 125	0	20
Cadmium	0.00028	U	0.0500	0.0507		mg/L		101	75 - 125	2	20
Calcium	1.1	V	5.00	5.90	V	mg/L		97	75 - 125	2	20
Chromium	0.0010	U	0.0500	0.0508		mg/L		102	75 - 125	4	20
Cobalt	0.0012	I	0.0500	0.0512		mg/L		100	75 - 125	2	20
Lead	0.0013	V	0.0500	0.0478		mg/L		93	75 - 125	2	20
Lithium	0.0019	U	0.0500	0.0544		mg/L		109	75 - 125	5	20
Molybdenum	0.0045	U	0.0500	0.0489		mg/L		98	75 - 125	4	20
Selenium	0.0018		0.0500	0.0483		mg/L		93	75 - 125	0	20
Thallium	0.00012	U	0.0100	0.00936		mg/L		94	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-547998/14-A
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547998

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:05	1

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

Lab Sample ID: LCS 400-547998/15-A
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547998

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00101	0.000998		mg/L		99	80 - 120		

Lab Sample ID: 400-208477-E-4-C MS
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00015	U	0.00201	0.00200		mg/L		99	80 - 120		

Lab Sample ID: 400-208477-E-4-D MSD
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547998

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00201	0.00194		mg/L		96	80 - 120	3	20

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

Lab Sample ID: MB 400-548254/1
Matrix: Water
Analysis Batch: 548254

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	0.10	U	0.10	0.10	mg/L			09/21/21 16:18	1

Lab Sample ID: LCS 400-548254/2
Matrix: Water
Analysis Batch: 548254

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	318		mg/L		109	78 - 122		

Lab Sample ID: 400-208492-A-10 DU
Matrix: Water
Analysis Batch: 548254

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	1400			1380		mg/L				3	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-549075/6
Matrix: Water
Analysis Batch: 549075

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			09/28/21 00:58	1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 400-549075/7
Matrix: Water
Analysis Batch: 549075

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	30.2		mg/L		101	90 - 110

Lab Sample ID: MRL 400-549075/3
Matrix: Water
Analysis Batch: 549075

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	1.42	I	mg/L		71	50 - 150

Lab Sample ID: 400-208546-1 MS
Matrix: Water
Analysis Batch: 549075

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11		10.0	22.0		mg/L		109	73 - 120

Lab Sample ID: 400-208546-1 MSD
Matrix: Water
Analysis Batch: 549075

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11		10.0	22.0		mg/L		109	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-548769/3
Matrix: Water
Analysis Batch: 548769

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 16:11	1

Lab Sample ID: LCS 400-548769/7
Matrix: Water
Analysis Batch: 548769

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	5.28		mg/L		106	90 - 110

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-549078/6
Matrix: Water
Analysis Batch: 549078

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			09/28/21 01:14	1

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-549078/7
Matrix: Water
Analysis Batch: 549078

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	14.3		mg/L		95	90 - 110

Lab Sample ID: MRL 400-549078/3
Matrix: Water
Analysis Batch: 549078

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	4.44	I	mg/L		89	50 - 150

Lab Sample ID: 400-208546-1 MS
Matrix: Water
Analysis Batch: 549078

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.0		10.0	15.4		mg/L		104	77 - 128

Lab Sample ID: 400-208546-1 MSD
Matrix: Water
Analysis Batch: 549078

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	5.0		10.0	15.6		mg/L		106	77 - 128	1	5

Lab Sample ID: 400-208546-2 MS
Matrix: Water
Analysis Batch: 549078

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	10.0		mg/L		100	77 - 128

Lab Sample ID: 400-208546-2 MSD
Matrix: Water
Analysis Batch: 549078

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	10.3		mg/L		103	77 - 128	3	5

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

Chain of Custody Record

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400-208546 COC

Client Information	Sampler: Trevor B / Philip E.	Lab PM: Whitmire, Cheyenne R	Carrier:	COC No: 400-104633-29464.1
Client Contact: Barry Evans	Phone: 850-336 0192	E-Mail: Cheyenne.Whitmire@Eurofinset.com	State:	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:			Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No			
Phone: 850-444-6427(Tel)	PO #: 2000339513			
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117			
Project Name: CCR Smith Plant	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_F_C - Fluoride	6020, 7470A	2540C - TDS	SM4500_SO4_E - Sulfate	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N	D	N	N		
[redacted] MW-02	9/16/21	1420	G	Water			X	X	X	X	X	✓			
[redacted] MW-03		1445		Water			↓	↓	↓	↓	↓	↓			
MW-12	↓	1315	↓	Water			↓	↓	↓	↓	↓	↓			
DUP-01	9/16/21	1320	G	Water			X	X	X	X	X	X			

Preservation Codes:

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

Other:

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:
Relinquished by: TL	Date/Time: 9-17-21 1445	Company: RDH	Received by: Kathy R Avery	Date/Time: 9-17-21 1445	Company: FDEP	
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: 0.9°C IR9 4.7°C 1.2°C

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-208546-1
SDG Number: Upgradient A

Login Number: 208546
List Number: 1
Creator: Avery, Kathy R

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.	N/A	
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	0.9°C, 4.7°C, 1.2°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: 400-208546-1
SDG: Upgradient A

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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-208546-2
Laboratory Sample Delivery Group: Upgradient A
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:
11/5/2021 4:51:28 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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

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

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Job ID: 400-208546-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-208546-2

RAD

Method 9315: Radium-226 prep batch 160-529150. The method blank counted on a failed detector. The detector passed the day prior (10/27/2021) and the day following (10/29/2021) the sample count. The method blank activity is below the MDC and RL, therefore the lab does not believe this excursion adversely affects the data. The data have been reported with this narrative. (MB 160-529150/24-A)

Method 9315: Radium-226 prep batch 160-529150. 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 (400-208546-1), MW-03 (400-208546-2), MW-12 (400-208546-3), DUP-01 (400-208546-4), (LCS 160-529150/1-A), (MB 160-529150/24-A), (410-55331-E-4-A), (410-55331-F-4-B MS) and (410-55331-D-4-C MSD)

Method 9320: Radium 228 batch 534195. 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 (400-208546-1), MW-03 (400-208546-2), MW-12 (400-208546-3), DUP-01 (400-208546-4), (LCS 160-534195/1-A), (LCSD 160-534195/2-A) and (MB 160-534195/19-A)

Method PrecSep_0: Radium-228 Prep Batch 529155. The following samples were prepared at a reduced aliquot due to Matrix: MW-12 (400-208546-3) and DUP-01 (400-208546-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 529155. Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-02 (400-208546-1) and MW-03 (400-208546-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-534195. The following samples were prepared at a reduced aliquot due to Matrix: MW-02 (400-208546-1), MW-03 (400-208546-2), MW-12 (400-208546-3) and DUP-01 (400-208546-4). 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 529150. The following samples were prepared at a reduced aliquot due to Matrix: MW-12 (400-208546-3) and DUP-01 (400-208546-4). 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 529150. Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-02 (400-208546-1) and MW-03 (400-208546-2). 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: 400-208546-2
SDG: Upgradient A

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: 400-208546-2
SDG: Upgradient A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-208546-1	MW-02	Water	09/16/21 14:20	09/17/21 14:45
400-208546-2	MW-03	Water	09/16/21 14:45	09/17/21 14:45
400-208546-3	MW-12	Water	09/16/21 13:15	09/17/21 14:45
400-208546-4	DUP-01	Water	09/16/21 13:20	09/17/21 14:45

Client Sample ID: MW-02

Date Collected: 09/16/21 14:20
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-1

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	1.48		0.354	0.379	1.00	0.270	pCi/L	09/28/21 11:44	10/28/21 15:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*09/28/21 11:44*	*10/28/21 15:53*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.08		0.465	0.476	1.00	0.684	pCi/L	10/29/21 09:01	11/04/21 13:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.3*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:05*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:05*	*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	2.57		0.584	0.608	5.00	0.684	pCi/L		11/05/21 14:44	1

Client Sample ID: MW-03

Date Collected: 09/16/21 14:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-2

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	**1.41**		0.336	0.359	1.00	0.273	pCi/L	09/28/21 11:44	10/28/21 18:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*40 - 110*	*09/28/21 11:44*	*10/28/21 18:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.172	U	0.338	0.339	1.00	0.626	pCi/L	10/29/21 09:01	11/04/21 13:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.3*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:09*	*1*
Y Carrier	*82.6*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:09*	*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	**1.24**		0.477	0.494	5.00	0.626	pCi/L		11/05/21 14:44	1

Client Sample ID: MW-12

Date Collected: 09/16/21 13:15
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-3

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	1.52		0.414	0.436	1.00	0.363	pCi/L	09/28/21 11:44	10/28/21 18:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*09/28/21 11:44*	*10/28/21 18:45*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.09		0.461	0.472	1.00	0.663	pCi/L	10/29/21 09:01	11/04/21 13:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:09*	*1*
Y Carrier	*80.7*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:09*	*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	2.61		0.620	0.643	5.00	0.663	pCi/L		11/05/21 14:44	1

Client Sample ID: DUP-01

Date Collected: 09/16/21 13:20
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-4

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	**1.23**		0.409	0.424	1.00	0.447	pCi/L	09/28/21 11:44	10/28/21 18:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.9*		*40 - 110*	*09/28/21 11:44*	*10/28/21 18:45*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.460	U	0.329	0.332	1.00	0.514	pCi/L	10/29/21 09:01	11/04/21 13:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*1*
Y Carrier	*81.9*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*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	**1.69**		0.525	0.539	5.00	0.514	pCi/L		11/05/21 14:54	1

Definitions/Glossary

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

Job ID: 400-208546-2
SDG: Upgradient A

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: 400-208546-2
SDG: Upgradient A

Client Sample ID: MW-02
Date Collected: 09/16/21 14:20
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 15:53	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535031	11/04/21 13:05	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:44	MLK	TAL SL

Client Sample ID: MW-03
Date Collected: 09/16/21 14:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 18:44	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 13:09	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:44	MLK	TAL SL

Client Sample ID: MW-12
Date Collected: 09/16/21 13:15
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 18:45	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 13:09	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:44	MLK	TAL SL

Client Sample ID: DUP-01
Date Collected: 09/16/21 13:20
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208546-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 18:45	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 13:10	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:54	MLK	TAL SL

Laboratory References:

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

QC Association Summary

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

Job ID: 400-208546-2
SDG: Upgradient A

Rad

Prep Batch: 529150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	PrecSep-21	
400-208546-2	MW-03	Total/NA	Water	PrecSep-21	
400-208546-3	MW-12	Total/NA	Water	PrecSep-21	
400-208546-4	DUP-01	Total/NA	Water	PrecSep-21	
MB 160-529150/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-529150/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
410-55331-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
410-55331-F-4-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	

Prep Batch: 534195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208546-1	MW-02	Total/NA	Water	PrecSep_0	
400-208546-2	MW-03	Total/NA	Water	PrecSep_0	
400-208546-3	MW-12	Total/NA	Water	PrecSep_0	
400-208546-4	DUP-01	Total/NA	Water	PrecSep_0	
MB 160-534195/19-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-534195/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-534195/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-529150/24-A
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 529150

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1326	U	0.199	0.199	1.00	0.342	pCi/L	09/28/21 11:44	10/28/21 15:53	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*09/28/21 11:44*	*10/28/21 15:53*	*1*

Lab Sample ID: LCS 160-529150/1-A
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 529150

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	15.22		1.90	1.00	0.425	pCi/L	101	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.1*		*40 - 110*

Lab Sample ID: 410-55331-D-4-C MSD
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 529150

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	0.681		22.7	23.98		2.88	1.00	0.540	pCi/L	103	75 - 138	0.44	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*78.8*		*40 - 110*

Lab Sample ID: 410-55331-F-4-B MS
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 529150

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.681		22.6	21.53		2.69	1.00	0.516	pCi/L	92	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*74.3*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-534195/19-A
Matrix: Water
Analysis Batch: 535180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 534195

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.9073		0.376	0.385	1.00	0.510	pCi/L	10/29/21 09:01	11/04/21 13:15	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		40 - 110	10/29/21 09:01	11/04/21 13:15	1
Y Carrier	84.1		40 - 110	10/29/21 09:01	11/04/21 13:15	1

Lab Sample ID: LCS 160-534195/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 535031 — **Prep Batch: 534195**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			12.2	12.52		1.47	1.00	0.531	pCi/L	102	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	85.2		40 - 110

Lab Sample ID: LCSD 160-534195/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 535031 — **Prep Batch: 534195**

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			12.2	12.38		1.45	1.00	0.545	pCi/L	101	75 - 125	0.05	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	102		40 - 110
Y Carrier	83.7		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 America

400-208546 COC

Client Information	Sampler: Trevor B / Philip E.	Lab PM: Whitmire, Cheyenne R	Carr
Client Contact: Barry Evans	Phone: 850-336 0192	E-Mail: Cheyenne.Whitmire@Eurofinset.com	Sta
Company: Gulf Power Company	PWSID:		
Address: BIN 731 One Energy Place	Due Date Requested:		
City: Pensacola	TAT Requested (days):		
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No		
Phone: 850-444-6427(Tel)	PO #: 2000339513		
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117		
Project Name: CCR Smith Plant	Project #: 40006609		
Site: Florida	SSOW#:		

COC No: 400-104633-29464.1
Page: Page 1 of 1
Job #:

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)	4500_F_C - Fluoride	6020, 7470A	2540C - TDS	SM4500_SO4_E - Sulfate	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N	D	N	N		
[redacted] MW-02	9/16/21	1420	G	Water			X	X	X	X	X	X			
[redacted] MW-03	↓	1445	↓	Water			↓	↓	↓	↓	↓	↓			
MW-12	0 ↓	1315	↓	Water			↓	↓	↓	↓	↓	↓			
DUP-01	9/16/21	1320	G	Water			X	X	X	X	X	X			

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]	9-17-21 1445	RDH	Kathy R Avery	9-17-21 1445	ETA

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

Cooler Temperature(s) °C and Other Remarks: 0.9°C IRG 4.7°C 1.2°C

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-208546-2
SDG Number: Upgradient A

Login Number: 208546
List Number: 1
Creator: Avery, Kathy R

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.	N/A	
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	0.9°C, 4.7°C, 1.2°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: 400-208546-2
SDG Number: Upgradient A

Login Number: 208546
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/21/21 12:27 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: 400-208546-2
SDG: Upgradient A

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	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21 *
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

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

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 400-208550-1
Laboratory Sample Delivery Group: Horizontal Delineation Well
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:
9/30/2021 5:46:17 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-208550-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-208550-1

Metals

Method 6020: The method blank for preparation batch 400-548503 and analytical batch 400-549080 contained Chromium above the method detection limit. This target analyte concentration was less than the practical quantitation limit (PQL); therefore, re-extraction and_or re-analysis of samples was not performed.

Method 6020: The method blank for preparation batch 400-548503 and analytical batch 400-549428 contained Barium above the method detection limit. This target analyte concentration was less than the practical quantitation limit (PQL); therefore, re-extraction and_or re-analysis of samples was not performed.

Method 6020: The following samples were diluted to bring the concentration of target analytes within the calibration range: PZ-14 (400-208550-2) and DUP-02 (400-208550-4). Elevated reporting limits (RLs) are provided.

General Chemistry

Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-548417 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: PZ-14 (400-208550-2) and DUP-02 (400-208550-4). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MWI-12A (400-208550-1) and PZ-14 (400-208550-2). Elevated reporting limits (RLs) are provided.

Detection Summary

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

Job ID: 400-208550-1
SDG: Horizontal Delineation Well

Client Sample ID: MWI-12A — Lab Sample ID: 400-208550-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0033		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.022		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	3.7		0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	73		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.014		0.0050	0.0019	mg/L	5		6020	Total Recoverable
Molybdenum	0.016		0.015	0.0045	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	430		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	49		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	48		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA
Field pH	6.73				SU	1		Field Sampling	Total/NA

Client Sample ID: PZ-14 — Lab Sample ID: 400-208550-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0081		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.16		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	12		0.25	0.090	mg/L	25		6020	Total Recoverable
Calcium	720		1.3	0.63	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	6300		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2200		100	70	mg/L	50		SM 4500 Cl- E	Total/NA
Fluoride	0.60		0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
Sulfate	1100		250	70	mg/L	50		SM 4500 SO4 E	Total/NA
Field pH	6.57				SU	1		Field Sampling	Total/NA

Client Sample ID: EB-01 — Lab Sample ID: 400-208550-3

No Detections.

Client Sample ID: DUP-02 — Lab Sample ID: 400-208550-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0065		0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.16		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	12		0.25	0.090	mg/L	25		6020	Total Recoverable
Calcium	730		1.3	0.63	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	6300		50	50	mg/L	1		SM 2540C	Total/NA
Chloride	2200		100	70	mg/L	50		SM 4500 Cl- E	Total/NA
Fluoride	0.51		0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
Sulfate	26		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.57				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: 400-208550-1
SDG: Horizontal Delineation Well

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: 400-208550-1
SDG: Horizontal Delineation Well

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-208550-1	MWI-12A	Water	09/17/21 10:45	09/17/21 14:45
400-208550-2	PZ-14	Water	09/17/21 10:30	09/17/21 14:45
400-208550-3	EB-01	Water	09/17/21 09:25	09/17/21 14:45
400-208550-4	DUP-02	Water	09/17/21 09:30	09/17/21 14:45

Client Sample ID: MWI-12A

Date Collected: 09/17/21 10:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-1

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		09/23/21 11:42	09/27/21 20:48	5
Arsenic	**0.0033**		0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 17:07	5
Barium	**0.022**		0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 17:07	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 20:48	5
Boron	**3.7**		0.050	0.018	mg/L		09/23/21 11:42	09/29/21 17:07	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 20:48	5
Calcium	**73**		0.25	0.13	mg/L		09/23/21 11:42	09/29/21 17:07	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 20:48	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 20:48	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/27/21 20:48	5
Lithium	**0.014**		0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 20:48	5
Molybdenum	**0.016**		0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 20:48	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 20:48	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 20:48	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:38	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**430**		5.0	5.0	mg/L			09/22/21 16:35	1
Chloride	**49**		2.0	1.4	mg/L			09/28/21 00:59	1
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 17:22	1
Sulfate	**48**		10	2.8	mg/L			09/28/21 01:52	2

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.73**				SU			09/17/21 10:45	1

Client Sample Results

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

Job ID: 400-208550-1
SDG: Horizontal Delineation Well

Client Sample ID: PZ-14
Date Collected: 09/17/21 10:30
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-2
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		09/23/21 11:42	09/27/21 20:53	5
Arsenic	**0.0081**		0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 17:12	5
Barium	**0.16**		0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 17:12	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 20:53	5
Boron	**12**		0.25	0.090	mg/L		09/23/21 11:42	09/29/21 17:17	25
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 20:53	5
Calcium	**720**		1.3	0.63	mg/L		09/23/21 11:42	09/29/21 17:17	25
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 20:53	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 20:53	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/27/21 20:53	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 20:53	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 20:53	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 20:53	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 20:53	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:40	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6300**		50	50	mg/L			09/22/21 16:35	1
Chloride	**2200**		100	70	mg/L			09/28/21 01:02	50
Fluoride	**0.60**		0.10	0.070	mg/L			09/24/21 17:38	1
Sulfate	**1100**		250	70	mg/L			09/28/21 02:44	50

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.57**				SU			09/17/21 10:30	1

Client Sample Results

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

Job ID: 400-208550-1
SDG: Horizontal Delineation Well

Client Sample ID: EB-01

Date Collected: 09/17/21 09:25
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-3

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		09/23/21 11:42	09/27/21 20:58	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 17:22	5
Barium	0.00070	U	0.0025	0.00070	mg/L		09/23/21 11:42	09/27/21 20:58	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 20:58	5
Boron	0.018	U	0.050	0.018	mg/L		09/23/21 11:42	09/29/21 17:22	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 20:58	5
Calcium	0.13	U	0.25	0.13	mg/L		09/23/21 11:42	09/27/21 20:58	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 20:58	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 20:58	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/27/21 20:58	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 20:58	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 20:58	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 20:58	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 20:58	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:42	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			09/22/21 16:35	1
Chloride	1.4	U	2.0	1.4	mg/L			09/28/21 00:59	1
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 17:42	1
Sulfate	1.4	U	5.0	1.4	mg/L			09/28/21 01:21	1

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

Job ID: 400-208550-1
SDG: Horizontal Delineation Well

Client Sample ID: DUP-02

Date Collected: 09/17/21 09:30
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-4

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		09/23/21 11:42	09/27/21 21:03	5
Arsenic	**0.0065**		0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 17:27	5
Barium	**0.16**		0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 17:27	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 21:03	5
Boron	**12**		0.25	0.090	mg/L		09/23/21 11:42	09/29/21 17:42	25
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 21:03	5
Calcium	**730**		1.3	0.63	mg/L		09/23/21 11:42	09/29/21 17:42	25
Chromium	0.0010	U	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 21:03	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 21:03	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/27/21 21:03	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 21:03	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 21:03	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 21:03	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 21:03	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:44	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6300**		50	50	mg/L			09/22/21 16:35	1
Chloride	**2200**		100	70	mg/L			09/28/21 01:02	50
Fluoride	**0.51**		0.10	0.070	mg/L			09/24/21 17:34	1
Sulfate	**26**		5.0	1.4	mg/L			09/28/21 01:21	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.57**				SU			09/17/21 09:30	1

Definitions/Glossary

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

Job ID: 400-208550-1
SDG: Horizontal Delineation Well

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.
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.
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: 400-208550-1
SDG: Horizontal Delineation Well

Client Sample ID: MWI-12A
Date Collected: 09/17/21 10:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549080	09/27/21 20:48	KW	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549428	09/29/21 17:07	LDC	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:38	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548417	09/22/21 16:35	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	549075	09/28/21 00:59	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 17:22	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	549078	09/28/21 01:52	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/17/21 10:45	FS	TAL PEN

Client Sample ID: PZ-14
Date Collected: 09/17/21 10:30
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549080	09/27/21 20:53	KW	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549428	09/29/21 17:12	LDC	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	549428	09/29/21 17:17	LDC	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:40	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548417	09/22/21 16:35	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		50	549075	09/28/21 01:02	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 17:38	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		50	549078	09/28/21 02:44	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/17/21 10:30	FS	TAL PEN

Client Sample ID: EB-01
Date Collected: 09/17/21 09:25
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549080	09/27/21 20:58	KW	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549428	09/29/21 17:22	LDC	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:42	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548417	09/22/21 16:35	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	549075	09/28/21 00:59	DN1	TAL PEN

Lab Chronicle

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

Job ID: 400-208550-1
SDG: Horizontal Delineation Well

Client Sample ID: EB-01

Lab Sample ID: 400-208550-3

Date Collected: 09/17/21 09:25
Matrix: Water
Date Received: 09/17/21 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 17:42	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	549078	09/28/21 01:21	DN1	TAL PEN

Client Sample ID: DUP-02

Lab Sample ID: 400-208550-4

Date Collected: 09/17/21 09:30
Matrix: Water
Date Received: 09/17/21 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549080	09/27/21 21:03	KW	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	549428	09/29/21 17:27	LDC	TAL PEN
Total Recoverable	Prep	3005A			548503	09/23/21 11:42	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	549428	09/29/21 17:42	LDC	TAL PEN
Total/NA	Prep	7470A			547998	09/20/21 10:03	NET	TAL PEN
Total/NA	Analysis	7470A		1	548148	09/20/21 17:44	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	548417	09/22/21 16:35	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		50	549075	09/28/21 01:02	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	548769	09/24/21 17:34	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	549078	09/28/21 01:21	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	549331	09/17/21 09:30	FS	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 547998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	7470A	
400-208550-2	PZ-14	Total/NA	Water	7470A	
400-208550-3	EB-01	Total/NA	Water	7470A	
400-208550-4	DUP-02	Total/NA	Water	7470A	
MB 400-547998/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-547998/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-208477-E-4-C MS	Matrix Spike	Total/NA	Water	7470A	
400-208477-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 548148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	7470A	547998
400-208550-2	PZ-14	Total/NA	Water	7470A	547998
400-208550-3	EB-01	Total/NA	Water	7470A	547998
400-208550-4	DUP-02	Total/NA	Water	7470A	547998
MB 400-547998/14-A	Method Blank	Total/NA	Water	7470A	547998
LCS 400-547998/15-A	Lab Control Sample	Total/NA	Water	7470A	547998
400-208477-E-4-C MS	Matrix Spike	Total/NA	Water	7470A	547998
400-208477-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	547998

Prep Batch: 548503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total Recoverable	Water	3005A	
400-208550-2	PZ-14	Total Recoverable	Water	3005A	
400-208550-3	EB-01	Total Recoverable	Water	3005A	
400-208550-4	DUP-02	Total Recoverable	Water	3005A	
MB 400-548503/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-548503/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
280-153070-B-2-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
280-153070-B-2-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 549080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total Recoverable	Water	6020	548503
400-208550-2	PZ-14	Total Recoverable	Water	6020	548503
400-208550-3	EB-01	Total Recoverable	Water	6020	548503
400-208550-4	DUP-02	Total Recoverable	Water	6020	548503
MB 400-548503/1-A ^5	Method Blank	Total Recoverable	Water	6020	548503
LCS 400-548503/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	548503
280-153070-B-2-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	548503
280-153070-B-2-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	548503

Analysis Batch: 549428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total Recoverable	Water	6020	548503
400-208550-2	PZ-14	Total Recoverable	Water	6020	548503
400-208550-2	PZ-14	Total Recoverable	Water	6020	548503
400-208550-3	EB-01	Total Recoverable	Water	6020	548503
400-208550-4	DUP-02	Total Recoverable	Water	6020	548503
400-208550-4	DUP-02	Total Recoverable	Water	6020	548503
MB 400-548503/1-A ^5	Method Blank	Total Recoverable	Water	6020	548503

Metals (Continued)

Analysis Batch: 549428 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-548503/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	548503

General Chemistry

Analysis Batch: 548417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	SM 2540C	
400-208550-2	PZ-14	Total/NA	Water	SM 2540C	
400-208550-3	EB-01	Total/NA	Water	SM 2540C	
400-208550-4	DUP-02	Total/NA	Water	SM 2540C	
MB 400-548417/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-548417/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-208550-4 DU	DUP-02	Total/NA	Water	SM 2540C	

Analysis Batch: 548769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	SM 4500 F C	
400-208550-2	PZ-14	Total/NA	Water	SM 4500 F C	
400-208550-3	EB-01	Total/NA	Water	SM 4500 F C	
400-208550-4	DUP-02	Total/NA	Water	SM 4500 F C	
MB 400-548769/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-548769/7	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-207993-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-207993-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-208550-1 MS	MWI-12A	Total/NA	Water	SM 4500 F C	
400-208550-1 MSD	MWI-12A	Total/NA	Water	SM 4500 F C	

Analysis Batch: 549075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	SM 4500 Cl- E	
400-208550-2	PZ-14	Total/NA	Water	SM 4500 Cl- E	
400-208550-3	EB-01	Total/NA	Water	SM 4500 Cl- E	
400-208550-4	DUP-02	Total/NA	Water	SM 4500 Cl- E	
MB 400-549075/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-549075/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-549075/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-208546-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-208546-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 549078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	SM 4500 SO4 E	
400-208550-2	PZ-14	Total/NA	Water	SM 4500 SO4 E	
400-208550-3	EB-01	Total/NA	Water	SM 4500 SO4 E	
400-208550-4	DUP-02	Total/NA	Water	SM 4500 SO4 E	
MB 400-549078/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-549078/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-549078/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-208546-B-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-208546-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

QC Association Summary

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

Job ID: 400-208550-1
SDG: Horizontal Delineation Well

Field Service / Mobile Lab

Analysis Batch: 549331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	Field Sampling	
400-208550-2	PZ-14	Total/NA	Water	Field Sampling	
400-208550-4	DUP-02	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-548503/1-A ^5
Matrix: Water
Analysis Batch: 549080

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		09/23/21 11:42	09/27/21 19:11	5
Beryllium	0.00017	U	0.0025	0.00017	mg/L		09/23/21 11:42	09/27/21 19:11	5
Cadmium	0.00028	U	0.0025	0.00028	mg/L		09/23/21 11:42	09/27/21 19:11	5
Chromium	0.00111	I	0.0025	0.0010	mg/L		09/23/21 11:42	09/27/21 19:11	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		09/23/21 11:42	09/27/21 19:11	5
Lithium	0.0019	U	0.0050	0.0019	mg/L		09/23/21 11:42	09/27/21 19:11	5
Molybdenum	0.0045	U	0.015	0.0045	mg/L		09/23/21 11:42	09/27/21 19:11	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		09/23/21 11:42	09/27/21 19:11	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		09/23/21 11:42	09/27/21 19:11	5

Lab Sample ID: MB 400-548503/1-A ^5
Matrix: Water
Analysis Batch: 549428

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00039	U	0.0013	0.00039	mg/L		09/23/21 11:42	09/29/21 16:46	5
Barium	0.00140	I	0.0025	0.00070	mg/L		09/23/21 11:42	09/29/21 16:46	5
Boron	0.018	U	0.050	0.018	mg/L		09/23/21 11:42	09/29/21 16:46	5
Calcium	0.13	U	0.25	0.13	mg/L		09/23/21 11:42	09/29/21 16:46	5
Lead	0.00029	U	0.0013	0.00029	mg/L		09/23/21 11:42	09/29/21 16:46	5

Lab Sample ID: LCS 400-548503/2-A ^5
Matrix: Water
Analysis Batch: 549080

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0475		mg/L		95	80 - 120
Beryllium	0.0500	0.0511		mg/L		102	80 - 120
Cadmium	0.0500	0.0479		mg/L		96	80 - 120
Chromium	0.0500	0.0482		mg/L		96	80 - 120
Cobalt	0.0500	0.0485		mg/L		97	80 - 120
Lead	0.0500	0.0450		mg/L		90	80 - 120
Lithium	0.0500	0.0482		mg/L		96	80 - 120
Molybdenum	0.0500	0.0482		mg/L		96	80 - 120
Selenium	0.0500	0.0458		mg/L		92	80 - 120
Thallium	0.0100	0.00910		mg/L		91	80 - 120

Lab Sample ID: LCS 400-548503/2-A ^5
Matrix: Water
Analysis Batch: 549428

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0500		mg/L		100	80 - 120
Barium	0.0500	0.0532		mg/L		106	80 - 120
Boron	0.100	0.0937		mg/L		94	80 - 120
Calcium	5.00	5.31		mg/L		106	80 - 120

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

Lab Sample ID: 280-153070-B-2-B MS ^5
Matrix: Water
Analysis Batch: 549080

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 548503

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0015	U	0.0500	0.0465		mg/L		93	75 - 125
Arsenic	0.0027		0.0500	0.0586		mg/L		112	75 - 125
Barium	0.018	V	0.0500	0.0713	V	mg/L		107	75 - 125
Beryllium	0.00026	I	0.0500	0.0522		mg/L		104	75 - 125
Boron	0.018	U	0.100	0.112		mg/L		112	75 - 125
Cadmium	0.00028	U	0.0500	0.0498		mg/L		100	75 - 125
Calcium	1.1	V	5.00	6.01	V	mg/L		99	75 - 125
Chromium	0.0010	U	0.0500	0.0526		mg/L		105	75 - 125
Cobalt	0.0012	I	0.0500	0.0523		mg/L		102	75 - 125
Lead	0.0013	V	0.0500	0.0487		mg/L		95	75 - 125
Lithium	0.0019	U	0.0500	0.0515		mg/L		103	75 - 125
Molybdenum	0.0045	U	0.0500	0.0508		mg/L		102	75 - 125
Selenium	0.0018		0.0500	0.0484		mg/L		93	75 - 125
Thallium	0.00012	U	0.0100	0.00948		mg/L		95	75 - 125

Lab Sample ID: 280-153070-B-2-C MSD ^5
Matrix: Water
Analysis Batch: 549080

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 548503

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	0.0445		mg/L		89	75 - 125	4	20
Arsenic	0.0027		0.0500	0.0612		mg/L		117	75 - 125	4	20
Barium	0.018	V	0.0500	0.0700	V	mg/L		104	75 - 125	2	20
Beryllium	0.00026	I	0.0500	0.0508		mg/L		101	75 - 125	3	20
Boron	0.018	U	0.100	0.112		mg/L		112	75 - 125	0	20
Cadmium	0.00028	U	0.0500	0.0507		mg/L		101	75 - 125	2	20
Calcium	1.1	V	5.00	5.90	V	mg/L		97	75 - 125	2	20
Chromium	0.0010	U	0.0500	0.0508		mg/L		102	75 - 125	4	20
Cobalt	0.0012	I	0.0500	0.0512		mg/L		100	75 - 125	2	20
Lead	0.0013	V	0.0500	0.0478		mg/L		93	75 - 125	2	20
Lithium	0.0019	U	0.0500	0.0544		mg/L		109	75 - 125	5	20
Molybdenum	0.0045	U	0.0500	0.0489		mg/L		98	75 - 125	4	20
Selenium	0.0018		0.0500	0.0483		mg/L		93	75 - 125	0	20
Thallium	0.00012	U	0.0100	0.00936		mg/L		94	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-547998/14-A
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547998

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/20/21 10:03	09/20/21 17:05	1

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

Lab Sample ID: LCS 400-547998/15-A
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547998

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00101	0.000998		mg/L		99	80 - 120		

Lab Sample ID: 400-208477-E-4-C MS
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00015	U	0.00201	0.00200		mg/L		99	80 - 120		

Lab Sample ID: 400-208477-E-4-D MSD
Matrix: Water
Analysis Batch: 548148

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547998

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00201	0.00194		mg/L		96	80 - 120	3	20

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

Lab Sample ID: MB 400-548417/1
Matrix: Water
Analysis Batch: 548417

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			09/22/21 16:35	1

Lab Sample ID: LCS 400-548417/2
Matrix: Water
Analysis Batch: 548417

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	310		mg/L		106	78 - 122		

Lab Sample ID: 400-208550-4 DU
Matrix: Water
Analysis Batch: 548417

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

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	6300			6100		mg/L				3	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-549075/6
Matrix: Water
Analysis Batch: 549075

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			09/28/21 00:58	1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 400-549075/7
Matrix: Water
Analysis Batch: 549075

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	30.2		mg/L		101	90 - 110

Lab Sample ID: MRL 400-549075/3
Matrix: Water
Analysis Batch: 549075

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	1.42	I	mg/L		71	50 - 150

Lab Sample ID: 400-208546-B-1 MS
Matrix: Water
Analysis Batch: 549075

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	11		10.0	22.0		mg/L		109	73 - 120

Lab Sample ID: 400-208546-B-1 MSD
Matrix: Water
Analysis Batch: 549075

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	11		10.0	22.0		mg/L		109	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-548769/3
Matrix: Water
Analysis Batch: 548769

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	U	0.10	0.070	mg/L			09/24/21 16:11	1

Lab Sample ID: LCS 400-548769/7
Matrix: Water
Analysis Batch: 548769

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	5.28		mg/L		106	90 - 110

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-549078/6
Matrix: Water
Analysis Batch: 549078

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			09/28/21 01:14	1

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-549078/7
Matrix: Water
Analysis Batch: 549078

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	14.3		mg/L		95	90 - 110

Lab Sample ID: MRL 400-549078/3
Matrix: Water
Analysis Batch: 549078

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	4.44	I	mg/L		89	50 - 150

Lab Sample ID: 400-208546-B-2 MS
Matrix: Water
Analysis Batch: 549078

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	10.0		mg/L		100	77 - 128

Lab Sample ID: 400-208546-B-2 MSD
Matrix: Water
Analysis Batch: 549078

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	10.3		mg/L		103	77 - 128	3	5

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

Chain of Custody Record

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400-208550 COC

Client Information	Sampler: Philip E. / Trevor B	Lab PM: Whitmire, Cheyenne R	COC No: 400-104634-31203.1
Client Contact: Barry Evans	Phone: 850-336-0192	E-Mail: Cheyenne.Whitmire@Eurofinset.com	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:		Job #:
Address: BIN 731 One Energy Place	Due Date Requested:		
City: Pensacola	TAT Requested (days):		
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No		
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	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:

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	9/17/21	1045	G	Water			X	X	X	X	X	X	X		
PZ-14	↓	1030	↓	Water			↓	↓	↓	↓	↓	↓	↓		
[redacted] EB-01		0925		Water			↓	↓	↓	↓	↓	↓	↓		
[redacted] DUP-02	9/17/21	0930	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: 9-17-21 1445	Company RPH	Received by: Kathy R Avery	Date/Time: 9-17-21 1445	Company 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: 1.2°C IR9 4.7°C, 0.9°C

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-208550-1
SDG Number: Horizontal Delineation Well

Login Number: 208550
List Number: 1
Creator: Avery, Kathy R

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.	N/A	
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	1.2°C, 4.7°C, 0.9° 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: 400-208550-1
SDG: Horizontal Delineation Well

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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-208550-2
Laboratory Sample Delivery Group: Horizontal Delineation Well
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:
11/5/2021 4:54:01 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-208550-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-208550-2

RAD

Method 9315: Radium-226 prep batch 160-529150. The method blank counted on a failed detector. The detector passed the day prior (10/27/2021) and the day following (10/29/2021) the sample count. The method blank activity is below the MDC and RL, therefore the lab does not believe this excursion adversely affects the data. The data have been reported with this narrative. (MB 160-529150/24-A)

Method 9315: Radium-226 prep batch 160-529150. 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 (400-208550-1), PZ-14 (400-208550-2), EB-01 (400-208550-3), DUP-02 (400-208550-4), (LCS 160-529150/1-A), (MB 160-529150/24-A), (410-55331-E-4-A), (410-55331-F-4-B MS) and (410-55331-D-4-C MSD)

Method 9320: Radium 228 batch 534195. 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 (400-208550-1), PZ-14 (400-208550-2), EB-01 (400-208550-3), DUP-02 (400-208550-4), (LCS 160-534195/1-A), (LCSD 160-534195/2-A) and (MB 160-534195/19-A)

Method PrecSep_0: Radium-228 Prep Batch 529155. The following samples were prepared at a reduced aliquot due to Matrix: MWI-12A (400-208550-1), PZ-14 (400-208550-2) and DUP-02 (400-208550-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 529155. Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-01 (400-208550-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-534195. The following samples were prepared at a reduced aliquot due to Matrix: MWI-12A (400-208550-1), PZ-14 (400-208550-2) and DUP-02 (400-208550-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-534195. Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-01 (400-208550-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 529150. The following samples were prepared at a reduced aliquot due to Matrix: MWI-12A (400-208550-1), PZ-14 (400-208550-2) and DUP-02 (400-208550-4). 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 529150. Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-01 (400-208550-3). 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: 400-208550-2
SDG: Horizontal Delineation Well

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: 400-208550-2
SDG: Horizontal Delineation Well

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-208550-1	MWI-12A	Water	09/17/21 10:45	09/17/21 14:45
400-208550-2	PZ-14	Water	09/17/21 10:30	09/17/21 14:45
400-208550-3	EB-01	Water	09/17/21 09:25	09/17/21 14:45
400-208550-4	DUP-02	Water	09/17/21 09:30	09/17/21 14:45

Client Sample ID: MWI-12A

Date Collected: 09/17/21 10:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-1

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	0.906		0.368	0.377	1.00	0.444	pCi/L	09/28/21 11:44	10/28/21 18:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.8*		*40 - 110*	*09/28/21 11:44*	*10/28/21 18:45*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.649		0.375	0.380	1.00	0.565	pCi/L	10/29/21 09:01	11/04/21 13:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.3*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*1*
Y Carrier	*80.7*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*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	1.56		0.525	0.535	5.00	0.565	pCi/L		11/05/21 14:55	1

Client Sample ID: PZ-14
Date Collected: 09/17/21 10:30
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-2
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	9.91		0.940	1.30	1.00	0.345	pCi/L	09/28/21 11:44	10/28/21 18:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.6*		*40 - 110*	*09/28/21 11:44*	*10/28/21 18:45*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	10.5		0.849	1.29	1.00	0.549	pCi/L	10/29/21 09:01	11/04/21 13:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*1*
Y Carrier	*82.6*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*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	20.4		1.27	1.83	5.00	0.549	pCi/L		11/05/21 14:55	1

Client Sample Results

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

Job ID: 400-208550-2
SDG: Horizontal Delineation Well

Client Sample ID: EB-01
Date Collected: 09/17/21 09:25
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-3
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	0.0837	U	0.173	0.174	1.00	0.309	pCi/L	09/28/21 11:44	10/28/21 18:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*09/28/21 11:44*	*10/28/21 18:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.282	U	0.280	0.281	1.00	0.454	pCi/L	10/29/21 09:01	11/04/21 13:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.0*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*1*
Y Carrier	*81.9*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*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	0.366	U	0.329	0.331	5.00	0.454	pCi/L		11/05/21 14:55	1

Client Sample ID: DUP-02
Date Collected: 09/17/21 09:30
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-4
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	11.9		1.06	1.51	1.00	0.373	pCi/L	09/28/21 11:44	10/28/21 18:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.5*		*40 - 110*	*09/28/21 11:44*	*10/28/21 18:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	10.2		0.836	1.26	1.00	0.535	pCi/L	10/29/21 09:01	11/04/21 13:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*1*
Y Carrier	*80.7*		*40 - 110*	*10/29/21 09:01*	*11/04/21 13:10*	*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	22.1		1.35	1.97	5.00	0.535	pCi/L		11/05/21 14:55	1

Definitions/Glossary

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

Job ID: 400-208550-2
SDG: Horizontal Delineation Well

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: 400-208550-2
SDG: Horizontal Delineation Well

Client Sample ID: MWI-12A
Date Collected: 09/17/21 10:45
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 18:45	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 13:10	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:55	MLK	TAL SL

Client Sample ID: PZ-14
Date Collected: 09/17/21 10:30
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 18:45	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 13:10	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:55	MLK	TAL SL

Client Sample ID: EB-01
Date Collected: 09/17/21 09:25
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 18:46	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 13:10	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:55	MLK	TAL SL

Client Sample ID: DUP-02
Date Collected: 09/17/21 09:30
Date Received: 09/17/21 14:45

Lab Sample ID: 400-208550-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			529150	09/28/21 11:44	BMP	TAL SL
Total/NA	Analysis	9315		1	533986	10/28/21 18:46	ANW	TAL SL
Total/NA	Prep	PrecSep_0			534195	10/29/21 09:01	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 13:10	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 14:55	MLK	TAL SL

Laboratory References:

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

QC Association Summary

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

Job ID: 400-208550-2
SDG: Horizontal Delineation Well

Rad

Prep Batch: 529150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	PrecSep-21	
400-208550-2	PZ-14	Total/NA	Water	PrecSep-21	
400-208550-3	EB-01	Total/NA	Water	PrecSep-21	
400-208550-4	DUP-02	Total/NA	Water	PrecSep-21	
MB 160-529150/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-529150/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
410-55331-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
410-55331-F-4-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	

Prep Batch: 534195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-208550-1	MWI-12A	Total/NA	Water	PrecSep_0	
400-208550-2	PZ-14	Total/NA	Water	PrecSep_0	
400-208550-3	EB-01	Total/NA	Water	PrecSep_0	
400-208550-4	DUP-02	Total/NA	Water	PrecSep_0	
MB 160-534195/19-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-534195/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-534195/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-529150/24-A
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 529150

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1326	U	0.199	0.199	1.00	0.342	pCi/L	09/28/21 11:44	10/28/21 15:53	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*09/28/21 11:44*	*10/28/21 15:53*	*1*

Lab Sample ID: LCS 160-529150/1-A
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 529150

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	15.22		1.90	1.00	0.425	pCi/L	101	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.1*		*40 - 110*

Lab Sample ID: 410-55331-D-4-C MSD
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 529150

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	0.681		22.7	23.98		2.88	1.00	0.540	pCi/L	103	75 - 138	0.44	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*78.8*		*40 - 110*

Lab Sample ID: 410-55331-F-4-B MS
Matrix: Water
Analysis Batch: 533986

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 529150

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.681		22.6	21.53		2.69	1.00	0.516	pCi/L	92	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*74.3*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-534195/19-A
Matrix: Water
Analysis Batch: 535180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 534195

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.9073		0.376	0.385	1.00	0.510	pCi/L	10/29/21 09:01	11/04/21 13:15	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		40 - 110	10/29/21 09:01	11/04/21 13:15	1
Y Carrier	84.1		40 - 110	10/29/21 09:01	11/04/21 13:15	1

Lab Sample ID: LCS 160-534195/1-A
Matrix: Water
Analysis Batch: 535031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 534195

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			12.2	12.52		1.47	1.00	0.531	pCi/L	102	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	85.2		40 - 110

Lab Sample ID: LCSD 160-534195/2-A
Matrix: Water
Analysis Batch: 535031

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 534195

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			12.2	12.38		1.45	1.00	0.545	pCi/L	101	75 - 125	0.05	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	102		40 - 110
Y Carrier	83.7		40 - 110

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

Chain of Custody Record

400-208550 COC

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Client Information	Sampler: Philip E. / Trevor B	Lab PM: Whitmire, Cheyenne R	COC No: 400-104634-31203.1
Client Contact: Barry Evans	Phone: 850-336-0192	E-Mail: Cheyenne.Whitmire@Eurofinset.com	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:		Job #:
Address: BIN 731 One Energy Place	Due Date Requested:	Analysis Requested	
City: Pensacola	TAT Requested (days):		
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No		
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	Project #: 40006609		
Site: Florida	SSOW#:		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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	9/17/21	1045	G	Water			X	X	X	X	X	X	X		
PZ-14	↓	1030	↓	Water			↓	↓	↓	↓	↓	↓	↓		
[redacted] EB-01	↓	0925	↓	Water			↓	↓	↓	↓	↓	↓	↓		
[redacted] DUP-02	9/17/21	0930	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: [signature]	Date/Time: 9-17-21 1445	Company: RPH	Received by: Kathy R Avery
Date/Time: 9-17-21 1445	Company: 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: 1.2°C IR9 4.7%, 0.9%

Ver: 06/08/2021

11/5/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-208550-2
SDG Number: Horizontal Delineation Well

Login Number: 208550
List Number: 1
Creator: Avery, Kathy R

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.	N/A	
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	1.2°C, 4.7°C, 0.9° 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: 400-208550-2
SDG Number: Horizontal Delineation Well

Login Number: 208550
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/21/21 12:27 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: 400-208550-2
SDG: Horizontal Delineation Well

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	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21 *
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-211563-1
Client Project/Site: CCR Smith Plant
Sampling Event: 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:
12/7/2021 6:01:53 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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

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Job ID: 400-211563-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-211563-1

Metals

Method 6020: The method blank for preparation batch 400-556828 and analytical batch 400-557035 contained Boron 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 6020: The continuing calibration verification (CCV) associated with batch 400-557035 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: (MB 400-556828/1-A ^5).

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-556828 and analytical batch 400-557035 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-14R (400-211563-5). Elevated reporting limits (RLs) are provided.

General Chemistry

Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-557447 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 F C: The matrix spike duplicate (MSD) recoveries for analytical batch 400-556979 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 4500 Cl- E: Due to the high concentration of Chloride, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 400-556847 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method SM 4500 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: DUP-01 (400-211563-1), MW-13R (400-211563-4) and MW-14R (400-211563-5). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: DUP-01 (400-211563-1), MW-13R (400-211563-4) and MW-14R (400-211563-5). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-556848 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Detection Summary

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

Job ID: 400-211563-1

Client Sample ID: DUP-01 — Lab Sample ID: 400-211563-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0039		0.0013	0.0012	mg/L	5		6020	Total Recoverable
Barium	0.080		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	14		0.50	0.012	mg/L	50		6020	Total Recoverable
Calcium	530		2.5	1.3	mg/L	50		6020	Total Recoverable
Chromium	0.0012	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Lithium	0.035		0.0050	0.0049	mg/L	5		6020	Total Recoverable
Molybdenum	0.0027	I	0.015	0.0013	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	7300		250	250	mg/L	1		SM 2540C	Total/NA
Chloride	3800		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Sulfate	430		100	28	mg/L	20		SM 4500 SO4 E	Total/NA
Field pH	6.09				SU	1		Field Sampling	Total/NA

Client Sample ID: EB-01 — Lab Sample ID: 400-211563-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.021	I V	0.050	0.0012	mg/L	5		6020	Total Recoverable
Chloride	3.6		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: FB-01 — Lab Sample ID: 400-211563-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0012	I	0.0013	0.0012	mg/L	5		6020	Total Recoverable
Boron	0.0083	I V	0.050	0.0012	mg/L	5		6020	Total Recoverable

Client Sample ID: MW-13R — Lab Sample ID: 400-211563-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0043		0.0013	0.0012	mg/L	5		6020	Total Recoverable
Barium	0.074		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	13		0.50	0.012	mg/L	50		6020	Total Recoverable
Calcium	500		2.5	1.3	mg/L	50		6020	Total Recoverable
Chromium	0.0016	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Lithium	0.036		0.0050	0.0049	mg/L	5		6020	Total Recoverable
Molybdenum	0.0024	I	0.015	0.0013	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	7500		250	250	mg/L	1		SM 2540C	Total/NA
Chloride	3800		200	140	mg/L	100		SM 4500 Cl- E	Total/NA
Sulfate	470		130	35	mg/L	25		SM 4500 SO4 E	Total/NA
Field pH	6.09				SU	1		Field Sampling	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: 400-211563-1

Client Sample ID: MW-14R

Lab Sample ID: 400-211563-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.032		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	4.0		0.50	0.012	mg/L	50		6020	Total Recoverable
Calcium	74		0.50	0.25	mg/L	10		6020	Total Recoverable
Chromium	0.0017	I	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Lithium	0.15		0.0050	0.0049	mg/L	5		6020	Total Recoverable
Molybdenum	0.018		0.015	0.0013	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	930		10	10	mg/L	1		SM 2540C	Total/NA
Chloride	240		20	14	mg/L	10		SM 4500 Cl- E	Total/NA
Fluoride	0.27		0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
Sulfate	100		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA
Field pH	7.39				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: 400-211563-1

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: 400-211563-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-211563-1	DUP-01	Water	11/19/21 13:23	11/20/21 08:55
400-211563-2	EB-01	Water	11/19/21 13:27	11/20/21 08:55
400-211563-3	FB-01	Water	11/19/21 14:25	11/20/21 08:55
400-211563-4	MW-13R	Water	11/19/21 14:23	11/20/21 08:55
400-211563-5	MW-14R	Water	11/19/21 13:15	11/20/21 08:55

Client Sample Results

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

Job ID: 400-211563-1

Client Sample ID: DUP-01

Date Collected: 11/19/21 13:23
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-1

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		11/21/21 13:48	11/22/21 15:20	5
Arsenic	**0.0039**		0.0013	0.0012	mg/L		11/21/21 13:48	11/22/21 15:20	5
Barium	**0.080**		0.0025	0.00070	mg/L		11/21/21 13:48	11/22/21 15:20	5
Beryllium	0.00092	U	0.0025	0.00092	mg/L		11/21/21 13:48	11/22/21 15:20	5
Boron	**14**		0.50	0.012	mg/L		11/21/21 13:48	11/24/21 18:21	50
Cadmium	0.00065	U	0.0025	0.00065	mg/L		11/21/21 13:48	11/22/21 15:20	5
Calcium	**530**		2.5	1.3	mg/L		11/21/21 13:48	11/24/21 18:21	50
Chromium	**0.0012**	**I**	0.0025	0.0010	mg/L		11/21/21 13:48	11/22/21 15:20	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		11/21/21 13:48	11/22/21 15:20	5
Lead	0.00081	U	0.0013	0.00081	mg/L		11/21/21 13:48	11/22/21 15:20	5
Lithium	**0.035**		0.0050	0.0049	mg/L		11/21/21 13:48	11/22/21 15:20	5
Molybdenum	**0.0027**	**I**	0.015	0.0013	mg/L		11/21/21 13:48	11/22/21 15:20	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		11/21/21 13:48	11/22/21 15:20	5
Thallium	0.00046	U	0.00050	0.00046	mg/L		11/21/21 13:48	11/22/21 15:20	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		11/23/21 10:26	11/23/21 17:45	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**7300**		250	250	mg/L			11/22/21 16:13	1
Chloride	**3800**		200	140	mg/L			11/22/21 02:06	100
Fluoride	0.070	U	0.10	0.070	mg/L			11/22/21 14:48	1
Sulfate	**430**		100	28	mg/L			11/22/21 02:24	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.09**				SU			11/19/21 13:23	1

Client Sample Results

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

Job ID: 400-211563-1

Client Sample ID: EB-01

Date Collected: 11/19/21 13:27
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-2

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		11/21/21 13:48	11/22/21 15:45	5
Arsenic	0.0012	U	0.0013	0.0012	mg/L		11/21/21 13:48	11/22/21 15:45	5
Barium	0.00070	U	0.0025	0.00070	mg/L		11/21/21 13:48	11/22/21 15:45	5
Beryllium	0.00092	U	0.0025	0.00092	mg/L		11/21/21 13:48	11/22/21 15:45	5
Boron	**0.021**	**I V**	0.050	0.0012	mg/L		11/21/21 13:48	11/23/21 16:54	5
Cadmium	0.00065	U	0.0025	0.00065	mg/L		11/21/21 13:48	11/22/21 15:45	5
Calcium	0.13	U	0.25	0.13	mg/L		11/21/21 13:48	11/22/21 15:45	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		11/21/21 13:48	11/22/21 15:45	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		11/21/21 13:48	11/22/21 15:45	5
Lead	0.00081	U	0.0013	0.00081	mg/L		11/21/21 13:48	11/22/21 15:45	5
Lithium	0.0049	U	0.0050	0.0049	mg/L		11/21/21 13:48	11/22/21 15:45	5
Molybdenum	0.0013	U	0.015	0.0013	mg/L		11/21/21 13:48	11/22/21 15:45	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		11/21/21 13:48	11/22/21 15:45	5
Thallium	0.00046	U	0.00050	0.00046	mg/L		11/21/21 13:48	11/22/21 15:45	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		11/23/21 10:26	11/23/21 17:47	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			11/22/21 16:13	1
Chloride	**3.6**		2.0	1.4	mg/L			11/22/21 01:34	1
Fluoride	0.070	U	0.10	0.070	mg/L			11/22/21 14:44	1
Sulfate	1.4	U	5.0	1.4	mg/L			11/22/21 01:45	1

Client Sample Results

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

Job ID: 400-211563-1

Client Sample ID: FB-01

Date Collected: 11/19/21 14:25
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-3

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		11/21/21 13:48	11/22/21 15:50	5
Arsenic	**0.0012**	**I**	0.0013	0.0012	mg/L		11/21/21 13:48	11/23/21 16:59	5
Barium	0.00070	U	0.0025	0.00070	mg/L		11/21/21 13:48	11/22/21 15:50	5
Beryllium	0.00092	U	0.0025	0.00092	mg/L		11/21/21 13:48	11/22/21 15:50	5
Boron	**0.0083**	**I V**	0.050	0.0012	mg/L		11/21/21 13:48	11/23/21 16:59	5
Cadmium	0.00065	U	0.0025	0.00065	mg/L		11/21/21 13:48	11/22/21 15:50	5
Calcium	0.13	U	0.25	0.13	mg/L		11/21/21 13:48	11/22/21 15:50	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		11/21/21 13:48	11/22/21 15:50	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		11/21/21 13:48	11/22/21 15:50	5
Lead	0.00081	U	0.0013	0.00081	mg/L		11/21/21 13:48	11/22/21 15:50	5
Lithium	0.0049	U	0.0050	0.0049	mg/L		11/21/21 13:48	11/22/21 15:50	5
Molybdenum	0.0013	U	0.015	0.0013	mg/L		11/21/21 13:48	11/22/21 15:50	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		11/21/21 13:48	11/22/21 15:50	5
Thallium	0.00046	U	0.00050	0.00046	mg/L		11/21/21 13:48	11/22/21 15:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		11/23/21 10:26	11/23/21 17:49	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			11/26/21 15:28	1
Chloride	1.4	U	2.0	1.4	mg/L			11/22/21 01:34	1
Fluoride	0.070	U	0.10	0.070	mg/L			11/30/21 15:20	1
Sulfate	1.4	U	5.0	1.4	mg/L			11/22/21 01:45	1

Client Sample Results

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

Job ID: 400-211563-1

Client Sample ID: MW-13R

Date Collected: 11/19/21 14:23
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-4

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		11/21/21 13:48	11/22/21 15:55	5
Arsenic	**0.0043**		0.0013	0.0012	mg/L		11/21/21 13:48	11/22/21 15:55	5
Barium	**0.074**		0.0025	0.00070	mg/L		11/21/21 13:48	11/22/21 15:55	5
Beryllium	0.00092	U	0.0025	0.00092	mg/L		11/21/21 13:48	11/22/21 15:55	5
Boron	**13**		0.50	0.012	mg/L		11/21/21 13:48	11/24/21 19:01	50
Cadmium	0.00065	U	0.0025	0.00065	mg/L		11/21/21 13:48	11/22/21 15:55	5
Calcium	**500**		2.5	1.3	mg/L		11/21/21 13:48	11/24/21 19:01	50
Chromium	**0.0016**	**I**	0.0025	0.0010	mg/L		11/21/21 13:48	11/22/21 15:55	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		11/21/21 13:48	11/22/21 15:55	5
Lead	0.00081	U	0.0013	0.00081	mg/L		11/21/21 13:48	11/22/21 15:55	5
Lithium	**0.036**		0.0050	0.0049	mg/L		11/21/21 13:48	11/22/21 15:55	5
Molybdenum	**0.0024**	**I**	0.015	0.0013	mg/L		11/21/21 13:48	11/22/21 15:55	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		11/21/21 13:48	11/22/21 15:55	5
Thallium	0.00046	U	0.00050	0.00046	mg/L		11/21/21 13:48	11/22/21 15:55	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		11/23/21 10:26	11/23/21 17:51	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**7500**		250	250	mg/L			11/22/21 16:13	1
Chloride	**3800**		200	140	mg/L			11/22/21 02:06	100
Fluoride	0.070	U	0.10	0.070	mg/L			11/22/21 14:37	1
Sulfate	**470**		130	35	mg/L			11/22/21 02:24	25

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.09**				SU			11/19/21 14:23	1

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

Job ID: 400-211563-1

Client Sample ID: MW-14R

Date Collected: 11/19/21 13:15
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-5

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		11/21/21 13:48	11/22/21 17:50	5
Arsenic	0.0012	U	0.0013	0.0012	mg/L		11/21/21 13:48	11/22/21 17:50	5
Barium	**0.032**		0.0025	0.00070	mg/L		11/21/21 13:48	11/22/21 17:50	5
Beryllium	0.00092	U	0.0025	0.00092	mg/L		11/21/21 13:48	11/22/21 17:50	5
Boron	**4.0**		0.50	0.012	mg/L		11/21/21 13:48	11/24/21 19:11	50
Cadmium	0.00065	U	0.0025	0.00065	mg/L		11/21/21 13:48	11/22/21 17:50	5
Calcium	**74**		0.50	0.25	mg/L		11/21/21 13:48	11/23/21 17:29	10
Chromium	**0.0017**	**I**	0.0025	0.0010	mg/L		11/21/21 13:48	11/22/21 17:50	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		11/21/21 13:48	11/22/21 17:50	5
Lead	0.00081	U	0.0013	0.00081	mg/L		11/21/21 13:48	11/22/21 17:50	5
Lithium	**0.15**		0.0050	0.0049	mg/L		11/21/21 13:48	11/22/21 17:50	5
Molybdenum	**0.018**		0.015	0.0013	mg/L		11/21/21 13:48	11/22/21 17:50	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		11/21/21 13:48	11/22/21 17:50	5
Thallium	0.00046	U	0.00050	0.00046	mg/L		11/21/21 13:48	11/22/21 17:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		11/23/21 10:26	11/23/21 17:56	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**930**		10	10	mg/L			11/22/21 16:13	1
Chloride	**240**		20	14	mg/L			11/22/21 01:44	10
Fluoride	**0.27**		0.10	0.070	mg/L			11/22/21 14:40	1
Sulfate	**100**		25	7.0	mg/L			11/22/21 01:57	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.39**				SU			11/19/21 13:15	1

Definitions/Glossary

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

Job ID: 400-211563-1

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.
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: DUP-01

Lab Sample ID: 400-211563-1

Date Collected: 11/19/21 13:23

Matrix: Water

Date Received: 11/20/21 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	557035	11/22/21 15:20	KW	TAL PEN
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		50	557578	11/24/21 18:21	KW	TAL PEN
Total/NA	Prep	7470A			557062	11/23/21 10:26	NET	TAL PEN
Total/NA	Analysis	7470A		1	557202	11/23/21 17:45	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	557003	11/22/21 16:13	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	556847	11/22/21 02:06	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	556979	11/22/21 14:48	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	556848	11/22/21 02:24	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	558000	11/19/21 13:23	EHS	TAL PEN

Client Sample ID: EB-01

Lab Sample ID: 400-211563-2

Date Collected: 11/19/21 13:27

Matrix: Water

Date Received: 11/20/21 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	557035	11/22/21 15:45	KW	TAL PEN
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	557221	11/23/21 16:54	LDC	TAL PEN
Total/NA	Prep	7470A			557062	11/23/21 10:26	NET	TAL PEN
Total/NA	Analysis	7470A		1	557202	11/23/21 17:47	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	557003	11/22/21 16:13	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	556847	11/22/21 01:34	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	556979	11/22/21 14:44	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	556848	11/22/21 01:45	DN1	TAL PEN

Client Sample ID: FB-01

Lab Sample ID: 400-211563-3

Date Collected: 11/19/21 14:25

Matrix: Water

Date Received: 11/20/21 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	557035	11/22/21 15:50	KW	TAL PEN
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	557221	11/23/21 16:59	LDC	TAL PEN
Total/NA	Prep	7470A			557062	11/23/21 10:26	NET	TAL PEN
Total/NA	Analysis	7470A		1	557202	11/23/21 17:49	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	557447	11/26/21 15:28	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	556847	11/22/21 01:34	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	557866	11/30/21 15:20	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	556848	11/22/21 01:45	DN1	TAL PEN

Lab Chronicle

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

Job ID: 400-211563-1

Client Sample ID: MW-13R

Date Collected: 11/19/21 14:23
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	557035	11/22/21 15:55	KW	TAL PEN
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		50	557578	11/24/21 19:01	KW	TAL PEN
Total/NA	Prep	7470A			557062	11/23/21 10:26	NET	TAL PEN
Total/NA	Analysis	7470A		1	557202	11/23/21 17:51	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	557003	11/22/21 16:13	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		100	556847	11/22/21 02:06	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	556979	11/22/21 14:37	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		25	556848	11/22/21 02:24	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	558000	11/19/21 14:23	EHS	TAL PEN

Client Sample ID: MW-14R

Date Collected: 11/19/21 13:15
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	557035	11/22/21 17:50	KW	TAL PEN
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		10	557221	11/23/21 17:29	LDC	TAL PEN
Total Recoverable	Prep	3005A			556828	11/21/21 13:48	KWN	TAL PEN
Total Recoverable	Analysis	6020		50	557578	11/24/21 19:11	KW	TAL PEN
Total/NA	Prep	7470A			557062	11/23/21 10:26	NET	TAL PEN
Total/NA	Analysis	7470A		1	557202	11/23/21 17:56	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	557003	11/22/21 16:13	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		10	556847	11/22/21 01:44	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	556979	11/22/21 14:40	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	556848	11/22/21 01:57	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	558000	11/19/21 13:15	EHS	TAL PEN

Laboratory References:

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

Metals

Prep Batch: 556828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total Recoverable	Water	3005A	
400-211563-2	EB-01	Total Recoverable	Water	3005A	
400-211563-3	FB-01	Total Recoverable	Water	3005A	
400-211563-4	MW-13R	Total Recoverable	Water	3005A	
400-211563-5	MW-14R	Total Recoverable	Water	3005A	
MB 400-556828/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-556828/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
400-211563-1 MS	DUP-01	Total Recoverable	Water	3005A	
400-211563-1 MSD	DUP-01	Total Recoverable	Water	3005A	

Analysis Batch: 557035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total Recoverable	Water	6020	556828
400-211563-2	EB-01	Total Recoverable	Water	6020	556828
400-211563-3	FB-01	Total Recoverable	Water	6020	556828
400-211563-4	MW-13R	Total Recoverable	Water	6020	556828
400-211563-5	MW-14R	Total Recoverable	Water	6020	556828
MB 400-556828/1-A ^5	Method Blank	Total Recoverable	Water	6020	556828
LCS 400-556828/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	556828
400-211563-1 MS	DUP-01	Total Recoverable	Water	6020	556828
400-211563-1 MSD	DUP-01	Total Recoverable	Water	6020	556828

Prep Batch: 557062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	7470A	
400-211563-2	EB-01	Total/NA	Water	7470A	
400-211563-3	FB-01	Total/NA	Water	7470A	
400-211563-4	MW-13R	Total/NA	Water	7470A	
400-211563-5	MW-14R	Total/NA	Water	7470A	
MB 400-557062/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-557062/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-211485-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-211485-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 557202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	7470A	557062
400-211563-2	EB-01	Total/NA	Water	7470A	557062
400-211563-3	FB-01	Total/NA	Water	7470A	557062
400-211563-4	MW-13R	Total/NA	Water	7470A	557062
400-211563-5	MW-14R	Total/NA	Water	7470A	557062
MB 400-557062/14-A	Method Blank	Total/NA	Water	7470A	557062
LCS 400-557062/15-A	Lab Control Sample	Total/NA	Water	7470A	557062
400-211485-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	557062
400-211485-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	557062

Analysis Batch: 557221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-2	EB-01	Total Recoverable	Water	6020	556828
400-211563-3	FB-01	Total Recoverable	Water	6020	556828
400-211563-5	MW-14R	Total Recoverable	Water	6020	556828

Metals (Continued)

Analysis Batch: 557221 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-556828/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	556828

Analysis Batch: 557578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total Recoverable	Water	6020	556828
400-211563-4	MW-13R	Total Recoverable	Water	6020	556828
400-211563-5	MW-14R	Total Recoverable	Water	6020	556828
400-211563-1 MS	DUP-01	Total Recoverable	Water	6020	556828
400-211563-1 MSD	DUP-01	Total Recoverable	Water	6020	556828

General Chemistry

Analysis Batch: 556847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	SM 4500 Cl- E	
400-211563-2	EB-01	Total/NA	Water	SM 4500 Cl- E	
400-211563-3	FB-01	Total/NA	Water	SM 4500 Cl- E	
400-211563-4	MW-13R	Total/NA	Water	SM 4500 Cl- E	
400-211563-5	MW-14R	Total/NA	Water	SM 4500 Cl- E	
MB 400-556847/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-556847/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-556847/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-211282-G-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-211282-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 556848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	SM 4500 SO4 E	
400-211563-2	EB-01	Total/NA	Water	SM 4500 SO4 E	
400-211563-3	FB-01	Total/NA	Water	SM 4500 SO4 E	
400-211563-4	MW-13R	Total/NA	Water	SM 4500 SO4 E	
400-211563-5	MW-14R	Total/NA	Water	SM 4500 SO4 E	
MB 400-556848/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-556848/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-556848/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-211563-5 MS	MW-14R	Total/NA	Water	SM 4500 SO4 E	
400-211563-5 MSD	MW-14R	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 556979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	SM 4500 F C	
400-211563-2	EB-01	Total/NA	Water	SM 4500 F C	
400-211563-4	MW-13R	Total/NA	Water	SM 4500 F C	
400-211563-5	MW-14R	Total/NA	Water	SM 4500 F C	
MB 400-556979/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-556979/6	Lab Control Sample	Total/NA	Water	SM 4500 F C	
240-159991-B-11 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
240-159991-B-11 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
240-160275-B-7 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
240-160275-B-7 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: 400-211563-1

General Chemistry

Analysis Batch: 557003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	SM 2540C	
400-211563-2	EB-01	Total/NA	Water	SM 2540C	
400-211563-4	MW-13R	Total/NA	Water	SM 2540C	
400-211563-5	MW-14R	Total/NA	Water	SM 2540C	
MB 400-557003/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-557003/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-211563-1 DU	DUP-01	Total/NA	Water	SM 2540C	

Analysis Batch: 557447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-3	FB-01	Total/NA	Water	SM 2540C	
MB 400-557447/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-557447/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-211703-B-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 557866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-3	FB-01	Total/NA	Water	SM 4500 F C	
MB 400-557866/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-557866/6	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-211563-3 MS	FB-01	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 558000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	Field Sampling	
400-211563-4	MW-13R	Total/NA	Water	Field Sampling	
400-211563-5	MW-14R	Total/NA	Water	Field Sampling	

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-556828/1-A ^5
Matrix: Water
Analysis Batch: 557035

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 556828

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		11/21/21 13:48	11/22/21 15:10	5
Arsenic	0.0012	U	0.0013	0.0012	mg/L		11/21/21 13:48	11/22/21 15:10	5
Barium	0.00070	U	0.0025	0.00070	mg/L		11/21/21 13:48	11/22/21 15:10	5
Beryllium	0.00092	U	0.0025	0.00092	mg/L		11/21/21 13:48	11/22/21 15:10	5
Boron	0.00515	I	0.050	0.0012	mg/L		11/21/21 13:48	11/22/21 15:10	5
Cadmium	0.00065	U	0.0025	0.00065	mg/L		11/21/21 13:48	11/22/21 15:10	5
Calcium	0.13	U	0.25	0.13	mg/L		11/21/21 13:48	11/22/21 15:10	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		11/21/21 13:48	11/22/21 15:10	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		11/21/21 13:48	11/22/21 15:10	5
Lead	0.00081	U	0.0013	0.00081	mg/L		11/21/21 13:48	11/22/21 15:10	5
Lithium	0.0049	U	0.0050	0.0049	mg/L		11/21/21 13:48	11/22/21 15:10	5
Molybdenum	0.0013	U	0.015	0.0013	mg/L		11/21/21 13:48	11/22/21 15:10	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		11/21/21 13:48	11/22/21 15:10	5
Thallium	0.00046	U	0.00050	0.00046	mg/L		11/21/21 13:48	11/22/21 15:10	5

Lab Sample ID: LCS 400-556828/2-A ^5
Matrix: Water
Analysis Batch: 557035

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 556828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0484		mg/L		97	80 - 120
Arsenic	0.0500	0.0458		mg/L		92	80 - 120
Barium	0.0500	0.0462		mg/L		92	80 - 120
Beryllium	0.0500	0.0505		mg/L		101	80 - 120
Cadmium	0.0500	0.0505		mg/L		101	80 - 120
Calcium	5.00	4.85		mg/L		97	80 - 120
Chromium	0.0500	0.0510		mg/L		102	80 - 120
Cobalt	0.0500	0.0505		mg/L		101	80 - 120
Lead	0.0500	0.0492		mg/L		98	80 - 120
Lithium	0.0500	0.0510		mg/L		102	80 - 120
Molybdenum	0.0500	0.0493		mg/L		99	80 - 120
Selenium	0.0500	0.0499		mg/L		100	80 - 120
Thallium	0.0100	0.00962		mg/L		96	80 - 120

Lab Sample ID: LCS 400-556828/2-A ^5
Matrix: Water
Analysis Batch: 557221

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 556828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0934		mg/L		93	80 - 120

Lab Sample ID: 400-211563-1 MS
Matrix: Water
Analysis Batch: 557035

Client Sample ID: DUP-01
Prep Type: Total Recoverable
Prep Batch: 556828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0015	U	0.0500	0.0497		mg/L		99	75 - 125
Arsenic	0.0039		0.0500	0.0535		mg/L		99	75 - 125
Barium	0.080		0.0500	0.123		mg/L		87	75 - 125

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

Lab Sample ID: 400-211563-1 MS
Matrix: Water
Analysis Batch: 557035

Client Sample ID: DUP-01
Prep Type: Total Recoverable
Prep Batch: 556828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.00092	U	0.0500	0.0492		mg/L		98	75 - 125
Cadmium	0.00065	U	0.0500	0.0504		mg/L		101	75 - 125
Chromium	0.0012	I	0.0500	0.0496		mg/L		97	75 - 125
Cobalt	0.00056	U	0.0500	0.0486		mg/L		97	75 - 125
Lead	0.00081	U	0.0500	0.0498		mg/L		100	75 - 125
Lithium	0.035		0.0500	0.0786		mg/L		88	75 - 125
Molybdenum	0.0027	I	0.0500	0.0537		mg/L		102	75 - 125
Selenium	0.00082	U	0.0500	0.0158	J3	mg/L		32	75 - 125
Thallium	0.00046	U	0.0100	0.00964		mg/L		96	75 - 125

Lab Sample ID: 400-211563-1 MS
Matrix: Water
Analysis Batch: 557578

Client Sample ID: DUP-01
Prep Type: Total Recoverable
Prep Batch: 556828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	14		0.100	15.2	J3	mg/L		782	75 - 125
Calcium	530		5.00	575	J3	mg/L		948	75 - 125

Lab Sample ID: 400-211563-1 MSD
Matrix: Water
Analysis Batch: 557035

Client Sample ID: DUP-01
Prep Type: Total Recoverable
Prep Batch: 556828

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	0.0494		mg/L		99	75 - 125	1	20
Arsenic	0.0039		0.0500	0.0521		mg/L		96	75 - 125	3	20
Barium	0.080		0.0500	0.123		mg/L		85	75 - 125	1	20
Beryllium	0.00092	U	0.0500	0.0497		mg/L		99	75 - 125	1	20
Cadmium	0.00065	U	0.0500	0.0505		mg/L		101	75 - 125	0	20
Chromium	0.0012	I	0.0500	0.0497		mg/L		97	75 - 125	0	20
Cobalt	0.00056	U	0.0500	0.0480		mg/L		96	75 - 125	1	20
Lead	0.00081	U	0.0500	0.0497		mg/L		99	75 - 125	0	20
Lithium	0.035		0.0500	0.0835		mg/L		97	75 - 125	6	20
Molybdenum	0.0027	I	0.0500	0.0541		mg/L		103	75 - 125	1	20
Selenium	0.00082	U	0.0500	0.0172	J3	mg/L		34	75 - 125	9	20
Thallium	0.00046	U	0.0100	0.00967		mg/L		97	75 - 125	0	20

Lab Sample ID: 400-211563-1 MSD
Matrix: Water
Analysis Batch: 557578

Client Sample ID: DUP-01
Prep Type: Total Recoverable
Prep Batch: 556828

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	14		0.100	14.8	J3	mg/L		353	75 - 125	3	20
Calcium	530		5.00	553	J3	mg/L		508	75 - 125	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-557062/14-A
Matrix: Water
Analysis Batch: 557202

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 557062

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		11/23/21 10:26	11/23/21 17:23	1

Lab Sample ID: LCS 400-557062/15-A
Matrix: Water
Analysis Batch: 557202

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 557062

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00101	0.00104		mg/L		104	80 - 120		

Lab Sample ID: 400-211485-B-1-B MS
Matrix: Water
Analysis Batch: 557202

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 557062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00015	U	0.00201	0.00194		mg/L		96	80 - 120		

Lab Sample ID: 400-211485-B-1-C MSD
Matrix: Water
Analysis Batch: 557202

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 557062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00201	0.00195		mg/L		97	80 - 120	0	20

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

Lab Sample ID: MB 400-557003/1
Matrix: Water
Analysis Batch: 557003

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			11/22/21 16:13	1

Lab Sample ID: LCS 400-557003/2
Matrix: Water
Analysis Batch: 557003

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	266		mg/L		91	78 - 122		

Lab Sample ID: 400-211563-1 DU
Matrix: Water
Analysis Batch: 557003

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

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	7300			7200		mg/L				1	5

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

Lab Sample ID: MB 400-557447/1
Matrix: Water
Analysis Batch: 557447

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			11/26/21 15:28	1

Lab Sample ID: LCS 400-557447/2
Matrix: Water
Analysis Batch: 557447

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	258		mg/L		88	78 - 122

Lab Sample ID: 400-211703-B-1 DU
Matrix: Water
Analysis Batch: 557447

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	560		596	J3	mg/L		6	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-556847/6
Matrix: Water
Analysis Batch: 556847

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			11/22/21 01:32	1

Lab Sample ID: LCS 400-556847/7
Matrix: Water
Analysis Batch: 556847

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	30.6		mg/L		102	90 - 110

Lab Sample ID: MRL 400-556847/3
Matrix: Water
Analysis Batch: 556847

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	1.50	I	mg/L		75	50 - 150

Lab Sample ID: 400-211282-G-1 MS
Matrix: Water
Analysis Batch: 556847

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	570		200	585	J3	mg/L		6	73 - 120

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-211282-G-1 MSD
Matrix: Water
Analysis Batch: 556847

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	570		200	581	J3	mg/L		4	73 - 120	1	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-556979/3
Matrix: Water
Analysis Batch: 556979

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	U	0.10	0.070	mg/L			11/22/21 13:57	1

Lab Sample ID: LCS 400-556979/6
Matrix: Water
Analysis Batch: 556979

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	5.29		mg/L		106	90 - 110

Lab Sample ID: 240-159991-B-11 MS
Matrix: Water
Analysis Batch: 556979

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	0.96		1.00	2.02		mg/L		106	75 - 125

Lab Sample ID: 240-159991-B-11 MSD
Matrix: Water
Analysis Batch: 556979

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	0.96		1.00	1.98		mg/L		102	75 - 125	2	4

Lab Sample ID: 240-160275-B-7 MS
Matrix: Water
Analysis Batch: 556979

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	0.91		1.00	1.90		mg/L		99	75 - 125

Lab Sample ID: 240-160275-B-7 MSD
Matrix: Water
Analysis Batch: 556979

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	0.91		1.00	1.53	J3	mg/L		62	75 - 125	22	4

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 400-557866/3
Matrix: Water
Analysis Batch: 557866

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	U	0.10	0.070	mg/L			11/30/21 15:08	1

Lab Sample ID: LCS 400-557866/6
Matrix: Water
Analysis Batch: 557866

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	5.23		mg/L		105	90 - 110

Lab Sample ID: 400-211563-3 MS
Matrix: Water
Analysis Batch: 557866

Client Sample ID: FB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.070	U	1.00	0.990		mg/L		99	75 - 125

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-556848/6
Matrix: Water
Analysis Batch: 556848

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			11/22/21 01:45	1

Lab Sample ID: LCS 400-556848/7
Matrix: Water
Analysis Batch: 556848

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	13.7		mg/L		92	90 - 110

Lab Sample ID: MRL 400-556848/3
Matrix: Water
Analysis Batch: 556848

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	4.35	I	mg/L		87	50 - 150

Lab Sample ID: 400-211563-5 MS
Matrix: Water
Analysis Batch: 556848

Client Sample ID: MW-14R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100		50.0	111	J3	mg/L		15	77 - 128

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-211563-5 MSD
Matrix: Water
Analysis Batch: 556848

Client Sample ID: MW-14R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100		50.0	110	J3	mg/L		13	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

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400-211563 COC

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	Carri	COC No: 400-106129-37791.1
Client Contact: Barry Evans	Phone: 850-336-0192	E-Mail: Cheyenne.Whitmire@Eurofinset.com	State	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:			Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days): 24hr Rush			
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No			
Phone: 850-444-6427(Tel)	PO #: 2000393131			
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117			
Project Name: CCR Smith Plant	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Reque

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)	4500_F_C - Fluoride	6020, 7470A	2540C - TDS	SM4500_SO4_E - Sulfate	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:			N	D	N	N	D	N	N		
MW-13R	11/19/21	1423	G	Water		x	x	x	x	x	x	x		
MW-14R		1315		Water										
EB-01		1327		Water										
FB-01		1425		Water										
DUP-01	11/19/21	1323	G	Water		x	x	x	x	x	x	x		

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: 11-19-21 0630pm	Company RDH	Received by:		Date/Time: 11-19-21 0630 PM	Company RDH
Relinquished by:		Date/Time: 11-19-21 1920	Company RDH	Received by:		Date/Time: 11-19-21 1920	Company RDH
Relinquished by:		Date/Time: 11-20-21 0855	Company	Received by:		Date/Time: 11-20-21 855	Company ETA
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:		0.9°C TR8	

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-211563-1

Login Number: 211563
List Number: 1
Creator: Avery, Kathy R

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.	N/A	
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	0.9°C IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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: 400-211563-1

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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	11-30-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	12-31-21

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-211563-2
Client Project/Site: CCR Smith Plant
Sampling Event: 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:
12/27/2021 3:50:28 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 400-211563-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-211563-2

RAD

Method 9315: Radium 226 batch 538648. 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. DUP-01 (400-211563-1), EB-01 (400-211563-2), FB-01 (400-211563-3), MW-13R (400-211563-4), MW-14R (400-211563-5), (LCS 160-538648/1-A), (MB 160-538648/24-A), (160-44028-C-29-A), (160-44028-E-29-A MS) and (160-44028-A-29-A MSD)

Method 9320: Radium 228 batch 542382. The LCS dup recovered at (136%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (61-138) per method requirements. The LCS passes, no further action is required. (LCSD 160-542382/2-A)

Method 9320: Radium 228 batch 542382. The method blank (MB) has activity above the MDC and RL. The following associated samples are either below the reporting limit for the contaminant or exhibit concentrations greater than five (5) times the concentrations observed in the MB), therefore, re-analysis is not required. The data have been reported. (MB 160-542382/9-A)

Method 9320: Radium 228 batch 542382. The detection goal was not met for the following sample(s). The sample was prepped at a reduced volume due to the presence of matrix interferences: MW-14R (400-211563-5). Analytical results are reported with the detection limit achieved.

Method 9320: Radium 228 batch 542382. 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. DUP-01 (400-211563-1), EB-01 (400-211563-2), FB-01 (400-211563-3), MW-13R (400-211563-4), (LCS 160-542382/1-A), (LCSD 160-542382/2-A) and (MB 160-542382/9-A)

Method 9320: Radium 228 batch 542382. The method blank (MB) has activity above the MDC and RL. The following associated sample is not below the reporting limit and is slightly below five (5) times the concentrations observed in the MB. Standard procedure is to re-extract the sample however there is insufficient volume to perform a re-extract. Original results will be reported. MW-14R (400-211563-5)

Method 9320: Radium 228 batch 542382. The Barium carrier recovery is outside the lower control limit (40%) for the following sample: MW-14R (400-211563-5). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method PrecSep_0: Batch 160-538649. The method blank had a hit above the RL. Samples are sent to re-extract. DUP-01 (400-211563-1), EB-01 (400-211563-2), FB-01 (400-211563-3), MW-13R (400-211563-4) and MW-14R (400-211563-5)

Method PrecSep_0: Radium-226 Prep Batch 160-542382. The following samples were prepared at a reduced aliquot due to Matrix: DUP-01 (400-211563-1), EB-01 (400-211563-2), FB-01 (400-211563-3), MW-13R (400-211563-4) and MW-14R (400-211563-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-226 Prep Batch 160-542382. Insufficient sample volume was available to perform a sample duplicate for the following samples: DUP-01 (400-211563-1), EB-01 (400-211563-2), FB-01 (400-211563-3), MW-13R (400-211563-4) and MW-14R (400-211563-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-542382. The barium carrier recovery is outside the lower control limit (40%) for the following sample: MW-14R (400-211563-5). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method Summary

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

Job ID: 400-211563-2

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: 400-211563-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-211563-1	DUP-01	Water	11/19/21 13:23	11/20/21 08:55
400-211563-2	EB-01	Water	11/19/21 13:27	11/20/21 08:55
400-211563-3	FB-01	Water	11/19/21 14:25	11/20/21 08:55
400-211563-4	MW-13R	Water	11/19/21 14:23	11/20/21 08:55
400-211563-5	MW-14R	Water	11/19/21 13:15	11/20/21 08:55

Client Sample ID: DUP-01

Date Collected: 11/19/21 13:23
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-1

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	13.6		0.719	1.42	1.00	0.109	pCi/L	11/26/21 07:25	12/20/21 17:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*11/26/21 07:25*	*12/20/21 17:53*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	17.7		1.08	1.95	1.00	0.509	pCi/L	12/16/21 13:59	12/23/21 09:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:42*	*1*
Y Carrier	*86.4*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:42*	*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	31.3		1.30	2.41	5.00	0.509	pCi/L		12/23/21 16:05	1

Client Sample ID: EB-01
Date Collected: 11/19/21 13:27
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-2
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	0.0117	U	0.0453	0.0453	1.00	0.0891	pCi/L	11/26/21 07:25	12/20/21 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*40 - 110*	*11/26/21 07:25*	*12/20/21 17:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.971**		0.350	0.361	1.00	0.455	pCi/L	12/16/21 13:59	12/23/21 09:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.1*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:42*	*1*
Y Carrier	*86.7*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:42*	*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	**0.983**		0.353	0.364	5.00	0.455	pCi/L		12/23/21 16:05	1

Client Sample ID: FB-01

Date Collected: 11/19/21 14:25
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-3

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	0.0331	U	0.0522	0.0523	1.00	0.0907	pCi/L	11/26/21 07:25	12/20/21 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.3*		*40 - 110*	*11/26/21 07:25*	*12/20/21 17:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.756**		0.339	0.346	1.00	0.479	pCi/L	12/16/21 13:59	12/23/21 09:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:42*	*1*
Y Carrier	*89.7*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:42*	*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	**0.789**		0.343	0.350	5.00	0.479	pCi/L		12/23/21 16:05	1

Client Sample ID: MW-13R

Date Collected: 11/19/21 14:23
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-4

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	14.1		0.717	1.45	1.00	0.120	pCi/L	11/26/21 07:25	12/20/21 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*40 - 110*	*11/26/21 07:25*	*12/20/21 17:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	22.1		1.56	2.56	1.00	0.913	pCi/L	12/16/21 13:59	12/23/21 09:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:42*	*1*
Y Carrier	*87.9*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:42*	*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	36.1		1.72	2.94	5.00	0.913	pCi/L		12/23/21 16:05	1

Client Sample ID: MW-14R

Date Collected: 11/19/21 13:15
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-5

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	1.04		0.269	0.285	1.00	0.249	pCi/L	11/26/21 07:25	12/21/21 13:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*57.2*		*40 - 110*	*11/26/21 07:25*	*12/21/21 13:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.00	G	1.87	1.90	1.00	2.70	pCi/L	12/16/21 13:59	12/23/21 09:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*29.6*	*X*	*40 - 110*	*12/16/21 13:59*	*12/23/21 09:43*	*1*
Y Carrier	*84.1*		*40 - 110*	*12/16/21 13:59*	*12/23/21 09:43*	*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	5.04		1.89	1.92	5.00	2.70	pCi/L		12/23/21 16:05	1

Definitions/Glossary

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

Job ID: 400-211563-2

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.
X	Carrier is outside acceptance limits.

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: 400-211563-2

Client Sample ID: DUP-01
Date Collected: 11/19/21 13:23
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			538648	11/26/21 07:25	BMP	TAL SL
Total/NA	Analysis	9315		1	543038	12/20/21 17:53	MLK	TAL SL
Total/NA	Prep	PrecSep_0			542382	12/16/21 13:59	LPS	TAL SL
Total/NA	Analysis	9320		1	543538	12/23/21 09:42	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	543551	12/23/21 16:05	CAH	TAL SL

Client Sample ID: EB-01
Date Collected: 11/19/21 13:27
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			538648	11/26/21 07:25	BMP	TAL SL
Total/NA	Analysis	9315		1	543038	12/20/21 17:54	MLK	TAL SL
Total/NA	Prep	PrecSep_0			542382	12/16/21 13:59	LPS	TAL SL
Total/NA	Analysis	9320		1	543538	12/23/21 09:42	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	543551	12/23/21 16:05	CAH	TAL SL

Client Sample ID: FB-01
Date Collected: 11/19/21 14:25
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			538648	11/26/21 07:25	BMP	TAL SL
Total/NA	Analysis	9315		1	543038	12/20/21 17:54	MLK	TAL SL
Total/NA	Prep	PrecSep_0			542382	12/16/21 13:59	LPS	TAL SL
Total/NA	Analysis	9320		1	543538	12/23/21 09:42	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	543551	12/23/21 16:05	CAH	TAL SL

Client Sample ID: MW-13R
Date Collected: 11/19/21 14:23
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			538648	11/26/21 07:25	BMP	TAL SL
Total/NA	Analysis	9315		1	543038	12/20/21 17:54	MLK	TAL SL
Total/NA	Prep	PrecSep_0			542382	12/16/21 13:59	LPS	TAL SL
Total/NA	Analysis	9320		1	543538	12/23/21 09:42	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	543551	12/23/21 16:05	CAH	TAL SL

Lab Chronicle

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

Job ID: 400-211563-2

Client Sample ID: MW-14R

Date Collected: 11/19/21 13:15
Date Received: 11/20/21 08:55

Lab Sample ID: 400-211563-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			538648	11/26/21 07:25	BMP	TAL SL
Total/NA	Analysis	9315		1	543110	12/21/21 13:44	FLC	TAL SL
Total/NA	Prep	PrecSep_0			542382	12/16/21 13:59	LPS	TAL SL
Total/NA	Analysis	9320		1	543538	12/23/21 09:43	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	543551	12/23/21 16:05	CAH	TAL SL

Laboratory References:

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

QC Association Summary

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

Job ID: 400-211563-2

Rad

Prep Batch: 538648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	PrecSep-21	
400-211563-2	EB-01	Total/NA	Water	PrecSep-21	
400-211563-3	FB-01	Total/NA	Water	PrecSep-21	
400-211563-4	MW-13R	Total/NA	Water	PrecSep-21	
400-211563-5	MW-14R	Total/NA	Water	PrecSep-21	
MB 160-538648/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-538648/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-44028-A-29-A MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
160-44028-E-29-A MS	Matrix Spike	Total/NA	Water	PrecSep-21	

Prep Batch: 542382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211563-1	DUP-01	Total/NA	Water	PrecSep_0	
400-211563-2	EB-01	Total/NA	Water	PrecSep_0	
400-211563-3	FB-01	Total/NA	Water	PrecSep_0	
400-211563-4	MW-13R	Total/NA	Water	PrecSep_0	
400-211563-5	MW-14R	Total/NA	Water	PrecSep_0	
MB 160-542382/9-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-542382/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-542382/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-538648/24-A
Matrix: Water
Analysis Batch: 543041

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538648

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.05515	U	0.0745	0.0747	1.00	0.125	pCi/L	11/26/21 07:25	12/20/21 17:47	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.3*		*40 - 110*	*11/26/21 07:25*	*12/20/21 17:47*	*1*

Lab Sample ID: LCS 160-538648/1-A
Matrix: Water
Analysis Batch: 543038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538648

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	13.73		1.43	1.00	0.171	pCi/L	91	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.0*		*40 - 110*

Lab Sample ID: 160-44028-A-29-A MSD
Matrix: Water
Analysis Batch: 543038

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 538648

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	0.463		15.1	15.20		1.56	1.00	0.171	pCi/L	98	60 - 140	0.30	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*91.5*		*40 - 110*

Lab Sample ID: 160-44028-E-29-A MS
Matrix: Water
Analysis Batch: 543038

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 538648

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.463		15.1	14.29		1.48	1.00	0.154	pCi/L	91	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*90.8*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-542382/9-A
Matrix: Water
Analysis Batch: 543538

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 542382

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.046		0.448	0.458	1.00	0.629	pCi/L	12/16/21 13:59	12/23/21 09:43	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	73.4		40 - 110	12/16/21 13:59	12/23/21 09:43	1
Y Carrier	84.5		40 - 110	12/16/21 13:59	12/23/21 09:43	1

Lab Sample ID: LCS 160-542382/1-A
Matrix: Water
Analysis Batch: 543540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542382

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			12.0	13.86		1.71	1.00	0.748	pCi/L	115	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	66.9		40 - 110
Y Carrier	87.5		40 - 110

Lab Sample ID: LCSD 160-542382/2-A
Matrix: Water
Analysis Batch: 543540

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 542382

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			12.0	16.35		1.95	1.00	0.762	pCi/L	136	75 - 125	0.68	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	66.7		40 - 110
Y Carrier	87.9		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

400-211563 COC

Client Information	Sampler: Philip Evans	Lab PM: Whitmire, Cheyenne R	Carri	COC No: 400-106129-37791.1
Client Contact: Barry Evans	Phone: 850-336-0192	E-Mail: Cheyenne.Whitmire@Eurofinset.com	State	Page: Page 1 of 1
Company: Gulf Power Company	PWSID:			Job #:
Address: BIN 731 One Energy Place	Due Date Requested:			
City: Pensacola	TAT Requested (days): 24hr Rush			
State, Zip: FL, 32520	Compliance Project: Δ Yes Δ No			
Phone: 850-444-6427(Tel)	PO #: 2000393131			
Email: Barry.Evans@nexteraenergy.com	WO #: 3000004117			
Project Name: CCR Smith Plant	Project #: 40006609			
Site: Florida	SSOW#:			

Analysis Reque

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)	4500_F_C - Fluoride	6020, 7470A	2540C - TDS	SM4500_SO4_E - Sulfate	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	SM4500_Cl_E - Chloride	FieldSampling - Field Sampling Parameters	Total Number of containers	Special Instructions/Note:
			Preservation Code:			N	D	N	N	D	N	N		
MW-13R	11/19/21	1423	G	Water		x	x	x	x	x	x	x		
MW-14R		1315		Water										
EB-01		1327		Water										
FB-01		1425		Water										
DUP-01	11/19/21	1323	G	Water		x	x	x	x	x	x	x		

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: 11-19-21 0630pm	Company RDH	Received by: B. Hagendorfer	Date/Time: 11-19-21 0630 PM	Company RDH	
Relinquished by: B. Hagendorfer		Date/Time: 11-19-21 1920	Company RDH	Received by:	Date/Time: 11-19-21 1920	Company RDH	
Relinquished by:		Date/Time: 11-20-21 0855	Company	Received by: Kathy Raven	Date/Time: 11-20-21 855	Company EDA	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks: 0.9°C IR8			

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Gulf Power Company

Job Number: 400-211563-2

Login Number: 211563
List Number: 1
Creator: Avery, Kathy R

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.	N/A	
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	0.9°C IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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: 400-211563-2

Login Number: 211563
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins TestAmerica, St. Louis
List Creation: 11/23/21 09:39 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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-211563-2

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	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

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

Product Name: Low-Flow System

Date: 2021-02-09 20:04:49

Project Information:	
Operator Name	Brett Surles
Company Name	RDH
Project Name	Smith CCR
Site Name	Smith Plant CCR
Latitude	0° 0' 0"
Longitude	0° 0' 0"
Sonde SN	632615
Turbidity Make/Model	Hach

Pump Information:	
Pump Model/Type	PP
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	30 ft
Pump placement from TOC	21 ft

Well Information:	
Well ID	MW-02
Well diameter	2 in
Well Total Depth	26 ft
Screen Length	10 ft
Depth to Water	4.54 ft

Pumping Information:	
Final Pumping Rate	400 mL/min
Total System Volume	0.2239027 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	15 in
Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	19:42:08	600.02	17.90	5.46	105.06	2.71	5.88	0.23	4.57
Last 5	19:47:08	900.02	18.26	5.46	104.89	2.56	5.90	0.20	-0.68
Last 5	19:52:08	1200.02	18.48	5.46	104.26	2.43	5.90	0.19	-4.61
Last 5	19:57:08	1500.02	18.48	5.48	104.13	2.03	5.90	0.18	-7.98
Last 5	20:02:08	1800.02	18.57	5.48	104.47	1.77	5.91	0.18	-10.43
Variance 0			0.22	0.00	-0.63			-0.01	-3.93
Variance 1			0.00	0.02	-0.13			-0.01	-3.37
Variance 2			0.09	0.00	0.34			-0.00	-2.45

Notes

Sample @0803,rain 48

Grab Samples

Low-Flow
Date: ########
Operator N Brett Surles
Pump Mod PP
Company N RDH
Tubing Typ PE
Project Na Smith CCR
Site Name: Smith Plant CCR
Latitude: 0Â° 0' 0"
Longitude: 0Â° 0' 0"
Tubing Dia .17in
Tubing Len 30 ft
Sonde SN: 632615
Turbidity N Hach
Pump plac 21 ft
Well ID: MW-02
Well diame 2 in
Well Total 26 ft
Screen Len 10 ft
Depth to W 4.54 ft
Final Pump 400 mL/min
Total Syste 0.2239027 L
Calculated 300 sec
Stabilizatio 15 in
Total Volur 12 L

Time	pH	ORP	Conductivi	DO	Temperatı	Turbidity	DTW
300.0928	5.47	9.7	105.9	0.27	17.35	1.95	5.85
600.0242	5.46	4.6	105.1	0.23	17.9	2.71	5.88
900.0219	5.46	-0.7	104.9	0.2	18.26	2.56	5.9
1200.017	5.46	-4.6	104.3	0.19	18.48	2.43	5.9
1500.021	5.48	-8	104.1	0.18	18.48	2.03	5.9
1800.022	5.48	-10.4	104.5	0.18	18.57	1.77	5.91

Product Name: Low-Flow System

Date: 2021-02-09 08:04:34

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	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	417744		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	28.0 ft

Well Information:		Pumping Information:	
Well ID	MW-03	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	33.0 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.44 in
Depth to Water	5.63 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	07:39:23	900.02	18.35	4.83	63.16	4.10	5.75	0.16	81.18
Last 5	07:44:23	1200.02	18.43	4.85	63.19	4.35	5.75	0.14	75.82
Last 5	07:49:23	1500.02	18.47	4.86	63.14	4.56	5.75	0.14	71.18
Last 5	07:54:23	1800.02	18.52	4.86	63.21	4.69	5.75	0.14	67.79
Last 5	07:59:23	2100.02	18.55	4.87	63.40	4.72	5.75	0.13	65.05
Variance 0			0.04	0.01	-0.05			-0.00	-4.64
Variance 1			0.05	0.00	0.07			-0.00	-3.39
Variance 2			0.02	0.01	0.19			-0.01	-2.74

Notes

Sample time @ 0805. Rainy 60. DUP-01@ fake time 0705.

Grab Samples

Low-Flow
Date: ########
Operator N Philip Evans
Pump Mod PP
Company N RDH Environmental
Tubing Typ PE
Project Nai Smith CCR
Site Name: Smith Plant
Latitude: 0Âº 0' 0"
Longitude: 0Âº 0' 0"
Tubing Dia .17in
Tubing Len 40 ft
Sonde SN: 417744
Turbidity N HACH 2100Q
Pump plac 28.0 ft
Well ID: MW-03
Well diame 2 in
Well Total 33.0 ft
Screen Len 10 ft
Depth to W 5.63 ft
Final Pump 400 mL/min
Total Syste 0.2685369 L
Calculated 300 sec
Stabilizatio 1.44 in
Total Volur 14 L

Time	pH	ORP	Conductivi	DO	Temperatı	Turbidity	DTW
300.1162	4.78	96.5	63.6	0.2	18.17	3.68	5.75
600.0193	4.82	88	63.5	0.17	18.26	3.9	5.75
900.018	4.83	81.2	63.2	0.16	18.35	4.1	5.75
1200.018	4.85	75.8	63.2	0.14	18.43	4.35	5.75
1500.016	4.86	71.2	63.1	0.14	18.47	4.56	5.75
1800.02	4.86	67.8	63.2	0.14	18.52	4.69	5.75
2100.019	4.87	65.1	63.4	0.13	18.55	4.72	5.75

Product Name: Low-Flow System

Date: 2021-02-09 22:45:16

Project Information:	
Operator Name	Brett Surles
Company Name	RDH
Project Name	Smith CCR
Site Name	Smith Plant CCR
Latitude	0° 0' 0"
Longitude	0° 0' 0"
Sonde SN	632615
Turbidity Make/Model	Hach

Pump Information:	
Pump Model/Type	PP
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	40 ft
Pump placement from TOC	34 ft

Well Information:	
Well ID	MW-06
Well diameter	2 in
Well Total Depth	39 ft
Screen Length	10 ft
Depth to Water	13.06 ft

Pumping Information:	
Final Pumping Rate	400 mL/min
Total System Volume	0.2685369 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	12 in
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	22:23:28	3001.04	23.93	5.49	9007.28	4.45	14.03	0.36	-124.71
Last 5	22:28:28	3301.03	23.79	5.46	9298.44	3.88	14.03	0.29	-145.76
Last 5	22:33:28	3601.02	23.71	5.43	9387.77	2.37	14.04	0.23	-125.68
Last 5	22:38:28	3901.02	23.75	5.42	9467.78	2.02	14.04	0.21	-124.50
Last 5	22:43:28	4201.02	23.72	5.40	9532.81	1.79	14.04	0.20	-122.97
Variance 0			-0.08	-0.03	89.33			-0.05	20.08
Variance 1			0.04	-0.02	80.01			-0.02	1.19
Variance 2			-0.03	-0.02	65.03			-0.01	1.52

Notes

Sample@1044, rainy 61

Grab Samples

Low-Flow
Date: ########
Operator N Brett Surles
Pump Mod PP
Company N RDH
Tubing Typ PE
Project Na Smith CCR
Site Name: Smith Plant CCR
Latitude: 0Âº 0' 0"
Longitude: 0Âº 0' 0"
Tubing Dia .17in
Tubing Len 40 ft
Sonde SN: 632615
Turbidity N Hach
Pump plac 34 ft
Well ID: MW-06
Well diam 2 in
Well Total 39 ft
Screen Len 10 ft
Depth to W 13.06 ft
Final Pump 400 mL/min
Total Syste 0.2685369 L
Calculated 300 sec
Stabilizatio 12 in
Total Volur 28 L

Time	pH	ORP	Conductivi	DO	Temperatı	Turbidity	DTW
300.0212	6.11	113.5	6976.4	0.25	23.3	15.5	13.8
600.0171	6.11	106.7	6433.9	0.59	23.52	13.2	13.94
900.0191	6.1	70.9	6349.3	0.88	23.57	20.2	13.98
1200.022	6.18	-89	6798.4	0.82	23.69	17.6	14.01
1500.019	5.95	-121.9	7506.8	0.54	23.79	15.5	14.01
1800.021	5.83	-127.3	7636.5	0.55	23.79	10.9	14.02
2100.019	5.67	-126.9	8090.5	0.48	23.81	7.74	14.02
2401.018	5.57	-126.2	8503.9	0.46	23.88	6.07	14.02
2701.02	5.52	-126.2	8836.5	0.4	23.96	5.11	14.03
3001.041	5.49	-124.7	9007.3	0.36	23.93	4.45	14.03
3301.026	5.46	-145.8	9298.4	0.29	23.79	3.88	14.03
3601.018	5.43	-125.7	9387.8	0.23	23.71	2.37	14.04
3901.021	5.42	-124.5	9467.8	0.21	23.75	2.02	14.04
4201.018	5.4	-123	9532.8	0.2	23.72	1.79	14.04

Product Name: Low-Flow System

Date: 2021-02-09 23:46:28

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	40 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	632615		
Turbidity Make/Model	Hach	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	MW-07	Final Pumping Rate	400 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	39 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	13 in
Depth to Water	12.03 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	23:21:56	600.02	22.11	6.59	7018.97	2.07	13.11	0.23	-191.27
Last 5	23:26:56	900.02	22.04	6.34	8036.69	1.63	13.15	0.19	-184.52
Last 5	23:31:56	1200.02	22.09	6.35	8108.22	1.41	13.15	0.17	-186.07
Last 5	23:36:56	1500.02	22.09	6.35	8125.73	1.27	13.15	0.16	-187.31
Last 5	23:41:56	1800.02	21.95	6.35	8123.39	1.09	13.60	0.15	-187.04
Variance 0			0.05	0.00	71.53			-0.02	-1.55
Variance 1			0.00	0.00	17.51			-0.01	-1.23
Variance 2			-0.14	0.00	-2.34			-0.00	0.27

Notes

Sample@1146, Cloudy 64

Grab Samples

Low-Flow
Date: ########
Operator N Brett Surles
Pump Mod PP
Company N RDH
Tubing Typ PE
Project Nai Smith CCR
Site Name: Smith Plant CCR
Latitude: 0Â° 0' 0"
Longitude: 0Â° 0' 0"
Tubing Dia .17in
Tubing Len 40 ft
Sonde SN: 632615
Turbidity N Hach
Pump plac 34 ft
Well ID: MW-07
Well diame 2 in
Well Total 39 ft
Screen Len 10 ft
Depth to W 12.03 ft
Final Pump 400 mL/min
Total Syste 0.2685369 L
Calculated 300 sec
Stabilizatio 13 in
Total Volur 20 L

Time	pH	ORP	Conductivi	DO	Temperatı	Turbidity	DTW
300.02	6.58	-180.5	7013.2	0.46	22.01	2.54	12.95
600.0192	6.59	-191.3	7019	0.23	22.11	2.07	13.11
900.019	6.34	-184.5	8036.7	0.19	22.04	1.63	13.15
1200.022	6.35	-186.1	8108.2	0.17	22.09	1.41	13.15
1500.019	6.35	-187.3	8125.7	0.16	22.09	1.27	13.15
1800.019	6.35	-187	8123.4	0.15	21.95	1.09	13.6

Product Name: Low-Flow System

Date: 2021-02-09 11:49:29

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

Pump Information:	
Pump Model/Type	PP
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	36 ft
Pump placement from TOC	27 ft

Well Information:	
Well ID	MW-12
Well diameter	2 in
Well Total Depth	32 ft
Screen Length	10 ft
Depth to Water	10.14 ft

Pumping Information:	
Final Pumping Rate	400 mL/min
Total System Volume	0.2506832 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	111.48 in
Total Volume Pumped	58 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	11:27:04	7520.02	20.80	5.99	882.39	3.48	19.34	0.12	-41.80
Last 5	11:32:04	7820.02	20.80	5.98	885.22	3.20	19.35	0.12	-43.20
Last 5	11:37:07	8123.02	20.83	5.96	867.50	3.17	19.38	0.13	-44.25
Last 5	11:42:07	8423.02	20.83	5.98	862.73	3.18	19.41	0.12	-45.90
Last 5	11:47:18	8734.02	20.88	5.96	850.72	3.18	19.43	0.12	-46.98
Variance 0			0.03	-0.02	-17.72			0.00	-1.05
Variance 1			0.01	0.02	-4.77			-0.00	-1.65
Variance 2			0.05	-0.02	-12.01			-0.00	-1.08

Notes

Sample time @ 1150. PC 60.

Grab Samples

Low-Flow
Date: ########
Operator N Philip Evans
Pump Mod PP
Company N RDH Environmental
Tubing Typ PE
Project Nai Smith CCR
Site Name: Smith Plant
Latitude: 0Âº 0' 0"
Longitude: 0Âº 0' 0"
Tubing Dia .17in
Tubing Len 36 ft
Sonde SN: 417744
Turbidity N HACH 2100Q
Pump plac 27 ft
Well ID: MW-12
Well diam 2 in
Well Total 32 ft
Screen Len 10 ft
Depth to W 10.14 ft
Final Pump 400 mL/min
Total Syste 0.2506832 L
Calculated 300 sec
Stabilizatio 111.48 in
Total Volur 58 L

Time	pH	ORP	Conductivi	DO	Temperatı	Turbidity	DTW
300.0498	6.29	31.9	1102.9	0.21	19.76	52.5	13.33
600.017	6.28	20.1	1109.1	0.21	20	41.2	14.15
900.0167	6.28	9.8	1083	0.18	20.03	36.6	14.97
1202.018	6.27	1.4	1063.3	0.18	20.21	28.7	15.77
1502.017	6.26	-1.5	1062.6	0.15	20.31	24.1	16.52
1804.115	6.24	-4.2	1034.7	0.14	20.39	22.1	16.85
2104.017	6.23	-8.1	1039.7	0.14	20.44	20	17.28
2407.018	6.2	-10.4	1018.5	0.14	20.5	17.5	17.64
2709.018	6.19	-12.9	1014.3	0.14	20.5	14.9	17.88
3009.018	6.16	-15.7	1000.1	0.14	20.57	11.9	18.05
3310.018	6.15	-17.8	985.9	0.14	20.57	10.6	18.22
3610.019	6.12	-19.9	982.8	0.14	20.7	10.1	18.35
3911.019	6.11	-21.8	972.9	0.13	20.66	9.32	18.51
4211.019	6.1	-23.9	956.1	0.13	20.66	8.04	18.6
4511.019	6.08	-25.7	939.7	0.13	20.74	7.49	18.68
4811.019	6.07	-27.5	952.4	0.13	20.74	6.55	18.75
5111.019	6.06	-29	934.2	0.13	20.75	5.6	18.9
5411.019	6.04	-30.8	922.9	0.13	20.75	5.24	18.97
5711.019	6.04	-32.4	924.9	0.13	20.75	5.05	19.03
6011.018	6.02	-33.9	913.6	0.12	20.75	4.98	19.09
6311.019	6.01	-35.4	900.3	0.13	20.77	4.89	19.11

6617.018	6	-36.9	893.1	0.12	20.77	4.2	19.18
6917.018	5.99	-38.5	890.2	0.12	20.77	3.94	19.24
7217.018	5.99	-40.1	890.7	0.12	20.79	3.84	19.32
7520.018	5.99	-41.8	882.4	0.12	20.8	3.48	19.34
7820.017	5.98	-43.2	885.2	0.12	20.8	3.2	19.35
8123.018	5.96	-44.2	867.5	0.13	20.83	3.17	19.38
8423.018	5.98	-45.9	862.7	0.12	20.83	3.18	19.41
8734.018	5.96	-47	850.7	0.12	20.88	3.18	19.43

Product Name: Low-Flow System

Date: 2021-02-10 02:01:37

Project Information:

Operator Name	Brett Surles
Company Name	RDH
Project Name	Smith CCR
Site Name	Smith Plant CCR
Latitude	0° 0' 0"
Longitude	0° 0' 0"
Sonde SN	632615
Turbidity Make/Model	Hach

Pump Information:

Pump Model/Type	PP
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	30 ft
Pump placement from TOC	20 ft

Well Information:

Well ID	PZ-14
Well diameter	2 in
Well Total Depth	25 ft
Screen Length	10 ft
Depth to Water	2.09 ft

Pumping Information:

Final Pumping Rate	400 mL/min
Total System Volume	0.2239027 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	30 in
Total Volume Pumped	32 L

Low-Flow Sampling Stabilization Summary

Stabilization	Time	Elapsed	Temp C +/- 0.2	pH +/- 0.2	SpCond µS/cm +/- 5%	Turb NTU +/- 10	DTW ft	RDO mg/L +/- 0.2	ORP mV +/- 10
Last 5	01:40:10	3600.02	20.04	6.23	11286.10	2.24	4.63	0.13	-409.10
Last 5	01:45:10	3900.02	20.04	6.24	11262.31	2.07	4.63	0.12	-424.28
Last 5	01:50:10	4200.02	20.04	6.24	11288.55	2.19	4.63	0.12	-437.27
Last 5	01:55:10	4500.02	20.02	6.24	11296.15	1.96	4.62	0.13	-442.79
Last 5	02:00:10	4800.02	19.93	6.24	11315.56	1.90	4.63	0.15	-446.41
Variance 0			0.00	-0.00	26.25			0.00	-12.99
Variance 1			-0.01	0.00	7.60			0.00	-5.52
Variance 2			-0.09	-0.00	19.40			0.02	-3.63

Notes

Sample@1400, FB-01@1330, cloudy 64

Grab Samples

Low-Flow
Date: ########
Operator N Brett Surles
Pump Mod PP
Company N RDH
Tubing Typ PE
Project Nai Smith CCR
Site Name: Smith Plant CCR
Latitude: 0Â° 0' 0"
Longitude: 0Â° 0' 0"
Tubing Dia .17in
Tubing Len 30 ft
Sonde SN: 632615
Turbidity N Hach
Pump plac 20 ft
Well ID: PZ-14
Well diame 2 in
Well Total 25 ft
Screen Len 10 ft
Depth to W 2.09 ft
Final Pump 400 mL/min
Total Syste 0.2239027 L
Calculated 300 sec
Stabilizatio 30 in
Total Volur 32 L

Time	pH	ORP	Conductivi	DO	Temperati	Turbidity	DTW
300.0245	6.25	-157.9	11343.3	0.18	19.19	4.91	4.44
600.0196	6.27	-180.4	11220	0.16	19.51	2.07	4.56
900.0192	6.28	-210.3	11212.8	0.16	19.77	1.94	4.6
1200.019	6.28	-225.2	11205	0.15	19.88	1.91	4.61
1500.019	6.28	-243.4	11215.2	0.14	19.96	1.86	4.61
1800.019	6.27	-268.9	11236.3	0.14	19.95	1.96	4.62
2100.02	6.27	-290.4	11264.2	0.14	20	2.07	4.63
2400.021	6.25	-305.6	11260.1	0.14	19.99	2.11	4.63
2700.021	6.24	-326.7	11242.9	0.13	20.03	2.2	4.63
3000.019	6.23	-356.6	11262.5	0.13	20	2.05	4.63
3300.02	6.23	-384.9	11276.6	0.14	20	2.17	4.63
3600.019	6.23	-409.1	11286.1	0.13	20.04	2.24	4.63
3900.022	6.24	-424.3	11262.3	0.12	20.04	2.07	4.63
4200.023	6.24	-437.3	11288.6	0.12	20.04	2.19	4.63
4500.024	6.24	-442.8	11296.2	0.13	20.02	1.96	4.62
4800.021	6.24	-446.4	11315.6	0.15	19.93	1.9	4.63

Product Name: Low-Flow System

Date: 2021-02-09 13:55:25

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

Pump Information:	
Pump Model/Type	PP
Tubing Type	PE
Tubing Diameter	.17 in
Tubing Length	20 ft
Pump placement from TOC	10.5 ft

Well Information:	
Well ID	MWI-12A
Well diameter	2 in
Well Total Depth	15.5 ft
Screen Length	10 ft
Depth to Water	6.64 ft

Pumping Information:	
Final Pumping Rate	400 mL/min
Total System Volume	0.1792685 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	23.52 in
Total Volume Pumped	24 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	13:32:13	2402.01	16.47	6.27	884.20	1.21	8.60	1.65	-1.82
Last 5	13:37:14	2703.02	16.37	6.26	916.61	1.10	8.60	1.45	-1.20
Last 5	13:42:17	3006.01	16.46	6.24	927.04	1.05	8.60	1.25	-2.82
Last 5	13:47:17	3306.02	16.59	6.26	913.61	1.02	8.60	1.21	-2.48
Last 5	13:52:17	3606.02	16.52	6.29	902.67	0.98	8.60	1.14	-3.07
Variance 0			0.09	-0.02	10.44			-0.20	-1.62
Variance 1			0.13	0.02	-13.43			-0.04	0.34
Variance 2			-0.07	0.03	-10.95			-0.07	-0.59

Notes

Sample time @ 1355. PC 60. EB-01@ 1245.

Grab Samples

Low-Flow
Date: ########
Operator N Philip Evans
Pump Mod PP
Company N RDH Environmental
Tubing Typ PE
Project Nai Smith CCR
Site Name: Smith Plant
Latitude: 0Â° 0' 0"
Longitude: 0Â° 0' 0"
Tubing Dia .17in
Tubing Len 20 ft
Sonde SN: 417744
Turbidity N HACH 2100Q
Pump plac 10.5 ft
Well ID: MWI-12A
Well diame 2 in
Well Total 15.5 ft
Screen Len 10 ft
Depth to W 6.64 ft
Final Pump 400 mL/min
Total Syste 0.1792685 L
Calculated 300 sec
Stabilizatio 23.52 in
Total Volur 24 L

Time	pH	ORP	Conductivi	DO	Temperatı	Turbidity	DTW
300.0771	6.36	24	902.4	1.49	16.51	15	8.55
600.0188	6.2	18.3	1018.3	1.46	16.51	8.99	8.57
900.0161	6.09	9.9	1076.9	1.32	16.58	6.48	8.58
1201.015	6.03	7.3	1090.7	1.23	16.77	4.57	8.58
1501.015	6.16	2	948.8	1.53	16.74	3.15	8.6
1801.019	6.23	-0.5	887.5	1.89	16.65	2.09	8.6
2102.016	6.26	-1.9	876.5	1.89	16.67	1.56	8.6
2402.015	6.27	-1.8	884.2	1.65	16.47	1.21	8.6
2703.015	6.26	-1.2	916.6	1.45	16.37	1.1	8.6
3006.015	6.24	-2.8	927	1.25	16.46	1.05	8.6
3306.015	6.26	-2.5	913.6	1.21	16.59	1.02	8.6
3606.019	6.29	-3.1	902.7	1.14	16.52	0.98	8.6

Low-Flow Test Report:

Test Date / Time: 9/16/2021 10:58:58 AM
Project: Smith CCR
Operator Name: Philip Evans

Location Name: Smith MW-12 **Well Diameter: 2 in** **Screen Length: 10 ft** **Top of Screen: 22 ft** **Total Depth: 32 ft** **Initial Depth to Water: 8.82 ft**	**Pump Type: PP** **Tubing Type: PE** **Pump Intake From TOC: 27 ft** **Estimated Total Volume Pumped: 52000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 7.34 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 817728**

Test Notes:
Sample time @ 1315. Cloudy 78.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.2	
9/16/2021 10:58 AM	00:00	6.23 pH	24.71 °C	1,117.6 µS/cm	1.12 mg/L	11.60 NTU	97.2 mV	9.68 ft	400.00 ml/min
9/16/2021 11:03 AM	05:00	5.79 pH	23.83 °C	1,073.1 µS/cm	0.20 mg/L	9.05 NTU	48.9 mV	11.18 ft	400.00 ml/min
9/16/2021 11:08 AM	10:00	5.86 pH	23.83 °C	1,058.2 µS/cm	0.14 mg/L	8.64 NTU	29.4 mV	12.57 ft	400.00 ml/min
9/16/2021 11:13 AM	15:00	5.92 pH	23.88 °C	1,047.8 µS/cm	0.15 mg/L	7.02 NTU	17.4 mV	12.88 ft	400.00 ml/min
9/16/2021 11:18 AM	20:00	5.95 pH	23.91 °C	1,036.8 µS/cm	0.12 mg/L	6.26 NTU	11.5 mV	13.35 ft	400.00 ml/min
9/16/2021 11:23 AM	25:00	5.97 pH	23.86 °C	1,025.4 µS/cm	0.12 mg/L	5.46 NTU	9.2 mV	13.82 ft	400.00 ml/min
9/16/2021 11:28 AM	30:00	5.99 pH	23.79 °C	1,010.0 µS/cm	0.11 mg/L	5.28 NTU	5.8 mV	14.04 ft	400.00 ml/min
9/16/2021 11:33 AM	35:00	5.99 pH	23.78 °C	1,002.6 µS/cm	0.10 mg/L	5.11 NTU	2.5 mV	14.28 ft	400.00 ml/min
9/16/2021 11:38 AM	40:00	6.00 pH	23.74 °C	995.43 µS/cm	0.10 mg/L	4.90 NTU	-1.4 mV	14.47 ft	400.00 ml/min
9/16/2021 11:43 AM	45:00	6.00 pH	23.74 °C	986.89 µS/cm	0.10 mg/L	4.70 NTU	-4.7 mV	14.60 ft	400.00 ml/min
9/16/2021 11:48 AM	50:00	6.00 pH	23.74 °C	975.95 µS/cm	0.09 mg/L	4.64 NTU	-6.7 mV	14.84 ft	400.00 ml/min
9/16/2021 11:53 AM	55:00	6.00 pH	23.73 °C	961.57 µS/cm	0.09 mg/L	4.62 NTU	-8.5 mV	14.98 ft	400.00 ml/min
9/16/2021 11:58 AM	01:00:00	5.99 pH	23.70 °C	950.46 µS/cm	0.09 mg/L	4.50 NTU	-9.0 mV	15.05 ft	400.00 ml/min
9/16/2021 12:03 PM	01:05:00	5.98 pH	23.70 °C	946.62 µS/cm	0.09 mg/L	4.28 NTU	-9.4 mV	15.18 ft	400.00 ml/min
9/16/2021 12:08 PM	01:10:00	5.98 pH	23.71 °C	926.70 µS/cm	0.09 mg/L	3.98 NTU	-9.7 mV	15.28 ft	400.00 ml/min

9/16/2021 12:13 PM	01:15:00	5.96 pH	23.74 °C	918.48 µS/cm	0.09 mg/L	3.83 NTU	-9.3 mV	15.40 ft	400.00 ml/min
9/16/2021 12:18 PM	01:20:00	5.95 pH	23.79 °C	916.67 µS/cm	0.09 mg/L	3.64 NTU	-9.1 mV	15.47 ft	400.00 ml/min
9/16/2021 12:23 PM	01:25:00	5.95 pH	23.83 °C	903.62 µS/cm	0.09 mg/L	3.45 NTU	-8.8 mV	15.56 ft	400.00 ml/min
9/16/2021 12:28 PM	01:30:00	5.94 pH	23.90 °C	890.91 µS/cm	0.09 mg/L	3.28 NTU	-8.3 mV	15.64 ft	400.00 ml/min
9/16/2021 12:33 PM	01:35:00	5.93 pH	23.89 °C	883.51 µS/cm	0.09 mg/L	3.16 NTU	-7.7 mV	15.70 ft	400.00 ml/min
9/16/2021 12:38 PM	01:40:00	5.93 pH	23.87 °C	876.38 µS/cm	0.09 mg/L	2.80 NTU	-7.3 mV	15.78 ft	400.00 ml/min
9/16/2021 12:43 PM	01:45:00	5.92 pH	23.84 °C	869.02 µS/cm	0.09 mg/L	2.58 NTU	-7.1 mV	15.84 ft	400.00 ml/min
9/16/2021 12:48 PM	01:50:00	5.91 pH	23.87 °C	866.04 µS/cm	0.09 mg/L	2.30 NTU	-6.8 mV	15.92 ft	400.00 ml/min
9/16/2021 12:53 PM	01:55:00	5.91 pH	23.89 °C	856.95 µS/cm	0.08 mg/L	1.96 NTU	-6.7 mV	15.96 ft	400.00 ml/min
9/16/2021 12:58 PM	02:00:00	5.90 pH	23.96 °C	852.42 µS/cm	0.09 mg/L	1.89 NTU	-6.3 mV	16.02 ft	400.00 ml/min
9/16/2021 1:03 PM	02:05:00	5.90 pH	23.97 °C	841.75 µS/cm	0.09 mg/L	1.86 NTU	-6.5 mV	16.10 ft	400.00 ml/min
9/16/2021 1:08 PM	02:10:00	5.90 pH	23.95 °C	842.99 µS/cm	0.09 mg/L	1.83 NTU	-6.7 mV	16.16 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-12	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/16/2021 1:48:08 PM
Project: Smith plant CCR
Operator Name: Philip Evans

Location Name: Smith MW-02 **Well Diameter: 2 in** **Screen Length: 10 ft** **Top of Screen: 16 ft** **Total Depth: 26 ft** **Initial Depth to Water: 3.82 ft**	**Pump Type: PP** **Tubing Type: PE** **Pump Intake From TOC: 21 ft** **Estimated Total Volume Pumped: 10000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 1.98 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 817728**

Test Notes:
Sample time @ 1420. DUP-01 @ fake time 1320. Pc 80.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.2	
9/16/2021 1:48 PM	00:00	8.07 pH	25.98 °C	97.41 µS/cm	0.60 mg/L	1.10 NTU	111.9 mV	5.75 ft	400.00 ml/min
9/16/2021 1:53 PM	05:00	5.51 pH	24.96 °C	67.21 µS/cm	0.12 mg/L	0.95 NTU	80.4 mV	5.78 ft	400.00 ml/min
9/16/2021 1:58 PM	10:00	5.44 pH	24.88 °C	74.65 µS/cm	0.09 mg/L	0.90 NTU	77.3 mV	5.78 ft	400.00 ml/min
9/16/2021 2:03 PM	15:00	5.45 pH	24.80 °C	77.99 µS/cm	0.07 mg/L	0.87 NTU	75.5 mV	5.80 ft	400.00 ml/min
9/16/2021 2:08 PM	20:00	5.46 pH	24.88 °C	80.10 µS/cm	0.07 mg/L	0.85 NTU	74.0 mV	5.80 ft	400.00 ml/min
9/16/2021 2:13 PM	25:00	5.47 pH	24.81 °C	78.93 µS/cm	0.06 mg/L	0.82 NTU	72.7 mV	5.80 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-02	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/16/2021 1:48:54 PM
Project: Smith CCR
Operator Name: Trevor braddock

Location Name: MW-03 **Latitude: 30.271451893391** **Longitude: -85.6854126602411** **Well Diameter: 2 in** **Casing Type: Pvc** **Screen Length: 10 ft** **Top of Screen: 23 ft** **Total Depth: 33 ft** **Initial Depth to Water: 4.94 ft**	**Pump Type: Pp** **Tubing Type: Pe** **Pump Intake From TOC: 28 ft** **Estimated Total Volume Pumped: 21286.666 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 736137**

Test Notes:
SAMPLE time 1445

Weather Conditions:
Sunny 77

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.2	+/- 0.2	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.2	
9/16/2021 1:48 PM	00:00	5.12 pH	24.53 °C	62.91 µS/cm	0.09 mg/L	5.11 NTU	51.7 mV	4.94 ft	400.00 ml/min
9/16/2021 1:53 PM	05:00	4.99 pH	22.90 °C	64.25 µS/cm	0.08 mg/L	4.67 NTU	56.1 mV	4.94 ft	400.00 ml/min
9/16/2021 1:58 PM	10:00	4.97 pH	22.95 °C	64.06 µS/cm	0.07 mg/L	10.30 NTU	46.5 mV	4.94 ft	400.00 ml/min
9/16/2021 2:03 PM	15:00	5.00 pH	22.81 °C	64.58 µS/cm	0.06 mg/L	9.54 NTU	41.8 mV	4.94 ft	400.00 ml/min
9/16/2021 2:08 PM	20:00	4.99 pH	22.89 °C	64.45 µS/cm	0.06 mg/L	10.40 NTU	43.3 mV	4.94 ft	400.00 ml/min
9/16/2021 2:13 PM	25:00	4.97 pH	22.94 °C	64.17 µS/cm	0.07 mg/L	8.40 NTU	38.7 mV	4.94 ft	400.00 ml/min
9/16/2021 2:18 PM	30:00	5.00 pH	22.78 °C	64.39 µS/cm	0.05 mg/L	7.16 NTU	35.8 mV	4.94 ft	400.00 ml/min
9/16/2021 2:23 PM	35:02	4.99 pH	22.82 °C	64.25 µS/cm	0.05 mg/L	6.41 NTU	34.0 mV	4.94 ft	400.00 ml/min
9/16/2021 2:28 PM	40:02	4.99 pH	22.78 °C	64.52 µS/cm	0.06 mg/L	6.27 NTU	33.3 mV	4.94 ft	400.00 ml/min
9/16/2021 2:33 PM	45:02	4.99 pH	22.63 °C	64.69 µS/cm	0.06 mg/L	5.28 NTU	32.4 mV	4.94 ft	400.00 ml/min
9/16/2021 2:37 PM	48:13	4.98 pH	22.62 °C	64.73 µS/cm	0.06 mg/L	5.12 NTU	30.6 mV	4.94 ft	400.00 ml/min
9/16/2021 2:42 PM	53:13	4.98 pH	22.73 °C	64.77 µS/cm	0.05 mg/L	4.74 NTU	32.0 mV	4.94 ft	400.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/17/2021 7:48:58 AM
Project: Smith plant CCR
Operator Name: Philip Evans

Location Name: Smith Plant MW-06 **Well Diameter: 2 in** **Screen Length: 10 ft** **Top of Screen: 29 ft** **Total Depth: 39 ft** **Initial Depth to Water: 14.64 ft**	**Pump Type: PP** **Tubing Type: PE** **Pump Intake From TOC: 34 ft** **Estimated Total Volume Pumped: 20000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 3.71 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 817728**

Test Notes:
Sample time @ 0845. Cloudy 78. FB-01 @ 0850.

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	+/- 0.2	
9/17/2021 7:48 AM	00:00	5.01 pH	24.28 °C	7,194.9 µS/cm	0.43 mg/L	2.37 NTU	172.3 mV	15.30 ft	400.00 ml/min
9/17/2021 7:53 AM	05:00	5.35 pH	23.93 °C	7,258.6 µS/cm	0.26 mg/L	1.80 NTU	120.0 mV	16.18 ft	400.00 ml/min
9/17/2021 7:58 AM	10:00	5.41 pH	23.92 °C	7,275.3 µS/cm	0.19 mg/L	1.26 NTU	91.3 mV	16.90 ft	400.00 ml/min
9/17/2021 8:03 AM	15:00	5.35 pH	23.95 °C	7,425.0 µS/cm	0.16 mg/L	1.15 NTU	74.3 mV	17.42 ft	400.00 ml/min
9/17/2021 8:08 AM	20:00	5.25 pH	23.99 °C	7,754.3 µS/cm	0.15 mg/L	1.17 NTU	63.0 mV	17.68 ft	400.00 ml/min
9/17/2021 8:13 AM	25:00	5.20 pH	24.01 °C	7,907.6 µS/cm	0.14 mg/L	1.18 NTU	50.2 mV	17.94 ft	400.00 ml/min
9/17/2021 8:18 AM	30:00	5.20 pH	24.00 °C	7,993.7 µS/cm	0.13 mg/L	1.25 NTU	39.5 mV	18.07 ft	400.00 ml/min
9/17/2021 8:23 AM	35:00	5.21 pH	24.04 °C	8,080.7 µS/cm	0.14 mg/L	1.27 NTU	31.1 mV	18.24 ft	400.00 ml/min
9/17/2021 8:28 AM	40:00	5.18 pH	24.06 °C	8,193.9 µS/cm	0.14 mg/L	1.30 NTU	25.2 mV	18.28 ft	400.00 ml/min
9/17/2021 8:33 AM	45:00	5.18 pH	24.05 °C	8,220.2 µS/cm	0.14 mg/L	1.28 NTU	20.7 mV	18.32 ft	400.00 ml/min
9/17/2021 8:38 AM	50:00	5.17 pH	24.06 °C	8,310.2 µS/cm	0.14 mg/L	1.31 NTU	17.1 mV	18.35 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-06	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/17/2021 7:58:19 AM
Project: Smith CCR (2)
Operator Name: Trevor braddock

Location Name: MW-7 **Latitude: 30.2700981902919** **Longitude: -85.6902493536472** **Well Diameter: 2 in** **Casing Type: Pvc** **Screen Length: 10 ft** **Top of Screen: 29 ft** **Total Depth: 39 ft** **Initial Depth to Water: 11.25 ft**	**Pump Type: Pp** **Tubing Type: Pe** **Pump Intake From TOC: 34 ft** **Estimated Total Volume Pumped: 24206.666 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 1.26 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 736137**

Test Notes:
SAMPLE time 0900

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	+/- 0.2	
9/17/2021 7:58 AM	00:00	6.31 pH	24.72 °C	7,915.8 µS/cm	0.48 mg/L	32.00 NTU	-71.9 mV	12.51 ft	400.00 ml/min
9/17/2021 8:03 AM	05:00	6.39 pH	23.86 °C	8,906.5 µS/cm	0.11 mg/L	25.30 NTU	-102.0 mV	12.51 ft	400.00 ml/min
9/17/2021 8:08 AM	10:31	6.49 pH	24.01 °C	8,847.3 µS/cm	0.09 mg/L	33.90 NTU	-119.0 mV	12.51 ft	400.00 ml/min
9/17/2021 8:13 AM	15:31	6.34 pH	23.88 °C	8,733.3 µS/cm	0.18 mg/L	26.40 NTU	-116.8 mV	12.51 ft	400.00 ml/min
9/17/2021 8:18 AM	20:31	6.55 pH	23.92 °C	8,808.1 µS/cm	0.08 mg/L	16.80 NTU	-128.1 mV	12.51 ft	400.00 ml/min
9/17/2021 8:23 AM	25:31	6.56 pH	23.98 °C	8,811.9 µS/cm	0.08 mg/L	9.62 NTU	-136.2 mV	12.51 ft	400.00 ml/min
9/17/2021 8:28 AM	30:31	6.57 pH	23.96 °C	8,848.8 µS/cm	0.07 mg/L	6.15 NTU	-141.4 mV	12.51 ft	400.00 ml/min
9/17/2021 8:33 AM	35:31	6.58 pH	23.97 °C	8,831.7 µS/cm	0.07 mg/L	4.63 NTU	-145.5 mV	12.51 ft	400.00 ml/min
9/17/2021 8:38 AM	40:31	6.59 pH	23.95 °C	8,862.4 µS/cm	0.07 mg/L	3.40 NTU	-147.9 mV	12.51 ft	400.00 ml/min
9/17/2021 8:43 AM	45:31	6.60 pH	23.97 °C	8,820.7 µS/cm	0.07 mg/L	2.94 NTU	-151.1 mV	12.51 ft	400.00 ml/min
9/17/2021 8:48 AM	50:31	6.60 pH	24.18 °C	8,876.9 µS/cm	0.06 mg/L	4.03 NTU	-153.0 mV	12.51 ft	400.00 ml/min
9/17/2021 8:53 AM	55:31	6.60 pH	24.28 °C	8,856.2 µS/cm	0.06 mg/L	2.40 NTU	-155.9 mV	12.51 ft	400.00 ml/min
9/17/2021 8:58 AM	01:00:31	6.60 pH	24.20 °C	8,884.7 µS/cm	0.06 mg/L	1.94 NTU	-157.2 mV	12.51 ft	400.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/17/2021 10:17:49 AM
Project: Smith CCR (3)
Operator Name: Trevor braddock

Location Name: MWI-12A **Latitude: 30.2640663836164** **Longitude: -85.6878377124667** **Well Diameter: 2 in** **Casing Type: Pvc** **Screen Length: 10 ft** **Top of Screen: 5.5 ft** **Total Depth: 15.5 ft** **Initial Depth to Water: 6.6 ft**	**Pump Type: Pp** **Tubing Type: Pe** **Pump Intake From TOC: 10.5 ft** **Estimated Total Volume Pumped: 10000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.6 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 736137**

Test Notes:
SAMPLE time 1045

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	+/- 0.2	
9/17/2021 10:17 AM	00:00	7.46 pH	25.61 °C	723.26 µS/cm	1.93 mg/L	23.00 NTU	-10.3 mV	6.60 ft	400.00 ml/min
9/17/2021 10:22 AM	05:00	6.87 pH	24.82 °C	720.65 µS/cm	0.49 mg/L	21.00 NTU	-38.2 mV	6.82 ft	400.00 ml/min
9/17/2021 10:27 AM	10:00	6.81 pH	24.97 °C	689.23 µS/cm	0.36 mg/L	16.30 NTU	-39.5 mV	6.91 ft	400.00 ml/min
9/17/2021 10:32 AM	15:00	6.75 pH	25.02 °C	657.18 µS/cm	0.43 mg/L	4.29 NTU	-67.4 mV	7.20 ft	400.00 ml/min
9/17/2021 10:37 AM	20:00	6.74 pH	25.05 °C	661.53 µS/cm	0.44 mg/L	3.92 NTU	-70.9 mV	7.20 ft	400.00 ml/min
9/17/2021 10:42 AM	25:00	6.73 pH	25.11 °C	664.02 µS/cm	0.52 mg/L	1.92 NTU	-70.8 mV	7.20 ft	400.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/17/2021 9:29:57 AM
Project: Smith plant CCR
Operator Name: Philip Evans

Location Name: Smith plant PZ-14 **Well Diameter: 2 in** **Screen Length: 10 ft** **Top of Screen: 15 ft** **Total Depth: 25 ft** **Initial Depth to Water: 1.7 ft**	**Pump Type: PP** **Tubing Type: PP** **Pump Intake From TOC: 20 ft** **Estimated Total Volume Pumped: 22000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 3.65 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 817728**

Test Notes:
Sample time @ 1030. Cloudy 78. DUP-02@ fake time 0930. EB-01@ 0925.

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	+/- 0.2	
9/17/2021 9:29 AM	00:00	5.72 pH	25.68 °C	7,668.8 µS/cm	1.59 mg/L	4.81 NTU	69.4 mV	3.48 ft	400.00 ml/min
9/17/2021 9:34 AM	05:00	5.96 pH	24.78 °C	7,736.2 µS/cm	0.26 mg/L	4.24 NTU	27.8 mV	4.05 ft	400.00 ml/min
9/17/2021 9:39 AM	10:00	6.07 pH	24.49 °C	8,434.3 µS/cm	0.11 mg/L	3.65 NTU	-0.2 mV	4.45 ft	400.00 ml/min
9/17/2021 9:44 AM	15:00	6.13 pH	24.34 °C	8,656.0 µS/cm	0.10 mg/L	2.77 NTU	-75.9 mV	4.72 ft	400.00 ml/min
9/17/2021 9:49 AM	20:00	6.19 pH	24.32 °C	8,773.5 µS/cm	0.09 mg/L	2.57 NTU	-171.7 mV	4.84 ft	400.00 ml/min
9/17/2021 9:54 AM	25:00	6.30 pH	24.29 °C	8,734.9 µS/cm	0.09 mg/L	2.25 NTU	-214.3 mV	4.91 ft	400.00 ml/min
9/17/2021 9:59 AM	30:00	6.39 pH	24.28 °C	8,833.9 µS/cm	0.08 mg/L	2.20 NTU	-238.7 mV	5.05 ft	400.00 ml/min
9/17/2021 10:04 AM	35:00	6.47 pH	24.27 °C	8,835.3 µS/cm	0.08 mg/L	2.16 NTU	-252.2 mV	5.14 ft	400.00 ml/min
9/17/2021 10:09 AM	40:00	6.53 pH	24.26 °C	8,935.2 µS/cm	0.07 mg/L	1.95 NTU	-259.1 mV	5.20 ft	400.00 ml/min
9/17/2021 10:14 AM	45:00	6.56 pH	24.25 °C	8,974.1 µS/cm	0.07 mg/L	1.89 NTU	-264.1 mV	5.24 ft	400.00 ml/min
9/17/2021 10:19 AM	50:00	6.57 pH	24.28 °C	8,900.5 µS/cm	0.07 mg/L	1.85 NTU	-268.1 mV	5.28 ft	400.00 ml/min
9/17/2021 10:24 AM	55:00	6.57 pH	24.28 °C	8,932.6 µS/cm	0.07 mg/L	1.84 NTU	-273.0 mV	5.35 ft	400.00 ml/min

Samples

Sample ID:	Description:

PZ-14	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 11/19/2021 1:31:47 PM
Project: Smith Plant CCR
Operator Name: Philip Evans

Location Name: Smith Plant MW-13R **Well Diameter: 2 in** **Screen Length: 10 ft** **Top of Screen: 22.2 ft** **Total Depth: 32.2 ft** **Initial Depth to Water: 6.62 ft**	**Pump Type: PP** **Tubing Type: PE** **Pump Intake From TOC: 27.2 ft** **Estimated Total Volume Pumped: 20000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 4.63 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 817728**

Test Notes:
Sample time @ 1423. Sunny 65. DUP-01@ fake time 1323. EB-01@ 1327. FB-01@ 1425.

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	+/- 0.2	
11/19/2021 1:31 PM	00:00	7.73 pH	23.06 °C	11,813 µS/cm	0.29 mg/L	5.79 NTU	-262.8 mV	6.62 ft	400.00 ml/min
11/19/2021 1:36 PM	05:00	7.51 pH	23.43 °C	11,593 µS/cm	0.13 mg/L	4.12 NTU	-301.1 mV	8.08 ft	400.00 ml/min
11/19/2021 1:41 PM	10:00	7.40 pH	23.43 °C	11,760 µS/cm	0.11 mg/L	3.68 NTU	-306.9 mV	10.15 ft	400.00 ml/min
11/19/2021 1:46 PM	15:00	7.24 pH	23.52 °C	11,829 µS/cm	0.10 mg/L	3.26 NTU	-313.9 mV	10.96 ft	400.00 ml/min
11/19/2021 1:51 PM	20:00	6.78 pH	23.47 °C	11,903 µS/cm	0.10 mg/L	2.98 NTU	-315.7 mV	11.05 ft	400.00 ml/min
11/19/2021 1:56 PM	25:00	6.35 pH	23.54 °C	12,024 µS/cm	0.11 mg/L	2.22 NTU	-315.3 mV	11.07 ft	400.00 ml/min
11/19/2021 2:01 PM	30:00	6.20 pH	23.53 °C	12,132 µS/cm	0.11 mg/L	2.08 NTU	-315.7 mV	11.10 ft	400.00 ml/min
11/19/2021 2:06 PM	35:00	6.14 pH	23.53 °C	12,182 µS/cm	0.11 mg/L	1.90 NTU	-315.5 mV	11.15 ft	400.00 ml/min
11/19/2021 2:11 PM	40:00	6.11 pH	23.52 °C	12,198 µS/cm	0.11 mg/L	1.89 NTU	-315.8 mV	11.17 ft	400.00 ml/min
11/19/2021 2:16 PM	45:00	6.08 pH	23.52 °C	12,229 µS/cm	0.11 mg/L	1.88 NTU	-316.0 mV	11.21 ft	400.00 ml/min
11/19/2021 2:21 PM	50:00	6.09 pH	23.56 °C	12,165 µS/cm	0.10 mg/L	1.89 NTU	-316.8 mV	11.25 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-13R	Sample time @ 1423. Sunny 65. DUP-01@ fake time 1323. EB-01@ 1327. FB-01@ 1425.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 11/19/2021 8:26:34 AM
Project: Smith Plant CCR
Operator Name: Philip Evans

Location Name: Smith Plant MW-14R **Well Diameter: 2 in** **Screen Length: 10 ft** **Top of Screen: 15.35 ft** **Total Depth: 25.35 ft** **Initial Depth to Water: 6.63 ft**	**Pump Type: PP** **Tubing Type: PE** **Pump Intake From TOC: 20.35 ft** **Estimated Total Volume Pumped: 112000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 1.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 817728**

Test Notes:
Sample time @ 1315. Sunny 60.

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	+/- 0.2	
11/19/2021 8:26 AM	00:00	6.77 pH	16.73 °C	980.54 µS/cm	2.01 mg/L	26.30 NTU	142.6 mV	7.20 ft	400.00 ml/min
11/19/2021 8:31 AM	05:00	6.93 pH	21.37 °C	1,033.7 µS/cm	0.27 mg/L	25.50 NTU	111.1 mV	7.32 ft	400.00 ml/min
11/19/2021 8:36 AM	10:00	6.95 pH	21.55 °C	1,103.6 µS/cm	0.19 mg/L	18.60 NTU	93.4 mV	7.36 ft	400.00 ml/min
11/19/2021 8:41 AM	15:00	6.95 pH	21.73 °C	1,149.2 µS/cm	0.17 mg/L	14.30 NTU	76.6 mV	7.45 ft	400.00 ml/min
11/19/2021 8:46 AM	20:00	6.96 pH	21.56 °C	1,154.5 µS/cm	0.15 mg/L	13.00 NTU	60.4 mV	7.48 ft	400.00 ml/min
11/19/2021 8:51 AM	25:00	6.95 pH	21.74 °C	1,202.6 µS/cm	0.14 mg/L	12.20 NTU	46.4 mV	7.50 ft	400.00 ml/min
11/19/2021 8:56 AM	30:00	6.96 pH	21.81 °C	1,186.4 µS/cm	0.13 mg/L	12.60 NTU	28.5 mV	7.52 ft	400.00 ml/min
11/19/2021 9:01 AM	35:00	6.95 pH	21.72 °C	1,230.0 µS/cm	0.13 mg/L	12.40 NTU	4.3 mV	7.54 ft	400.00 ml/min
11/19/2021 9:06 AM	40:00	6.94 pH	21.85 °C	1,259.7 µS/cm	0.12 mg/L	12.10 NTU	-21.6 mV	7.55 ft	400.00 ml/min
11/19/2021 9:11 AM	45:00	6.94 pH	21.90 °C	1,276.7 µS/cm	0.12 mg/L	11.80 NTU	-44.6 mV	7.58 ft	400.00 ml/min
11/19/2021 9:16 AM	50:00	6.95 pH	22.00 °C	1,279.4 µS/cm	0.11 mg/L	11.50 NTU	-56.9 mV	7.60 ft	400.00 ml/min
11/19/2021 9:21 AM	55:00	6.96 pH	22.05 °C	1,321.2 µS/cm	0.10 mg/L	11.40 NTU	-63.8 mV	7.62 ft	400.00 ml/min
11/19/2021 9:26 AM	01:00:00	6.96 pH	22.31 °C	1,322.0 µS/cm	0.09 mg/L	11.10 NTU	-86.5 mV	7.64 ft	400.00 ml/min
11/19/2021 9:31 AM	01:05:00	6.99 pH	22.40 °C	1,321.5 µS/cm	0.09 mg/L	11.00 NTU	-143.0 mV	7.64 ft	400.00 ml/min
11/19/2021 9:36 AM	01:10:00	7.00 pH	22.53 °C	1,336.8 µS/cm	0.08 mg/L	11.00 NTU	-199.0 mV	7.65 ft	400.00 ml/min

11/19/2021 9:41 AM	01:15:00	7.03 pH	22.55 °C	1,361.4 µS/cm	0.08 mg/L	10.40 NTU	-237.6 mV	7.65 ft	400.00 ml/min
11/19/2021 9:46 AM	01:20:00	7.06 pH	22.51 °C	1,380.6 µS/cm	0.08 mg/L	10.50 NTU	-261.9 mV	7.65 ft	400.00 ml/min
11/19/2021 9:51 AM	01:25:00	7.09 pH	22.55 °C	1,395.9 µS/cm	0.07 mg/L	10.20 NTU	-276.9 mV	7.65 ft	400.00 ml/min
11/19/2021 9:56 AM	01:30:00	7.16 pH	22.57 °C	1,382.3 µS/cm	0.07 mg/L	10.10 NTU	-286.7 mV	7.65 ft	400.00 ml/min
11/19/2021 10:01 AM	01:35:00	7.23 pH	22.62 °C	1,399.3 µS/cm	0.07 mg/L	9.96 NTU	-293.6 mV	7.65 ft	400.00 ml/min
11/19/2021 10:06 AM	01:40:00	7.29 pH	22.53 °C	1,426.2 µS/cm	0.07 mg/L	9.81 NTU	-298.5 mV	7.65 ft	400.00 ml/min
11/19/2021 10:11 AM	01:45:00	7.35 pH	22.53 °C	1,453.7 µS/cm	0.07 mg/L	9.44 NTU	-302.3 mV	7.65 ft	400.00 ml/min
11/19/2021 10:16 AM	01:50:00	7.40 pH	22.62 °C	1,454.0 µS/cm	0.07 mg/L	9.20 NTU	-305.6 mV	7.65 ft	400.00 ml/min
11/19/2021 10:21 AM	01:55:00	7.45 pH	22.62 °C	1,435.2 µS/cm	0.07 mg/L	8.85 NTU	-308.5 mV	7.65 ft	400.00 ml/min
11/19/2021 10:26 AM	02:00:00	7.48 pH	22.62 °C	1,460.1 µS/cm	0.07 mg/L	8.79 NTU	-310.5 mV	7.65 ft	400.00 ml/min
11/19/2021 10:31 AM	02:05:00	7.50 pH	22.72 °C	1,485.5 µS/cm	0.07 mg/L	8.36 NTU	-312.5 mV	7.65 ft	400.00 ml/min
11/19/2021 10:36 AM	02:10:00	7.53 pH	22.66 °C	1,468.0 µS/cm	0.06 mg/L	8.28 NTU	-314.2 mV	7.65 ft	400.00 ml/min
11/19/2021 10:41 AM	02:15:00	7.53 pH	22.80 °C	1,511.6 µS/cm	0.07 mg/L	8.20 NTU	-316.0 mV	7.65 ft	400.00 ml/min
11/19/2021 10:46 AM	02:20:00	7.54 pH	22.73 °C	1,487.2 µS/cm	0.06 mg/L	8.11 NTU	-317.3 mV	7.65 ft	400.00 ml/min
11/19/2021 10:51 AM	02:25:00	7.55 pH	22.79 °C	1,488.8 µS/cm	0.06 mg/L	8.02 NTU	-319.3 mV	7.65 ft	400.00 ml/min
11/19/2021 10:56 AM	02:30:00	7.55 pH	22.80 °C	1,505.2 µS/cm	0.06 mg/L	7.94 NTU	-320.7 mV	7.65 ft	400.00 ml/min
11/19/2021 11:01 AM	02:35:00	7.56 pH	22.80 °C	1,512.5 µS/cm	0.06 mg/L	7.89 NTU	-321.8 mV	7.65 ft	400.00 ml/min
11/19/2021 11:06 AM	02:40:00	7.55 pH	22.86 °C	1,524.8 µS/cm	0.06 mg/L	7.87 NTU	-322.7 mV	7.65 ft	400.00 ml/min
11/19/2021 11:11 AM	02:45:00	7.56 pH	22.93 °C	1,515.3 µS/cm	0.06 mg/L	7.84 NTU	-324.6 mV	7.65 ft	400.00 ml/min
11/19/2021 11:16 AM	02:50:00	7.57 pH	22.89 °C	1,472.4 µS/cm	0.06 mg/L	7.75 NTU	-325.7 mV	7.65 ft	400.00 ml/min
11/19/2021 11:21 AM	02:55:00	7.54 pH	22.93 °C	1,525.2 µS/cm	0.06 mg/L	7.66 NTU	-326.7 mV	7.65 ft	400.00 ml/min
11/19/2021 11:26 AM	03:00:00	7.53 pH	23.02 °C	1,552.9 µS/cm	0.06 mg/L	7.61 NTU	-328.3 mV	7.65 ft	400.00 ml/min
11/19/2021 11:31 AM	03:05:00	7.54 pH	22.99 °C	1,546.4 µS/cm	0.06 mg/L	7.54 NTU	-330.4 mV	7.65 ft	400.00 ml/min
11/19/2021 11:36 AM	03:10:00	7.53 pH	23.03 °C	1,545.9 µS/cm	0.06 mg/L	7.38 NTU	-330.8 mV	7.65 ft	400.00 ml/min
11/19/2021 11:41 AM	03:15:00	7.51 pH	23.11 °C	1,554.2 µS/cm	0.06 mg/L	7.35 NTU	-332.2 mV	7.65 ft	400.00 ml/min
11/19/2021 11:46 AM	03:20:00	7.50 pH	23.11 °C	1,542.4 µS/cm	0.06 mg/L	7.22 NTU	-333.0 mV	7.65 ft	400.00 ml/min
11/19/2021 11:51 AM	03:25:00	7.49 pH	23.15 °C	1,591.6 µS/cm	0.05 mg/L	6.89 NTU	-334.5 mV	7.65 ft	400.00 ml/min
11/19/2021 11:56 AM	03:30:00	7.49 pH	23.15 °C	1,567.7 µS/cm	0.05 mg/L	6.74 NTU	-336.5 mV	7.65 ft	400.00 ml/min
11/19/2021 12:01 PM	03:35:00	7.49 pH	23.14 °C	1,557.8 µS/cm	0.05 mg/L	6.60 NTU	-338.3 mV	7.65 ft	400.00 ml/min

11/19/2021 12:06 PM	03:40:00	7.47 pH	23.15 °C	1,577.0 µS/cm	0.05 mg/L	6.52 NTU	-338.9 mV	7.65 ft	400.00 ml/min
11/19/2021 12:11 PM	03:45:00	7.46 pH	23.16 °C	1,578.5 µS/cm	0.05 mg/L	6.38 NTU	-340.1 mV	7.65 ft	400.00 ml/min
11/19/2021 12:16 PM	03:50:00	7.45 pH	23.17 °C	1,599.1 µS/cm	0.05 mg/L	6.26 NTU	-340.8 mV	7.65 ft	400.00 ml/min
11/19/2021 12:21 PM	03:55:00	7.44 pH	23.20 °C	1,609.0 µS/cm	0.05 mg/L	6.14 NTU	-342.0 mV	7.65 ft	400.00 ml/min
11/19/2021 12:26 PM	04:00:00	7.44 pH	23.18 °C	1,599.2 µS/cm	0.05 mg/L	6.05 NTU	-343.2 mV	7.65 ft	400.00 ml/min
11/19/2021 12:31 PM	04:05:00	7.44 pH	23.20 °C	1,593.2 µS/cm	0.05 mg/L	5.95 NTU	-344.5 mV	7.65 ft	400.00 ml/min
11/19/2021 12:36 PM	04:10:00	7.42 pH	23.21 °C	1,612.4 µS/cm	0.05 mg/L	5.92 NTU	-345.1 mV	7.65 ft	400.00 ml/min
11/19/2021 12:41 PM	04:15:00	7.41 pH	23.20 °C	1,613.3 µS/cm	0.05 mg/L	5.90 NTU	-345.8 mV	7.65 ft	400.00 ml/min
11/19/2021 12:46 PM	04:20:00	7.41 pH	23.21 °C	1,626.4 µS/cm	0.05 mg/L	5.85 NTU	-346.9 mV	7.65 ft	400.00 ml/min
11/19/2021 12:51 PM	04:25:00	7.40 pH	23.20 °C	1,631.1 µS/cm	0.05 mg/L	5.82 NTU	-347.7 mV	7.65 ft	400.00 ml/min
11/19/2021 12:56 PM	04:30:00	7.40 pH	23.29 °C	1,628.5 µS/cm	0.05 mg/L	5.81 NTU	-348.3 mV	7.65 ft	400.00 ml/min
11/19/2021 1:01 PM	04:35:00	7.40 pH	23.25 °C	1,599.9 µS/cm	0.05 mg/L	5.81 NTU	-349.5 mV	7.65 ft	400.00 ml/min
11/19/2021 1:06 PM	04:40:00	7.39 pH	23.26 °C	1,640.7 µS/cm	0.05 mg/L	5.80 NTU	-350.1 mV	7.65 ft	400.00 ml/min

Samples

Sample ID:	Description:
MW-14R	Sample time @ 1315. Sunny 60.

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Memorandum

Date:	29 September 2021
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Eurofins TestAmerica Job IDs 400-199329-1, 400-199330-1 and 400-199331-1**

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of seven aqueous samples, one field duplicate, one field blank and one equipment blank, collected 9 February 2021, 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
400-199329-1	MW-06
400-199329-2	MW-07
400-199330-1	MW-2
400-199330-2	MW-3
400-199330-3	DUP-01

Laboratory ID	Client ID
400-199330-4	MW-12
400-199331-1	MWI-12A
400-199331-2	PZ-14
400-199331-3	EB-01
400-199331-4	FB-01

The chain of custody (COC) indicates the samples were received at 1.7 degrees Celsius (°C) and 2.4°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 recovery of thallium in the contract required detection limit verification standard (CRI) was high and outside of the laboratory specified acceptance criteria. Since thallium 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 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 520600). 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 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-01, was collected with the sample set. Metals were not detected in the equipment blank above the MDLs, with the following exception.

Boron was detected in EB-01 at an estimated concentration greater than the MDL and less than the reporting limit (RL). Therefore, the estimated boron concentration in the associated sample was U qualified as not detected at the RL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
MW-2	Boron	0.024	I	0.05	U	3

mg/L-milligrams per liter
I-laboratory flag indicating an estimated concentration greater than the MDL and less than the RL
* 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

1.7 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

One field duplicate was collected with the sample set, DUP-01. Acceptable precision [relative precent difference (RPD)≤ 30%] was demonstrated between the field duplicate and the original sample, MW-3, with the following exceptions.

Arsenic was not detected in MW-3 and was detected at an estimated concentration greater than the MDL and less than the RL in DUP-01, resulting in a noncalculable RPD. Therefore, the non-detect result of arsenic in MW-3 was UJ qualified as estimated less than the MDL and the arsenic concentration in DUP-01 was J qualified as estimated.

The RPD of lithium was greater than 30%; therefore, the lithium concentrations in field duplicate pair MW-3/DUP-01 were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
MW-3	Arsenic	0.00039	U	NC	0.00039	UJ	7
DUP-01	Arsenic	0.00074	I		0.00074	J	7
MW-3	Lithium	0.0082	NA	38	0.0082	J	7
DUP-01	Lithium	0.012	NA		0.012	J	7

mg/L-milligrams per liter
I-laboratory flag indicating an estimated concentration greater than the MDL and less than the RL
U-laboratory flag indicating not detected at or above the MDL
NA-not applicable
NC-not calculable
* 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

1.9 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 520494). 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

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-3.

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 520511), chloride (batch 521272), sulfate (batch 521271) and fluoride (batch 522162) 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 sulfate and chloride using samples MW-3. The recovery and RPD results were within the laboratory specified acceptance criteria.

One batch MS/MSD pair was 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

Two 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

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-3.

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.

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* * * * *

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

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Memorandum

Date:	29 September 2021
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Eurofins TestAmerica Job IDs 400-199329-2, 400-199330-2 and 400-199331-2**

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of seven aqueous samples, one field duplicate, one field blank and one equipment blank, collected 9 February 2021, 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 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
400-199329-1	MW-06
400-199329-2	MW-07
400-199330-1	MW-2
400-199330-2	MW-3
400-199330-3	DUP-01

Laboratory ID	Client ID
400-199330-4	MW-12
400-199331-1	MWI-12A
400-199331-2	PZ-14
400-199331-3	EB-01
400-199331-4	FB-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 radium-226 and radium-228 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 499724) and radium-228 (batch 499735). 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). One LCS was reported for radium-226 and one LCS was reported for 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

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 collected with the sample set, DUP-01. Acceptable precision (RER ≤ 3) was demonstrated between the field duplicates and the original samples, MW-3.

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

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Memorandum

Date: 5 January 2022

To: Lane Dorman

From: Kristoffer Henderson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverables – Eurofins TestAmerica Job IDs 400-208540-1, 400-208546-1, 400-208550-1 and 400-211563-1

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of nine aqueous samples, three field duplicates, two field blanks and two equipment blanks, collected 17 September 2021 and 19 November 2021, 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, November 2020 (EPA 542-R-20-006).

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

Laboratory ID	Client ID
400-208540-1	MW-06
400-208540-2	MW-07
400-208540-3	FB-01
400-208546-1	MW-02
400-208546-2	MW-03
400-208546-3	MW-12
400-208546-4	DUP-01
400-208550-1	MWI-12A

Laboratory ID	Client ID
400-208550-2	PZ-14
400-208550-3	EB-01
400-208550-4	DUP-02
400-211563-1	DUP-01
400-211563-2	EB-01
400-211563-3	FB-01
400-211563-4	MW-13R
400-211563-5	MW-14R

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

Incorrect error corrections were observed on the COCs, 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

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

400-208540-1: The laboratory noted the recoveries of molybdenum and lithium in a bracketing continuing calibration verification (CCV) in batch 548621 were high and outside of the method specified acceptance criteria. Since molybdenum and lithium were not detected in the associated samples, no qualifications were applied to the data.

400-208540-1: The laboratory noted the recovery of boron in the contract required detection limit verification standard (CRDL) was low and outside of the SOP specified acceptance criteria. Since the boron concentration in the associated sample was greater than 10 times the CRDL concentration and based on professional and technical judgment, no qualifications were applied to the data.

400-208546-1: The laboratory noted the recovery of beryllium in a bracketing CCV in batch 549080 was high and outside of the method specified acceptance criteria. Since beryllium 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 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). Three method blanks were reported (batches 548090, 548503 and 556828). Metals were not detected in the method blanks above the method detection limits (MDLs), with the following exceptions.

400-208546-1 and 400-208550-1: Chromium and barium were detected in the method blank in batch 548503 at estimated concentrations greater than the MDLs and less than the practical quantitation limits (PQLs). Based on the barium concentrations in the associated samples and

professional and technical judgment, no qualifications were applied to the barium data. However, based on professional and technical judgment the chromium concentration in sample MW-12 was J+ qualified as estimated with high bias.

400-211563-1: Boron was detected in the method blank in batch 556828 at an estimated concentration greater than the MDL and less than the PQL. Therefore, the estimated boron concentrations in the associated samples 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-12	Chromium	0.0032	V	0.0032	J+	3
EB-01 400-211563-1	Boron	0.021	I V	0.05	U	3
FB-01 400-211563-1	Boron	0.0083	I V	0.05	U	3

mg/L-milligrams per liter
I-laboratory flag indicating estimated concentration greater than the MDL and less than the PQL
V-laboratory flag indicating analyte was detected in both the method blank and sample
* 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). Two sample set specific MS/MSD pairs were reported using samples MW-06 and DUP-01 (400-211563-1). The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

400-208540-1: One or both the recoveries of barium, lithium, and selenium in the MS/MSD pair using sample MW-06 were low and outside of the laboratory specified acceptance criteria. Also, the RPDs of lithium and molybdenum were high and outside of the laboratory specified acceptance criteria. Since molybdenum was not detected in sample MW-06, no qualifications were applied to the molybdenum data. However, the non-detect selenium result in sample MW-06 was UJ qualified as estimated less than the MDL and the barium and lithium concentrations in sample MW-06 were J- qualified as estimated with low biases.

400-208540-1: Since the calcium and boron concentrations in sample MW-06 were greater than four times the spiked concentrations, no qualifications were applied to the calcium and boron data based on the MS/MSD pair recovery results.

400-211563-1: The recoveries of selenium in the MS/MSD pair using sample DUP-01 (400-211563-1) were low and outside of the laboratory specified acceptance criteria. Therefore, the non-

detect selenium result in sample DUP-01 (400-211563-1) was UJ qualified as estimated less than the MDL.

400-211563-1: Since the calcium and boron concentrations in sample DUP-01 (400-211563-1) were greater than four times the spiked concentration, no qualifications were applied to the calcium and boron data based on the MS/MSD pair recovery results.

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.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-06	Selenium	0.00082	U	0.00082	UJ	4
MW-06	Barium	0.071	NA	0.071	J-	4
MW-06	Lithium	0.012	NA	0.012	J-	4
DUP-01 400-211563-1	Selenium	0.00082	U	0.00082	UJ	4

mg/L-milligrams per liter
U-not detected at or above the MDL
NA-not applicable

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). Three LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

Two equipment blanks, both identified as EB-01, was collected with the sample set. Metals were not detected in the equipment blanks above the MDLs, with the following exceptions.

400-211563-1: Boron was detected in EB-01 (400-211563-1) at an estimated concentration greater than the MDL and less than the PQL. Since the boron concentration in EB-01 (400-211563-1) was U qualified as not detected due to method blank contamination and based on professional and technical judgment, no qualifications were applied to the data.

1.7 Field Blank

Two field blanks, both identified as FB-01, was collected with the sample set. Metals were not detected in the field blanks above the MDLs, with the following exceptions.

Boron was detected in FB-01 (400-208540-1) at an estimated concentration greater than the MDL and less than the PQL. Therefore, the estimated boron concentrations in the associated samples were U qualified as not detected at the PQL.

Arsenic and boron were detected in FB-01 (400-211563-1) at estimated concentrations greater than the MDLs and less than the PQLs. Since the boron concentration in EB-01 (400-211563-1) was U qualified as not detected due to method blank contamination and based on professional and technical judgment, no qualifications were applied to the data. However, based on professional and technical judgment, the arsenic concentrations in MW-13R and DUP-01 were J+ qualified as estimated with high biases.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-02	Boron	0.045	I	0.05	U	3
DUP-01 400-208540-1	Boron	0.032	I	0.05	U	3
MW-13R	Arsenic	0.0043	NA	0.0043	J+	3
DUP-01 400-211563-1	Arsenic	0.0039	NA	0.0039	J+	3

mg/L-milligrams per liter
I-laboratory flag indicating estimated concentration greater than the MDL and less than the PQL
NA-not applicable

1.8 Field Duplicate

Three field duplicates were collected with the sample set, DUP-01 (400-208546-1), DUP-02 and DUP-01 (400-211563-1). Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicates and the original samples, MW-02, PZ-14 and MW-13R, respectively, with the following exceptions.

400-208546-1: Arsenic was detected in MW-02 at a concentration greater than the PQL and was not detected in DUP-01 (400-208546-1), resulting in a noncalculable RPD. Therefore, based on professional and technical judgment, the arsenic concentration in MW-02 was J qualified as estimated and the non-detect arsenic result in DUP-01 (400-208546-1) was UJ qualified as estimated less than the MDL.

400-208546-1: Lithium was not detected in MW-02 and was detected in DUP-01 (400-208546-1) at an estimated concentration greater than the MDL and less than the PQL, resulting in a noncalculable RPD. Therefore, based on professional and technical judgment, the non-detect lithium result in MW-02 was UJ qualified as estimated less than the MDL and the lithium concentration in DUP-01 (400-208546-1) was J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-02	Arsenic	0.0014	NA	NC	0.0014	J	7
DUP-01 400-208546-1	Arsenic	0.00039	U		0.00039	UJ	7
MW-02	Lithium	0.0019	U	NC	0.0019	UJ	7
DUP-01 400-208546-1	Lithium	0.0020	I		0.002	J	7

mg/L-milligrams per liter
I-laboratory flag indicating an estimated concentration greater than the MDL and less than the PQL
U-laboratory flag indicating not detected at or above 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 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). Two method blanks were reported (batches 547998 and 557062). Mercury was not detected in the method blanks 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). Two 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.

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). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

2.6 Equipment Blank

Two equipment blanks, both identified as EB-01, were collected with the sample set. Mercury was not detected in the equipment blanks above the MDL.

2.7 Field Blank

Two field blanks, both identified as FB-01, was collected with the sample set. Mercury was not detected in the field blanks above the MDL.

2.8 Field Duplicate

Three field duplicates were collected with the sample set, DUP-01 (400-208546-1), DUP-02 and DUP-01 (400-211563-1). Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicates and the original samples, MW-02, PZ-14 and MW-13R, 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 548254, 548417, 557003 and 557447), chloride (batches 549075 and 556847), sulfate (batches 549078 and 556848) and fluoride (batches 548769, 556979 and 557866) The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

Sample set specific MS/MSD pairs were reported for sulfate using samples MW-02, MW-03 and MW-14R. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

400-211563-1: The recoveries of sulfate in the MS/MSD pair using sample MW-14R were less than 35% and outside of the laboratory specified acceptance criteria. Therefore, the sulfate concentration in sample MW-14R was J- qualified as estimated with low bias.

Sample set specific MS/MSD pairs were reported for chloride using sample MW-02. The recovery and RPD results were within the laboratory specified acceptance criteria.

One sample set specific MS was reported for fluoride using sample FB-01. The recovery result was within the laboratory specified acceptance criteria.

Batch MS/MSD pairs were reported for chloride and 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.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-14R	Sulfate	100	NA	100	J-	4

mg/L-milligrams per liter
NA-not applicable

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

Two sample set specific laboratory duplicates were reported for TDS using samples DUP-02 and DUP-01 (400-211563-1). The RPD results were within the laboratory specified acceptance criteria.

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

Two equipment blanks, both identified as EB-01, were collected with the sample set. The wet chemistry parameters were not detected in the equipment blanks above the MDLs, with the following exception.

Chloride (3.6 mg/L) was detected in EB-01 (400-211563-1) at a concentration greater than the PQL. Since the chloride concentrations in the associated samples were greater than ten times the equipment blank concentration, no qualifications were applied to the data.

3.8 Field Blank

Two field blanks, both identified as FB-01, were collected with the sample set. The wet chemistry parameters were not detected in the field blanks above the MDLs, with the following exception.

TDS (32 mg/L) was detected in FB-01 (400-208540-1) at a concentration greater than the PQL. Therefore, the TDS concentrations in samples MW-02, MW-03 and DUP-01 were J+ qualified as estimated with high biases.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-02	TDS	50	NA	50	J+	3
MW-03	TDS	76	NA	76	J+	3
DUP-01 400-208546-1	TDS	100	NA	100	J+	3

mg/L-milligrams per liter

NA-not applicable

3.9 Field Duplicate

Three field duplicates were collected with the sample set, DUP-01 (400-208546-1), DUP-02 and DUP-01 (400-211563-1). Acceptable precision (RPD≤ 30%) was demonstrated between the field duplicates and the original samples, MW-02, PZ-14 and MW-13R, respectively, with the following exceptions.

400-208546-1: The RPD of TDS in field duplicate pair MW-02/DUP-01 (400-208546-1) was greater than 30%; therefore, the TDS concentrations in field duplicate pair MW-02/DUP-01 (400-208546-1) were J qualified as estimated.

400-208550-1: The RPD of sulfate in field duplicate pair PZ-14/DUP-02 was greater than 30%; therefore, the sulfate concentrations in field duplicate pair PZ-14/DUP-02 were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-02	TDS	50	NA	67	50	J	7
DUP-01 400-208546-1	TDS	100	NA		100	J	7
PZ-14	Sulfate	1100	NA	191	1100	J	7
DUP-02	Sulfate	26	NA		26	J	7

mg/L-milligrams per liter
NA-not applicable

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.

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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

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Memorandum

Date:	5 January 2022
To:	Lane Dorman
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Eurofins TestAmerica Job IDs 400-208540-2, 400-208546-2, 400-208550-2 and 400-211563-2**

SITE: CCR Plant Smith

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of nine aqueous samples, three field duplicates, two field blanks and two equipment blanks, collected 17 September 2021 and 19 November 2021, 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
400-208540-1	MW-06
400-208540-2	MW-07
400-208540-3	FB-01
400-208546-1	MW-02
400-208546-2	MW-03
400-208546-3	MW-12
400-208546-4	DUP-01
400-208550-1	MWI-12A

Laboratory ID	Client ID
400-208550-2	PZ-14
400-208550-3	EB-01
400-208550-4	DUP-02
400-211563-1	DUP-01
400-211563-2	EB-01
400-211563-3	FB-01
400-211563-4	MW-13R
400-211563-5	MW-14R

No preservation issues were noted by the laboratory.

Incorrect error corrections were observed on the chain of custodies (COCs), instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.

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 radium-226 and radium-228 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 529150 and 538648) and radium-228 (batches 534195 and 542382). The radiochemistry parameters were not detected in the method blanks above the minimum detectable concentrations (MDCs), with the following exceptions.

400-2085540-2, 400-208546-2 and 400-208550-2: Radium-228 (0.9073) was detected in the method blank in batch 534195 at a concentration greater than the MDC. Therefore, the radium-228 concentrations in samples MW-02 and M2-12 were J+ qualified as estimated with high biases and the radium-228 concentration in MWI-12A was U qualified as not detected at the reported concentration. In addition, the combined radium concentrations in samples MW-02, M2-12 and MWI-12A were J+ qualified as estimated with high biases.

400-211563-2: Radium-228 (1.046) was detected in the method blank in batch 534195 at a concentration greater than the MDC. Therefore, the radium-228 concentration in sample MW-14R was J+ qualified as estimated with a high bias and the radium-228 concentrations in EB-01 and FB-01 were U qualified as not detected at the reported concentrations. Also, the combined radium concentration in sample MW-14R was J+ qualified as estimated with a high bias and the combined radium concentrations in EB-01 and FB-01 were U qualified as not detected at the reported concentrations.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	Reason Code**
MW-02	Radium-228	1.08	NA	1.08	J+	3
MW-02	Combined Radium 226 + 228	2.57	NA	2.57	J+	3
MW-12	Radium-228	1.09	NA	1.09	J+	3

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	Reason Code**
MW-12	Combined Radium 226 + 228	2.61	NA	2.61	J+	3
MWI-12A	Radium-228	0.649	NA	0.649	U	3
MWI-12A	Combined Radium 226 + 228	1.56	NA	1.56	J+	3
EB-01	Radium-228	0.971	NA	0.971	U	3
EB-01	Combined Radium 226 + 228	0.983	NA	0.983	U	3
FB-01	Radium-228	0.756	NA	0.756	U	3
FB-01	Combined Radium 226 + 228	0.789	NA	0.789	U	3
MW-14R	Radium-228	4.00	G	4.00	J+	3
MW-14R	Combined Radium 226 + 228	5.04	NA	5.04	J+	3

pCi/L-picocuries per liter
G-laboratory flag indicating sample MDC was greater than the requested reporting limit (RL)
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

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

Two batch MS/MSD pairs were reported for radium-226. 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 for radium-226 and two LCS/LCS duplicate (LCSD) pairs were reported for radium-228. The recovery and replicate error ratio (RER) results were within the laboratory specified acceptance criteria, with the following exception.

400-211563-2: The LCSD recovery of radium-228 in the LCS/LCSD pair in batch 542382 was high and outside the laboratory specified acceptance criteria. Therefore, the radium-228 and combined radium concentrations in MW-13R and MW-14R were J+ qualified as estimated with high biases.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
MW-13R	Radium-228	22.1	NA	22.1	J+	5
MW-13R	Combined Radium 226 + 228	36.1	NA	36.1	J+	5
MW-14R	Radium-228	4.00	G	4.00	J+	5
MW-14R	Combined Radium 226 + 228	5.04	NA	5.04	J+	5

pCi/L-picocuries per liter
G-laboratory flag indicating sample MDC was greater than the requested reporting limit (RL)
NA-not applicable

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

Two equipment blanks, both identified as EB-01, were collected with the sample set. The radiochemistry parameters were not detected in the equipment blanks above the MDCs, with the following exception.

400-211563-2: Radium-228 was detected in EB-01 at a concentration greater than the MDC. Since the radium-228 concentration in EB-01 was U qualified as not detected due to method blank contamination and based on professional and technical judgment, no additional qualifications were applied to the data.

1.9 Field Blank

Two field blanks, both identified as FB-01, were collected with the sample set. The radiochemistry parameters were not detected in the field blanks above the MDCs, with the following exception.

400-211563-2: Radium-228 was detected in FB-01 at a concentration greater than the MDC. Since the radium-228 concentration in FB-01 was U qualified as not detected due to method blank contamination and based on professional and technical judgment, no additional qualifications were applied to the data.

1.10 Field Duplicate

Three field duplicates were collected with the sample set, DUP-01 (400-208546-1), DUP-02 and DUP-01 (400-211563-1). Acceptable precision (RER $\leq$ 3) was demonstrated between the field duplicates and the original samples, MW-02, PZ-14 and MW-13R, 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 – February 2021
Semi-Annual Monitoring

February 2021

GROUNDWATER STATISTICAL ANALYSIS

FOR GULF POWER'S

PLANT SMITH

Prepared by:

Groundwater Stats Consulting LLC

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GROUNDWATER STATS CONSULTING

May 20, 2021

Geosyntec Consultants
Attn: Mr. Benjamin K. Amos, Ph.D., P.E.
1255 Roberts Boulevard, Suite 200
Kennesaw, GA 30144

Re: Plant Smith – February 2021 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 February 2021 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 Kristina Rayner, Groundwater Statistician and Founder of Groundwater Stats Consulting.

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

- **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 list of Appendix IV downgradient well/constituent pairs with 100% non-detects 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 were 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 non-detects, 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% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

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, but only pH was eligible for intrawell testing. 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.

Based on the above screening, intrawell methods were recommended for pH, and interwell methods were 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 – February 2021 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 February 2021 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 February 2021 for boron, calcium, chloride, fluoride, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. Background (upgradient) well data for constituents using interwell statistical limits were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No new values were flagged and a summary of any flagged outliers follows this report.

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, no exceedances were identified. 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.

Trend Tests

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 the 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 calcium and 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 – February 2021 Sample Event

For Appendix IV parameters, data from upgradient wells are reassessed for outliers during each analysis prior to constructing statistical limits. No new values were flagged during this analysis and a complete list of flagged outliers follows this report.

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 February 2021 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. During this analysis, the reporting limit for lithium increased from <0.005 mg/L to <0.025 mg/L; however, this change resulted only in a slight change to the background limit and was still well below the CCR rule-specified level.

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 downgradient well/constituent pairs with 100% non-detects 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 5/19/2021, 2:22 PM

	MW-12 Total Dissolved Solids (mg/L)
6/27/2016	4200 (o)

100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/19/2021 2:49 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Antimony (mg/L)
MW-6, MW-7

Cadmium (mg/L)
MW-6, MW-7

Cobalt (mg/L)
MW-6

Lead (mg/L)
MW-6, MW-7

Mercury (mg/L)
MW-6, MW-7

Thallium (mg/L)
MW-6, MW-7

Appendix III Interwell Prediction Limits - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:29 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-6**	**0.33**	**n/a**	**2/9/2021**	**7.5**	**Yes**	**54**	**n/a**	**n/a**	**46.3**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**2/9/2021**	**3**	**Yes**	**54**	**n/a**	**n/a**	**46.3**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**2/9/2021**	**230**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**2/9/2021**	**250**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**2/9/2021**	**2500**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**2/9/2021**	**2000**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**MW-6**	**9.2**	**n/a**	**2/9/2021**	**360**	**Yes**	**54**	**n/a**	**n/a**	**59.26**	**n/a**	**n/a**	**0.000661**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**9.2**	**n/a**	**2/9/2021**	**420**	**Yes**	**54**	**n/a**	**n/a**	**59.26**	**n/a**	**n/a**	**0.000661**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**580**	**n/a**	**2/9/2021**	**5300**	**Yes**	**53**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006833**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**580**	**n/a**	**2/9/2021**	**4200**	**Yes**	**53**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006833**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:29 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-6**	**0.33**	**n/a**	**2/9/2021**	**7.5**	**Yes**	**54**	**n/a**	**n/a**	**46.3**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**2/9/2021**	**3**	**Yes**	**54**	**n/a**	**n/a**	**46.3**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**2/9/2021**	**230**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**2/9/2021**	**250**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**2/9/2021**	**2500**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**2/9/2021**	**2000**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	MW-6	0.1741	n/a	2/9/2021	0.04	No	54	0.2662	0.09397	20.37	Kaplan-Meier	sqrt(x)	0.003756	Param Inter 1 of 2
Fluoride (mg/L)	MW-7	0.1741	n/a	2/9/2021	0.1ND	No	54	0.2662	0.09397	20.37	Kaplan-Meier	sqrt(x)	0.003756	Param Inter 1 of 2
Sulfate (mg/L)	**MW-6**	**9.2**	**n/a**	**2/9/2021**	**360**	**Yes**	**54**	**n/a**	**n/a**	**59.26**	**n/a**	**n/a**	**0.000661**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**9.2**	**n/a**	**2/9/2021**	**420**	**Yes**	**54**	**n/a**	**n/a**	**59.26**	**n/a**	**n/a**	**0.000661**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**580**	**n/a**	**2/9/2021**	**5300**	**Yes**	**53**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006833**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**580**	**n/a**	**2/9/2021**	**4200**	**Yes**	**53**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006833**	**NP Inter (normality) 1 of 2**

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

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:34 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-12	6.214	5.888	2/9/2021	5.96	No	12	6.051	0.08339	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-2	7.353	5.354	2/9/2021	5.48	No	12	6.353	0.512	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-3	5.193	4.724	2/9/2021	4.87	No	12	4.958	0.1201	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-6	5.781	4.55	2/9/2021	5.4	No	12	5.166	0.3153	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-7	6.413	5.999	2/9/2021	6.35	No	12	6.206	0.1061	0	None	No	0.001878	Param Intra 1 of 2

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/20/2021, 8:25 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-7**	**0.2296**	**101**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-3 (bg)**	**0.09518**	**75**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-39.53**	**-94**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.9518**	**98**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-257.4**	**-101**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-6**	**-50.99**	**-77**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/20/2021, 8:25 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-12 (bg)	-0.004993	-18	-68	No	18	11.11	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0	-22	-68	No	18	44.44	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	-26	-68	No	18	83.33	n/a	n/a	0.01	NP
Boron (mg/L)	MW-6	-0.1498	-32	-68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-7**	**0.2296**	**101**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-12 (bg)	0.5897	21	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-3.782	-41	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-3 (bg)**	**0.09518**	**75**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-39.53**	**-94**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	18.01	59	68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	0	12	68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	0	-6	-68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.9518**	**98**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-257.4**	**-101**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	144.8	47	68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-16	-68	No	18	61.11	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.2009	-41	-68	No	18	27.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	68	No	18	88.89	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-6**	**-50.99**	**-77**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-7	57.33	42	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	10.41	30	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-15.72	-47	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	0	4	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-6	-334.6	-67	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-7	214.1	36	68	No	18	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:43 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0025	n/a	n/a	39	n/a	n/a	100	n/a	n/a	0.1353	NP Inter(NDs)
Arsenic (mg/L)	0.0013	n/a	n/a	51	n/a	n/a	98.04	n/a	n/a	0.0731	NP Inter(NDs)
Barium (mg/L)	0.02791	n/a	n/a	51	0.01698	0.005308	5.882	None	No	0.05	Inter
Beryllium (mg/L)	0.0025	n/a	n/a	48	n/a	n/a	93.75	n/a	n/a	0.08526	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	39	n/a	n/a	100	n/a	n/a	0.1353	NP Inter(NDs)
Chromium (mg/L)	0.012	n/a	n/a	51	n/a	n/a	45.1	n/a	n/a	0.0731	NP Inter(normality)
Cobalt (mg/L)	0.0025	n/a	n/a	45	n/a	n/a	100	n/a	n/a	0.09944	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	4.64	n/a	n/a	51	n/a	n/a	0	n/a	n/a	0.0731	NP Inter(normality)
Fluoride (mg/L)	0.2098	n/a	n/a	54	0.2662	0.09397	20.37	Kaplan-Meier	sqrt(x)	0.05	Inter
Lead (mg/L)	0.0013	n/a	n/a	45	n/a	n/a	95.56	n/a	n/a	0.09944	NP Inter(NDs)
Lithium (mg/L)	0.01712	n/a	n/a	51	0.006954	0.004936	15.69	Kaplan-Meier	No	0.05	Inter
Mercury (mg/L)	0.0002	n/a	n/a	39	n/a	n/a	97.44	n/a	n/a	0.1353	NP Inter(NDs)
Molybdenum (mg/L)	0.015	n/a	n/a	51	n/a	n/a	96.08	n/a	n/a	0.0731	NP Inter(NDs)
Selenium (mg/L)	0.0013	n/a	n/a	45	n/a	n/a	93.33	n/a	n/a	0.09944	NP Inter(NDs)
Thallium (mg/L)	0.0005	n/a	n/a	39	n/a	n/a	100	n/a	n/a	0.1353	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		0.028	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		4.64	5
Fluoride, Total (mg/L)	4		0.21	4
Lead, Total (mg/L)	0.015		0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.017	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*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Confidence Intervals - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:53 PM

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**	**30.81**	**23.85**	**5**	**Yes**	**17**	**27.49**	**5.796**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**35.73**	**24.33**	**5**	**Yes**	**17**	**30.91**	**10.45**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-6	0.001875	0.0008019	0.01	No	17	0.001684	0.0009191	23.53	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.002129	0.001143	0.01	No	17	0.002064	0.0009644	23.53	Kaplan-Meier	x^(1/3)	0.01	Param.
Barium (mg/L)	MW-6	0.0702	0.06026	2	No	17	0.06412	0.01085	5.882	None	x^3	0.01	Param.
Barium (mg/L)	MW-7	0.1067	0.06088	2	No	17	0.086	0.03812	5.882	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MW-6	0.001799	0.0009694	0.004	No	16	0.001384	0.0006378	12.5	None	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	16	0.002214	0.0007822	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-6	0.0025	0.0013	0.1	No	17	0.002429	0.000291	94.12	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.002448	0.001201	0.1	No	17	0.002353	0.001019	41.18	Kaplan-Meier	sqrt(x)	0.01	Param.
Cobalt (mg/L)	MW-7	0.0025	0.00029	0.006	No	15	0.002353	0.0005706	93.33	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**30.81**	**23.85**	**5**	**Yes**	**17**	**27.49**	**5.796**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**35.73**	**24.33**	**5**	**Yes**	**17**	**30.91**	**10.45**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	18	0.06306	0.02562	27.78	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.047	4	No	18	0.08706	0.02496	77.78	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.02121	0.01258	0.04	No	17	0.01689	0.006885	5.882	None	No	0.01	Param.
Lithium (mg/L)	MW-7	0.025	0.002	0.04	No	17	0.01704	0.01113	64.71	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-6	0.015	0.0011	0.1	No	17	0.01418	0.003371	94.12	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.008288	0.004904	0.1	No	17	0.009606	0.004752	29.41	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	MW-6	0.0013	0.00037	0.05	No	15	0.001093	0.0004135	73.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-7	0.0013	0.0003	0.05	No	15	0.001052	0.0004327	73.33	None	No	0.01	NP (NDs)

Prediction Limits - Interwell

Appendix III Interwell Prediction Limits - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:29 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-6**	**0.33**	**n/a**	**2/9/2021**	**7.5**	**Yes**	**54**	**n/a**	**n/a**	**46.3**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**2/9/2021**	**3**	**Yes**	**54**	**n/a**	**n/a**	**46.3**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**2/9/2021**	**230**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**2/9/2021**	**250**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**2/9/2021**	**2500**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**2/9/2021**	**2000**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**MW-6**	**9.2**	**n/a**	**2/9/2021**	**360**	**Yes**	**54**	**n/a**	**n/a**	**59.26**	**n/a**	**n/a**	**0.000661**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**9.2**	**n/a**	**2/9/2021**	**420**	**Yes**	**54**	**n/a**	**n/a**	**59.26**	**n/a**	**n/a**	**0.000661**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**580**	**n/a**	**2/9/2021**	**5300**	**Yes**	**53**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006833**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**580**	**n/a**	**2/9/2021**	**4200**	**Yes**	**53**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006833**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

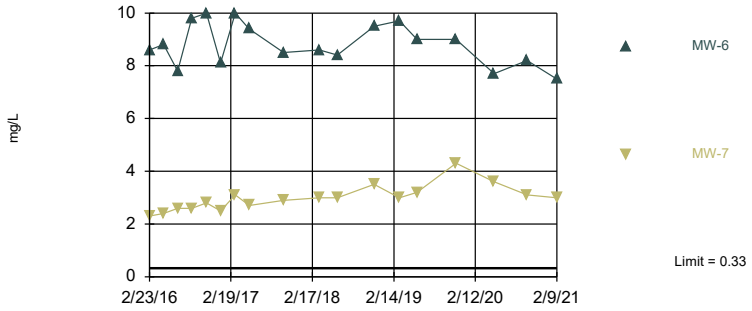
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:29 PM

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-6**	**0.33**	**n/a**	**2/9/2021**	**7.5**	**Yes**	**54**	**n/a**	**n/a**	**46.3**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**2/9/2021**	**3**	**Yes**	**54**	**n/a**	**n/a**	**46.3**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-6**	**49**	**n/a**	**2/9/2021**	**230**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**49**	**n/a**	**2/9/2021**	**250**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**2/9/2021**	**2500**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**2/9/2021**	**2000**	**Yes**	**54**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000661**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	MW-6	0.1741	n/a	2/9/2021	0.04	No	54	0.2662	0.09397	20.37	Kaplan-Meier	sqrt(x)	0.003756	Param Inter 1 of 2
Fluoride (mg/L)	MW-7	0.1741	n/a	2/9/2021	0.1ND	No	54	0.2662	0.09397	20.37	Kaplan-Meier	sqrt(x)	0.003756	Param Inter 1 of 2
Sulfate (mg/L)	**MW-6**	**9.2**	**n/a**	**2/9/2021**	**360**	**Yes**	**54**	**n/a**	**n/a**	**59.26**	**n/a**	**n/a**	**0.000661**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**9.2**	**n/a**	**2/9/2021**	**420**	**Yes**	**54**	**n/a**	**n/a**	**59.26**	**n/a**	**n/a**	**0.000661**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**580**	**n/a**	**2/9/2021**	**5300**	**Yes**	**53**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006833**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**580**	**n/a**	**2/9/2021**	**4200**	**Yes**	**53**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006833**	**NP Inter (normality) 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 54 background values. 46.3% NDs. Annual per-constituent alpha = 0.002641. Individual comparison alpha = 0.000661 (1 of 2). Comparing 2 points to limit.

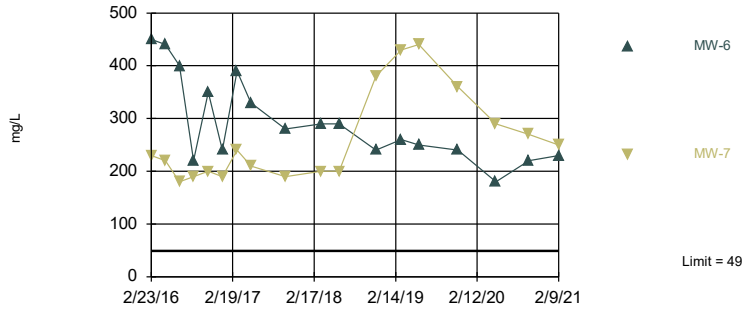
Constituent: Boron Analysis Run 5/19/2021 2:26 PM View: Appendix III - Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

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 54 background values. Annual per-constituent alpha = 0.002641. Individual comparison alpha = 0.000661 (1 of 2). Comparing 2 points to limit.

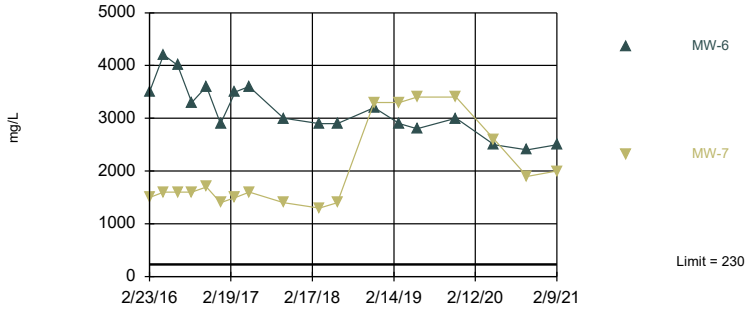
Constituent: Calcium Analysis Run 5/19/2021 2:26 PM View: Appendix III - Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

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 54 background values. Annual per-constituent alpha = 0.002641. Individual comparison alpha = 0.000661 (1 of 2). Comparing 2 points to limit.

Constituent: Chloride Analysis Run 5/19/2021 2:26 PM View: Appendix III - Interwell

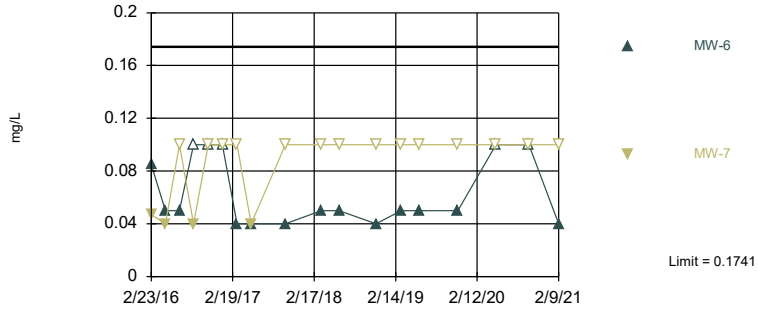
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.2662, Std. Dev.=0.09397, n=54, 20.37% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9446, critical = 0.939. Kappa = 1.608 (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.

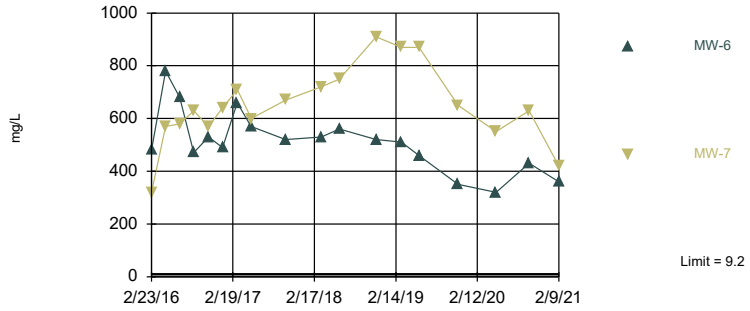
Constituent: Fluoride Analysis Run 5/19/2021 2:26 PM View: Appendix III - Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

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 54 background values. 59.26% NDs. Annual per-constituent alpha = 0.002641. Individual comparison alpha = 0.000661 (1 of 2). Comparing 2 points to limit.

Constituent: Sulfate Analysis Run 5/19/2021 2:26 PM View: Appendix III - Interwell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

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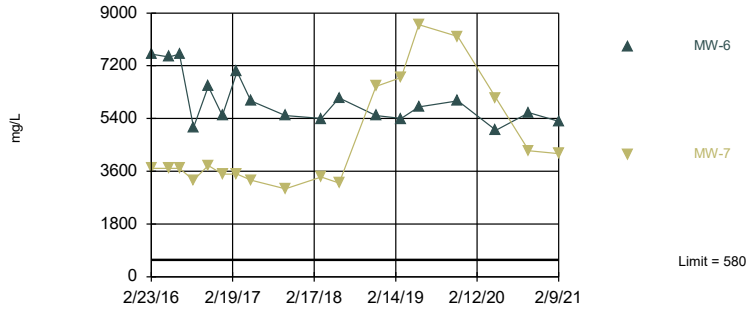
Exceeds Limit: MW-6, MW-7

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 53 background values. Annual per-constituent alpha = 0.00273. Individual comparison alpha = 0.0006833 (1 of 2). Comparing 2 points to limit.

Constituent: Total Dissolved Solids Analysis Run 5/19/2021 2:26 PM View: Appendix III - Interwell
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/19/2021 2:29 PM View: Appendix III - Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-3 (bg)	MW-2 (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		<0.05	0.022 (J)		
4/26/2016	0.27			8.8	2.4
6/27/2016	0.083	<0.05	0.032 (J)		
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	<0.05	0.032 (J)		
3/11/2017				10	3.1
5/11/2017	0.33	0.18	0.23	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	<0.05	0.027 (J)		
6/8/2018				8.4	3
11/19/2018	0.071	<0.05	0.045 (J)	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	0.0094 (IV)	0.036 (V)	9 (J3)	
11/19/2019					4.3 (J3)
5/5/2020	0.11	0.0073 (J)	0.041		
5/6/2020				7.7	3.6
9/29/2020	0.086	<0.05	0.04		
9/30/2020				8.2	3.1
2/9/2021	0.09	<0.05	0.024 (I)	7.5	3

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/19/2021 2:29 PM View: Appendix III - Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-3 (bg)	MW-2 (bg)	MW-6	MW-7
2/22/2016	23	1.9	12		
2/23/2016				450	230
4/25/2016		1.8	11		
4/26/2016	33			440	220
6/27/2016	29	1.7	7.7		
6/28/2016				400	180
8/29/2016	28	1.7	48	220	190
11/1/2016	36	1.9	49		
11/2/2016				350	200
1/4/2017	36	1.8	44		
1/5/2017				240	190
3/10/2017	37	1.9	46		
3/11/2017				390	240
5/11/2017	31	1.7	43	330	
5/12/2017					210
10/12/2017	32	1.9	45	280	190
3/20/2018	34	1.9			
3/21/2018			45	290	200
6/6/2018	30	1.8	32		
6/8/2018				290	200
11/19/2018	38	1.8	20	240	380
3/11/2019	31	1.9	16		
3/12/2019				260	430
5/28/2019	37	2.1	35		
5/29/2019				250	440
11/18/2019	30	1.9	44	240	
11/19/2019					360
5/5/2020	31	2.3	13		
5/6/2020				180	290
9/29/2020	41	2.6	9.6		
9/30/2020				220	270
2/9/2021	26	2.4	9.1	230	250

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/19/2021 2:29 PM View: Appendix III - Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-3 (bg)	MW-2 (bg)	MW-6	MW-7
2/22/2016	140	11	15		
2/23/2016				3500	1500
4/25/2016		10	18		
4/26/2016	190			4200	1600
6/27/2016	170	11	17		
6/28/2016				4000	1600
8/29/2016	180	11	16	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	11	14		
3/11/2017				3500	1500
5/11/2017	200	12	11	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	11	13		
6/8/2018				2900	1400
11/19/2018	210	19.9 (D)	13	3200	3300
3/11/2019	190	13	12		
3/12/2019				2900	3300
5/28/2019	190	13	13		
5/29/2019				2800	3400
11/18/2019	210	14	12	3000	
11/19/2019					3400
5/5/2020	200	15	13		
5/6/2020				2500	2600
9/29/2020	200	16	14		
9/30/2020				2400	1900
2/9/2021	150	15	20	2500	2000

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/19/2021 2:29 PM View: Appendix III - Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-3 (bg)	MW-2 (bg)	MW-6	MW-7
2/22/2016	0.09 (J)	0.04 (J)	0.06 (J)		
2/23/2016				0.085 (J)	0.047 (J)
4/25/2016		<0.1	0.04 (J)		
4/26/2016	0.08 (J)			0.05 (J)	0.04 (J)
6/27/2016	0.08 (J)	<0.1	0.04 (J)		
6/28/2016				0.05 (J)	<0.1
8/29/2016	0.09 (J)	0.04 (J)	0.16	<0.1	0.04 (J)
11/1/2016	0.08 (J)	<0.1	0.17		
11/2/2016				<0.1	<0.1
1/4/2017	0.1	<0.1	0.23		
1/5/2017				<0.1	<0.1
3/10/2017	0.1	<0.1	0.21		
3/11/2017				0.04 (J)	<0.1
5/11/2017	0.1	<0.1	0.23	0.04 (J)	
5/12/2017					0.04 (J)
10/12/2017	0.12	<0.1	0.27	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	0.04 (J)	0.19		
6/8/2018				0.05 (J)	<0.1
11/19/2018	0.13	0.04 (J)	0.12	0.04 (J)	<0.1
3/11/2019	0.12	0.04 (J)	0.08 (J)		
3/12/2019				0.05 (J)	<0.1
5/28/2019	0.13	0.04 (J)	0.13		
5/29/2019				0.05 (J)	<0.1
11/18/2019	0.14	<0.1	0.17	0.05 (I)	
11/19/2019					<0.1
5/5/2020	0.15 (V)	0.05 (J)	0.09 (J)		
5/6/2020				<0.1	<0.1
9/29/2020	0.15	<0.1	0.06		
9/30/2020				<0.1	<0.1
2/9/2021	0.11	<0.1	0.06 (I)	0.04 (I)	<0.1

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/19/2021 2:29 PM View: Appendix III - Interwell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-3 (bg)	MW-2 (bg)	MW-6	MW-7
2/22/2016	<5	<5	6.3		
2/23/2016				480	320
4/25/2016		1.4 (J)	6.1		
4/26/2016	<5			780	570
6/27/2016	1.6 (J)	<5	6.6		
6/28/2016				680	580
8/29/2016	<5	<5	4.5 (J)	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	<5	2.3 (J)		
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)	<5	4.8 (J)		
6/8/2018				560	750
11/19/2018	2.2 (J)	7.473 (D)	4.4 (J)	520	910
3/11/2019	1.5 (J)	<5	5.2		
3/12/2019				510	870
5/28/2019	3 (J)	<5	4.3 (J)		
5/29/2019				460	870
11/18/2019	<5	<5	2.8 (I)	350	
11/19/2019					650
5/5/2020	<5	<5	4.4 (J)		
5/6/2020				320	550
9/29/2020	3.3	<5	4.8		
9/30/2020				430	630
2/9/2021	<5	<5	9.2	360	420

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/19/2021 2:29 PM View: Appendix III - 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
2/9/2021	500	130	66	4200	5300

Prediction Limits - Intrawell

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

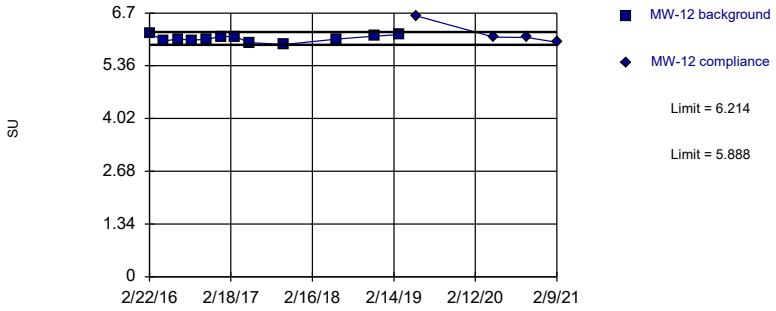
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-12	6.214	5.888	2/9/2021	5.96	No	12	6.051	0.08339	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-2	7.353	5.354	2/9/2021	5.48	No	12	6.353	0.512	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-3	5.193	4.724	2/9/2021	4.87	No	12	4.958	0.1201	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-6	5.781	4.55	2/9/2021	5.4	No	12	5.166	0.3153	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-7	6.413	5.999	2/9/2021	6.35	No	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 5/19/2021 2:32 PM View: Appendix III - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

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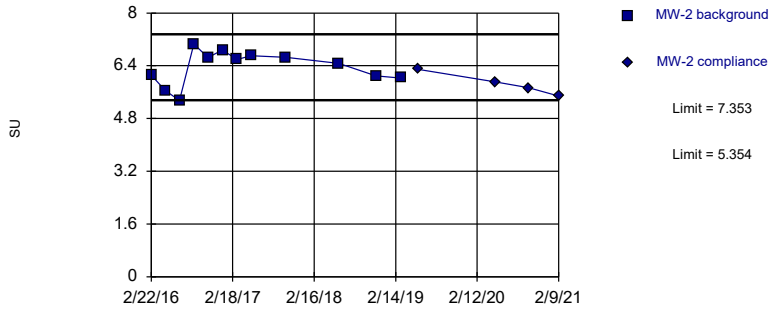
Within Limits

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 5/19/2021 2:32 PM View: Appendix III - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

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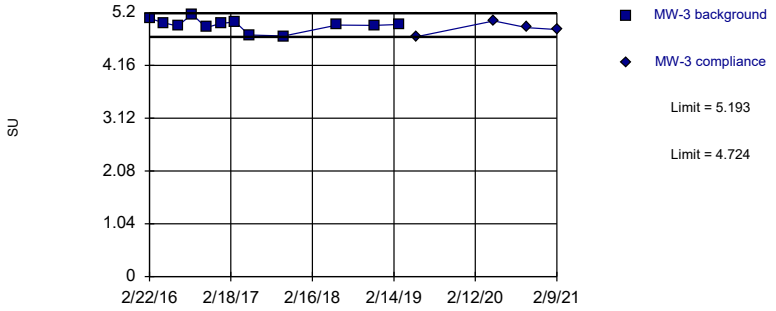
Within Limits

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 5/19/2021 2:32 PM View: Appendix III - Intrawell

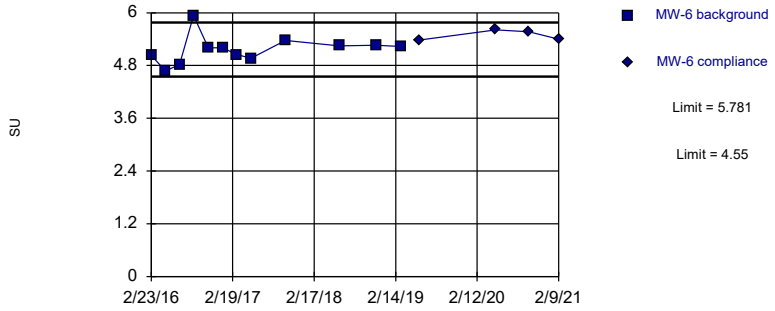
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 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.

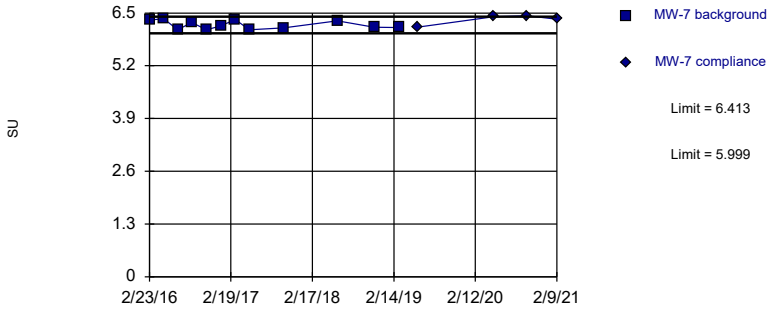
Constituent: pH Analysis Run 5/19/2021 2:32 PM View: Appendix III - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

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 = 1.952 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.003756.

Constituent: pH Analysis Run 5/19/2021 2:32 PM View: Appendix III - Intrawell

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: pH (SU) Analysis Run 5/19/2021 2:34 PM View: Appendix III - 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
2/9/2021		5.96

Prediction Limit

Constituent: pH (SU) Analysis Run 5/19/2021 2:34 PM View: Appendix III - 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
2/9/2021		5.48

Prediction Limit

Constituent: pH (SU) Analysis Run 5/19/2021 2:34 PM View: Appendix III - 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
2/9/2021		4.87

Prediction Limit

Constituent: pH (SU) Analysis Run 5/19/2021 2:34 PM View: Appendix III - 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
2/9/2021		5.4

Prediction Limit

Constituent: pH (SU) Analysis Run 5/19/2021 2:34 PM View: Appendix III - 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
2/9/2021		6.35

Trend Tests - Prediction Limit Exceedances

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/20/2021, 8:25 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-7**	**0.2296**	**101**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-3 (bg)**	**0.09518**	**75**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-39.53**	**-94**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.9518**	**98**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-257.4**	**-101**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-6**	**-50.99**	**-77**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

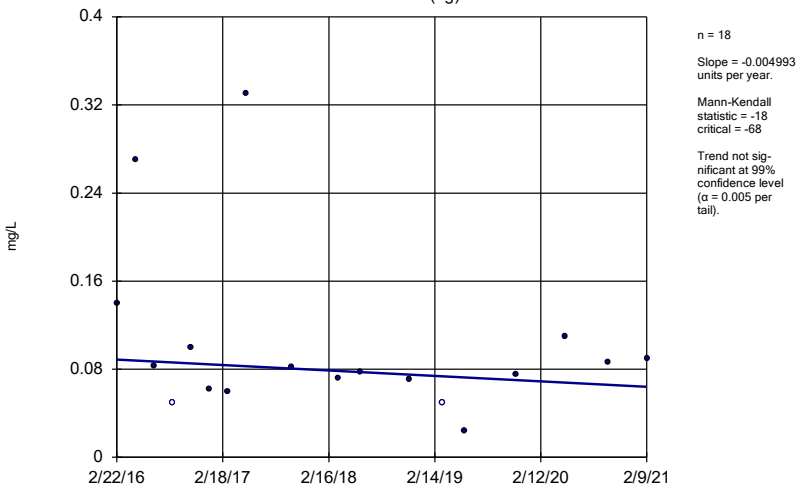
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/20/2021, 8:25 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-12 (bg)	-0.004993	-18	-68	No	18	11.11	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0	-22	-68	No	18	44.44	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	-26	-68	No	18	83.33	n/a	n/a	0.01	NP
Boron (mg/L)	MW-6	-0.1498	-32	-68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-7**	**0.2296**	**101**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-12 (bg)	0.5897	21	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-3.782	-41	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-3 (bg)**	**0.09518**	**75**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-6**	**-39.53**	**-94**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	18.01	59	68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	0	12	68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	0	-6	-68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.9518**	**98**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-257.4**	**-101**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	144.8	47	68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-16	-68	No	18	61.11	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.2009	-41	-68	No	18	27.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	68	No	18	88.89	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-6**	**-50.99**	**-77**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-7	57.33	42	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	10.41	30	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-15.72	-47	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	0	4	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-6	-334.6	-67	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-7	214.1	36	68	No	18	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-12 (bg)



n = 18

Slope = -0.004993 units per year.

Mann-Kendall statistic = -18
critical = -68

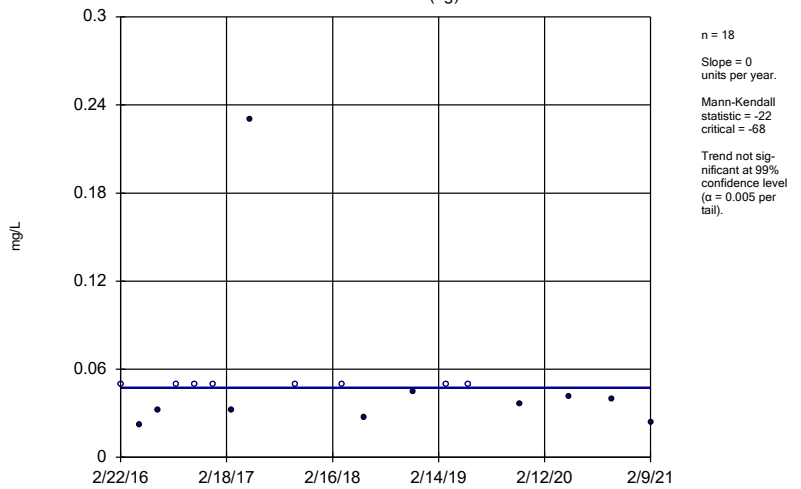
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -22
critical = -68

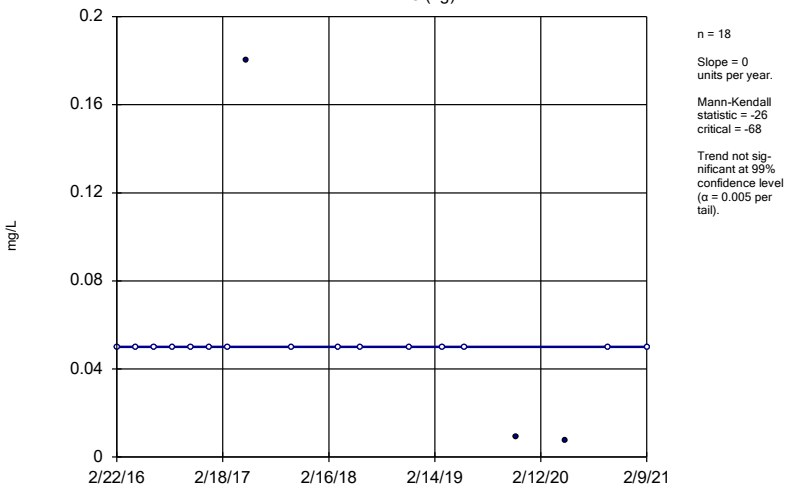
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -26
critical = -68

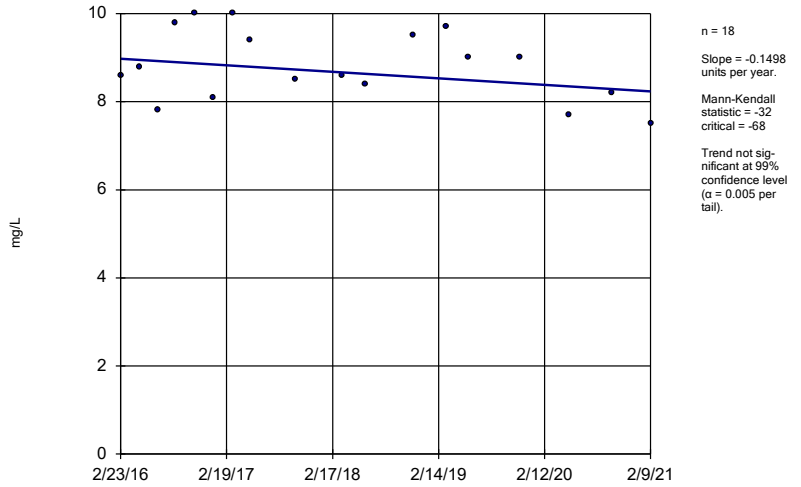
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 18

Slope = -0.1498 units per year.

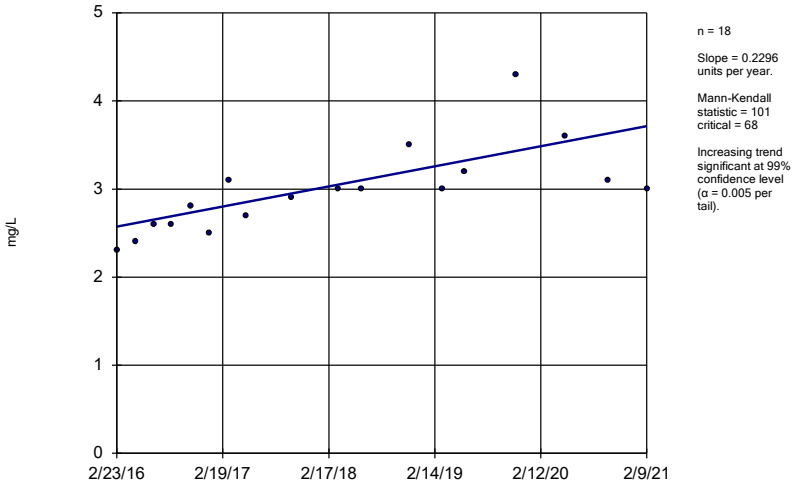
Mann-Kendall statistic = -32
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-7



n = 18

Slope = 0.2296 units per year.

Mann-Kendall statistic = 101
critical = 68

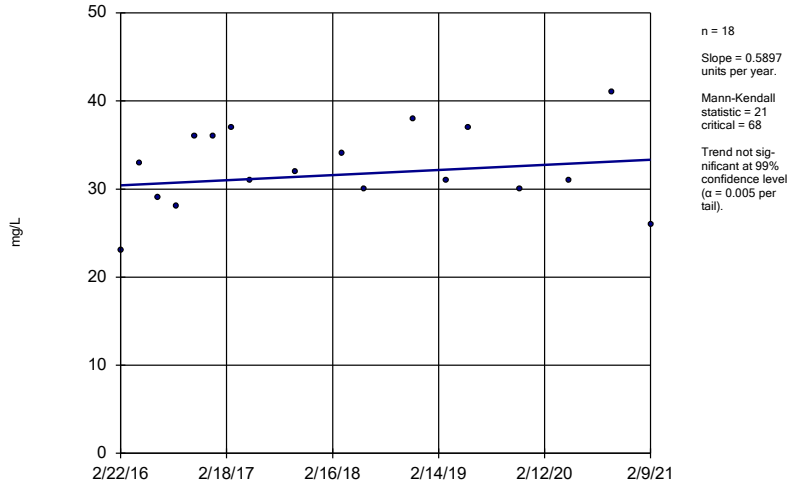
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 18

Slope = 0.5897 units per year.

Mann-Kendall statistic = 21
critical = 68

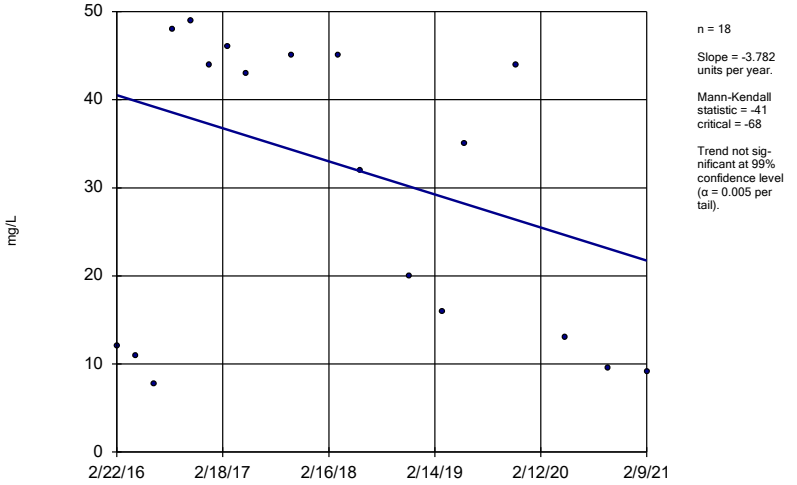
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 18

Slope = -3.782 units per year.

Mann-Kendall statistic = -41
critical = -68

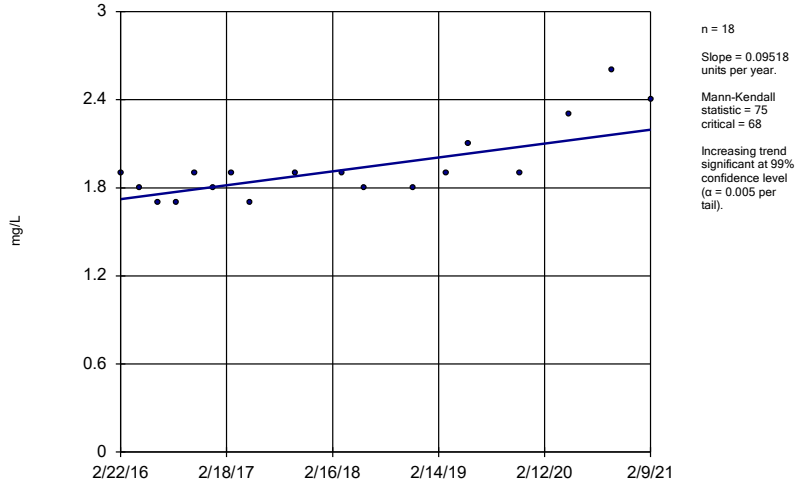
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 18

Slope = 0.09518 units per year.

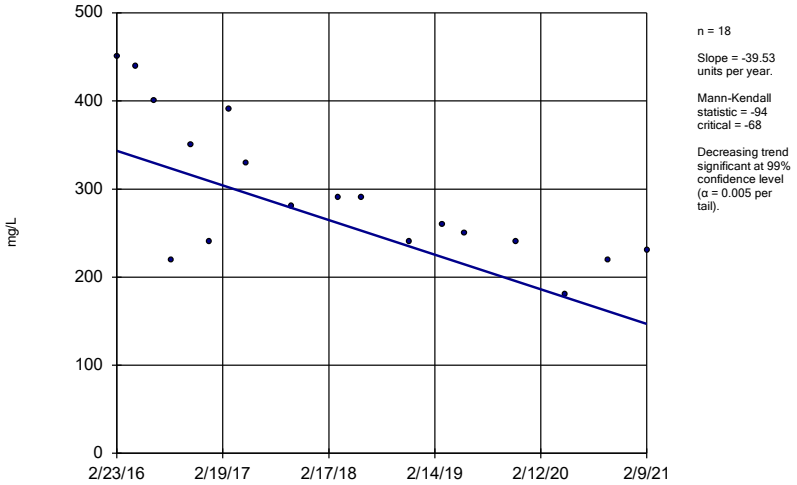
Mann-Kendall statistic = 75
critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-6



n = 18

Slope = -39.53 units per year.

Mann-Kendall statistic = -94
critical = -68

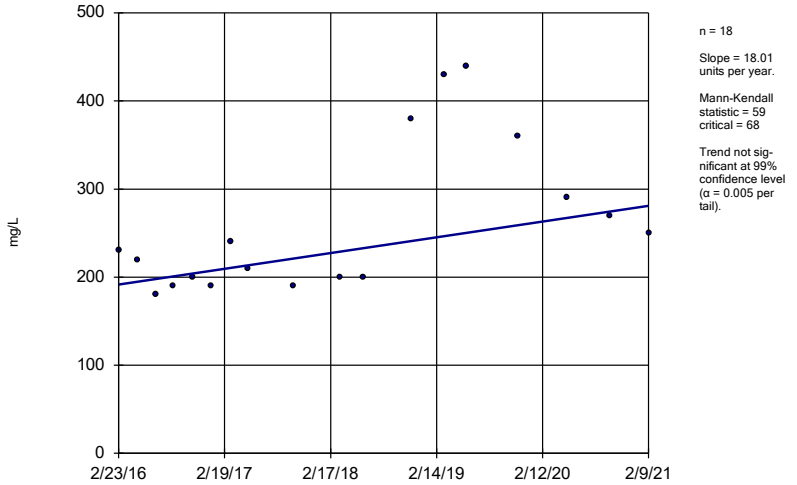
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 18

Slope = 18.01 units per year.

Mann-Kendall statistic = 59
critical = 68

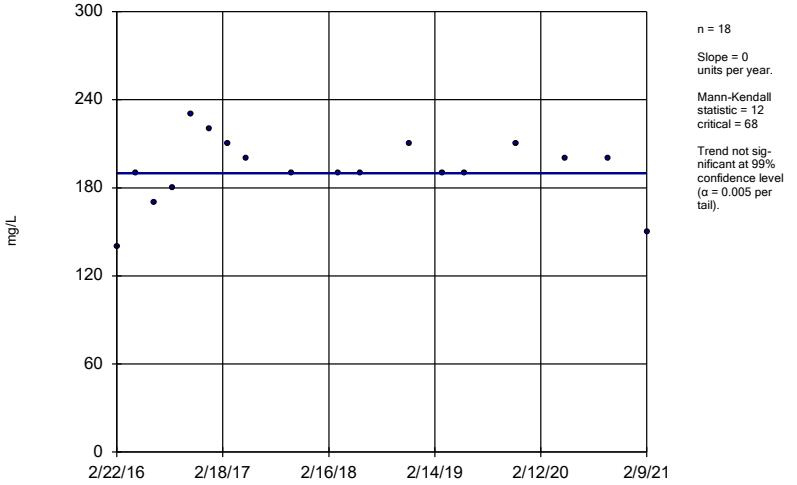
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 12
critical = 68

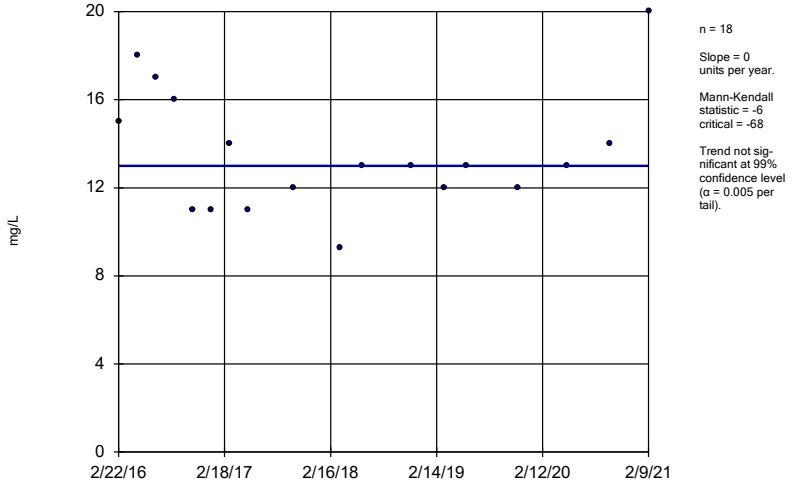
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 18

Slope = 0 units per year.

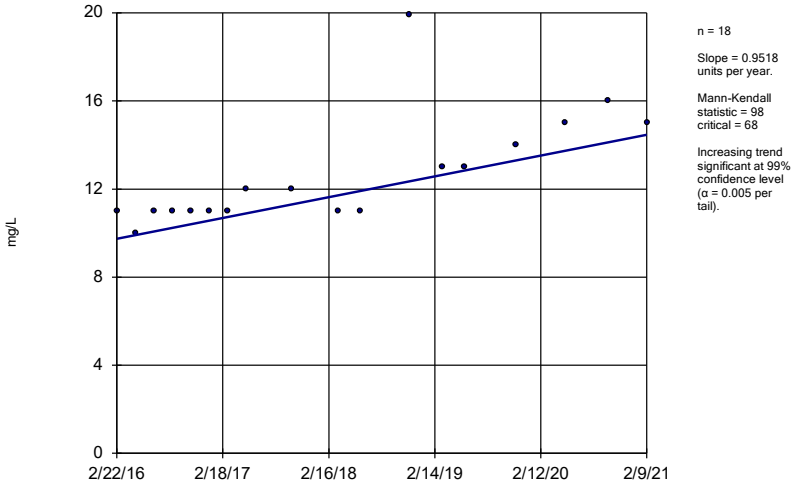
Mann-Kendall statistic = -6
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-3 (bg)



n = 18

Slope = 0.9518 units per year.

Mann-Kendall statistic = 98 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

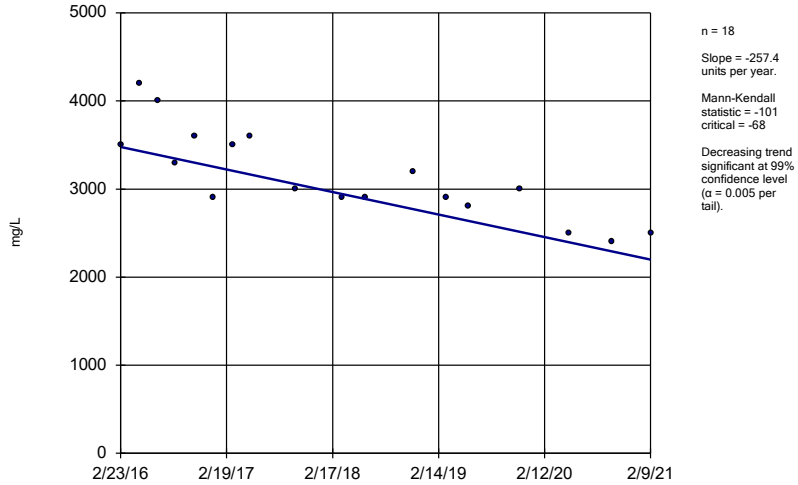
Constituent: Chloride Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 18

Slope = -257.4 units per year.

Mann-Kendall statistic = -101 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

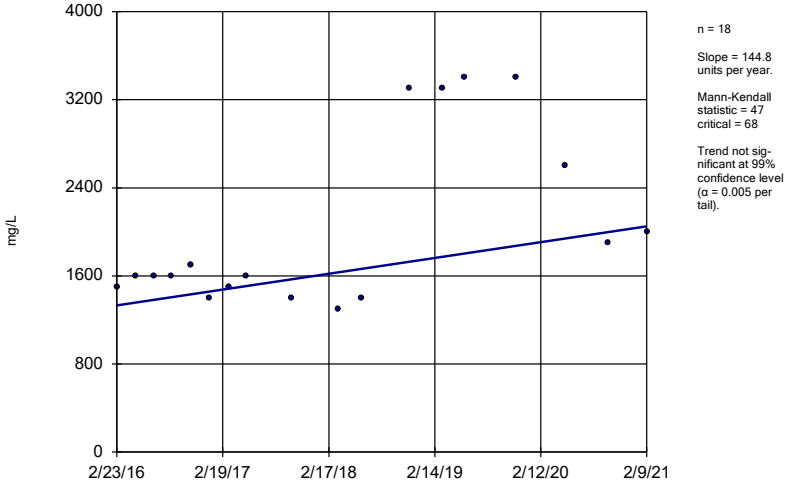
Constituent: Chloride Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 18

Slope = 144.8 units per year.

Mann-Kendall statistic = 47 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests

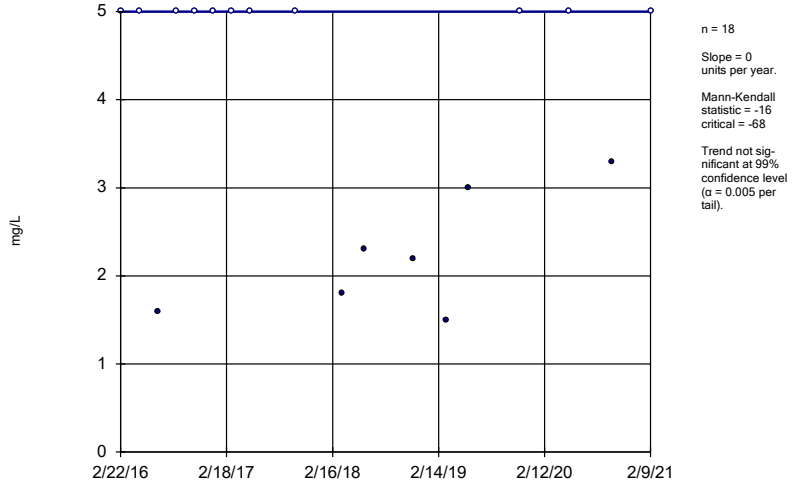
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-12 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -16 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

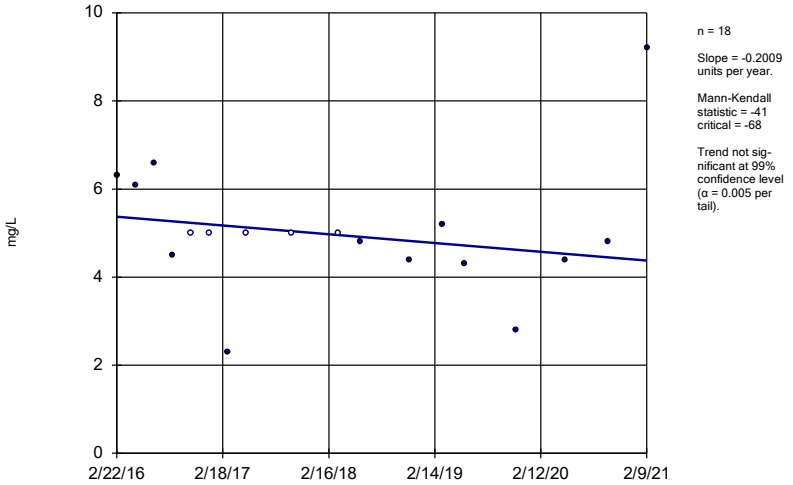
Constituent: Sulfate Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 18

Slope = -0.2009 units per year.

Mann-Kendall statistic = -41
critical = -68

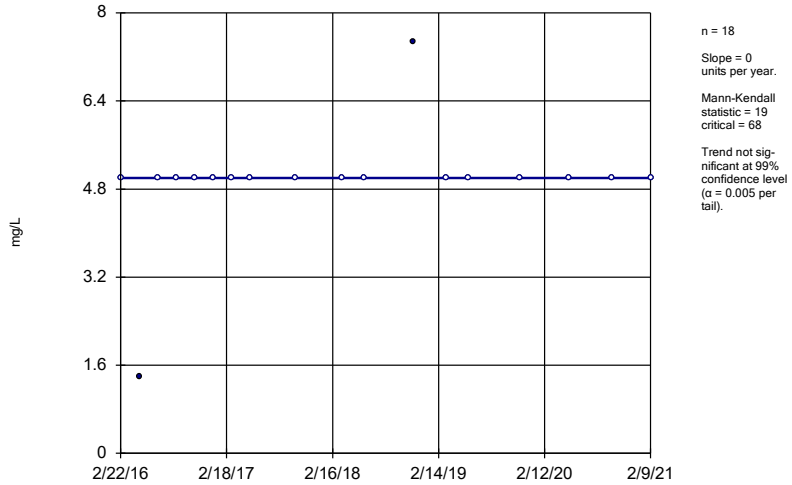
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 19
critical = 68

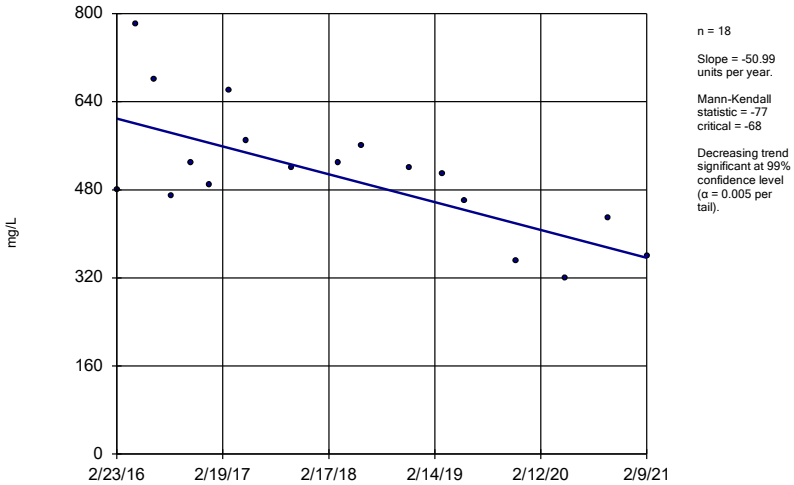
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 18

Slope = -50.99 units per year.

Mann-Kendall statistic = -77
critical = -68

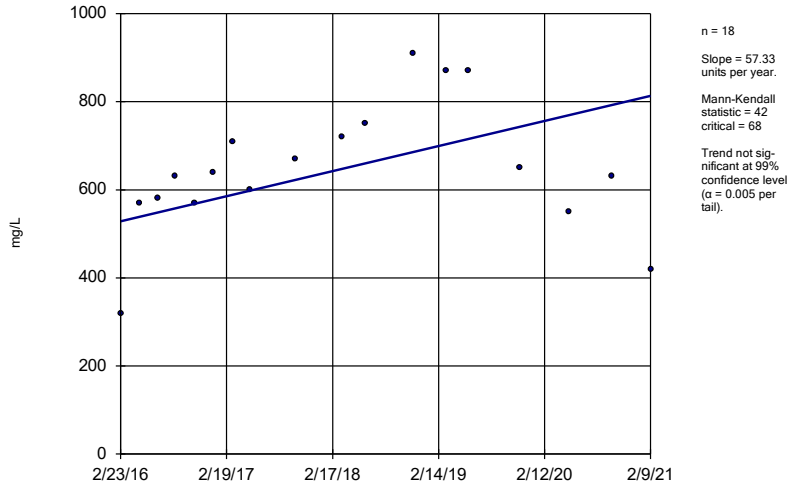
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 18

Slope = 57.33 units per year.

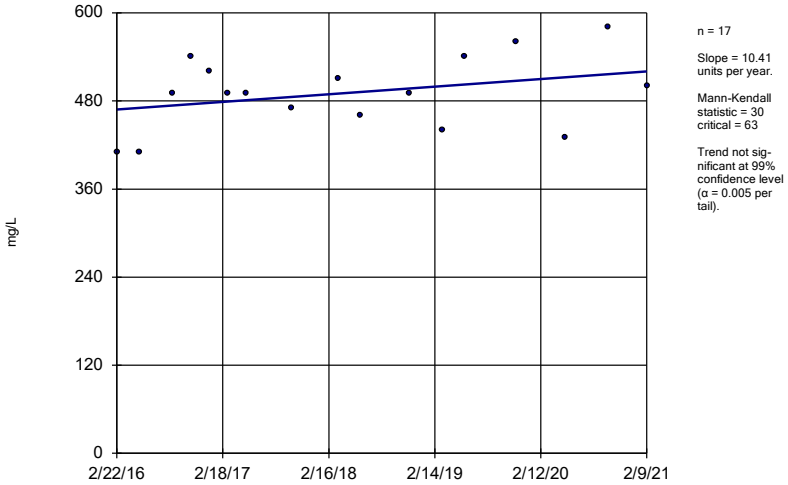
Mann-Kendall statistic = 42
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-12 (bg)



n = 17

Slope = 10.41 units per year.

Mann-Kendall statistic = 30 critical = 63

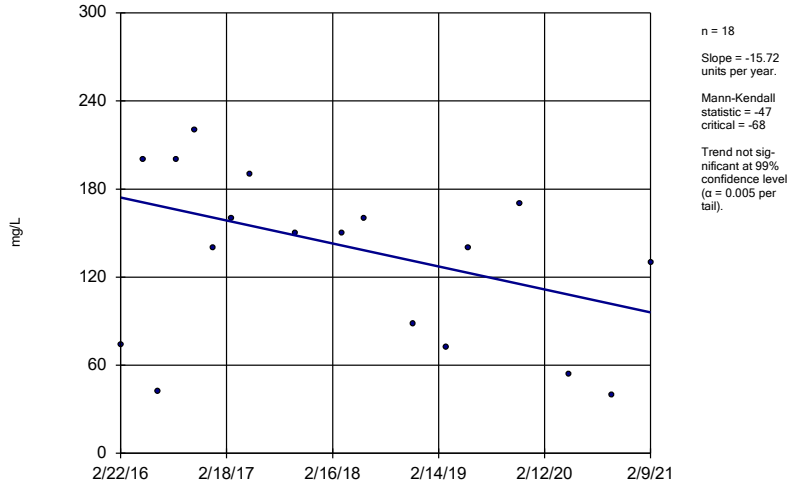
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 18

Slope = -15.72 units per year.

Mann-Kendall statistic = -47 critical = -68

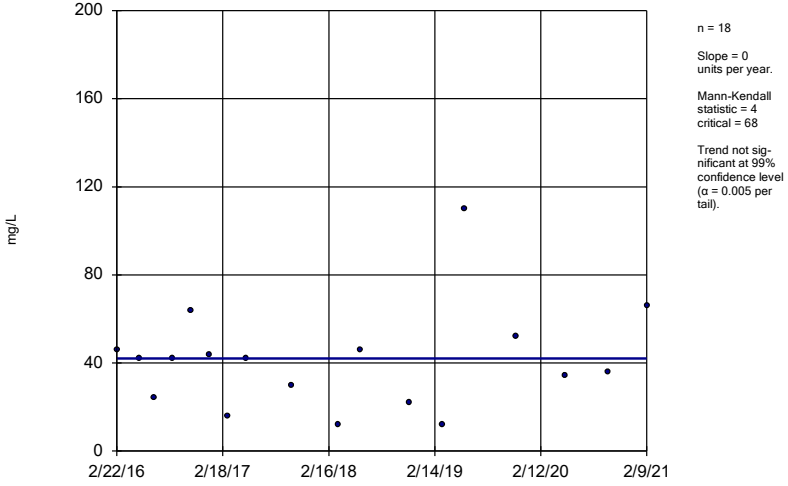
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 4 critical = 68

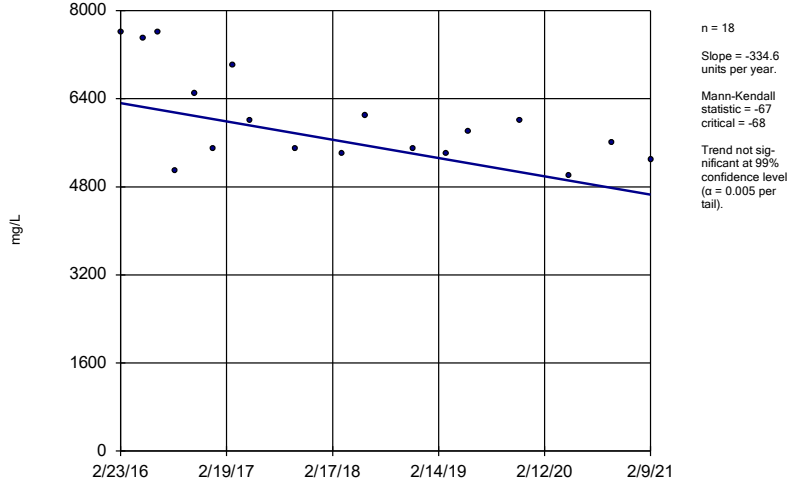
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



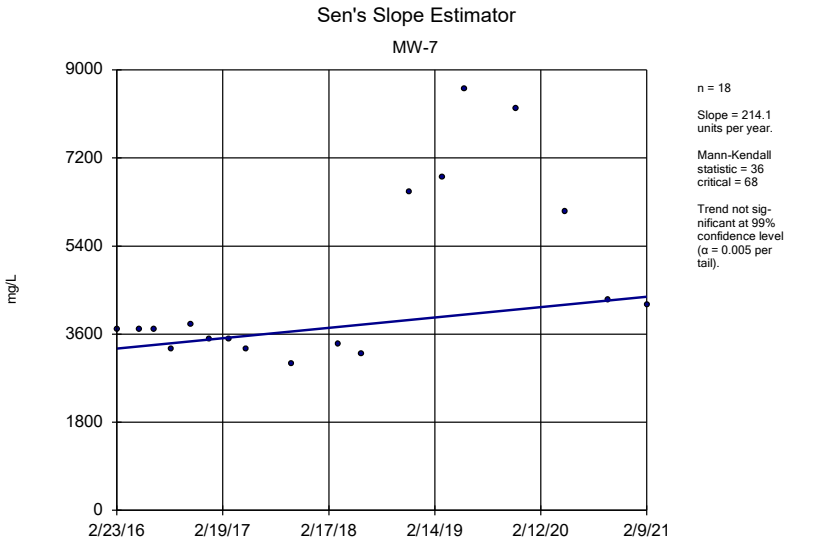
n = 18

Slope = -334.6 units per year.

Mann-Kendall statistic = -67 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests
Plant Smith Client: Geosyntec Data: Plant Smith CCR



Constituent: Total Dissolved Solids Analysis Run 5/20/2021 8:23 AM View: Appendix III - Trend Tests

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Upper Tolerance Limits

Upper Tolerance Limits Summary Table

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:43 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0025	n/a	n/a	39	n/a	n/a	100	n/a	n/a	0.1353	NP Inter(NDs)
Arsenic (mg/L)	0.0013	n/a	n/a	51	n/a	n/a	98.04	n/a	n/a	0.0731	NP Inter(NDs)
Barium (mg/L)	0.02791	n/a	n/a	51	0.01698	0.005308	5.882	None	No	0.05	Inter
Beryllium (mg/L)	0.0025	n/a	n/a	48	n/a	n/a	93.75	n/a	n/a	0.08526	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	39	n/a	n/a	100	n/a	n/a	0.1353	NP Inter(NDs)
Chromium (mg/L)	0.012	n/a	n/a	51	n/a	n/a	45.1	n/a	n/a	0.0731	NP Inter(normality)
Cobalt (mg/L)	0.0025	n/a	n/a	45	n/a	n/a	100	n/a	n/a	0.09944	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	4.64	n/a	n/a	51	n/a	n/a	0	n/a	n/a	0.0731	NP Inter(normality)
Fluoride (mg/L)	0.2098	n/a	n/a	54	0.2662	0.09397	20.37	Kaplan-Meier	sqrt(x)	0.05	Inter
Lead (mg/L)	0.0013	n/a	n/a	45	n/a	n/a	95.56	n/a	n/a	0.09944	NP Inter(NDs)
Lithium (mg/L)	0.01712	n/a	n/a	51	0.006954	0.004936	15.69	Kaplan-Meier	No	0.05	Inter
Mercury (mg/L)	0.0002	n/a	n/a	39	n/a	n/a	97.44	n/a	n/a	0.1353	NP Inter(NDs)
Molybdenum (mg/L)	0.015	n/a	n/a	51	n/a	n/a	96.08	n/a	n/a	0.0731	NP Inter(NDs)
Selenium (mg/L)	0.0013	n/a	n/a	45	n/a	n/a	93.33	n/a	n/a	0.09944	NP Inter(NDs)
Thallium (mg/L)	0.0005	n/a	n/a	39	n/a	n/a	100	n/a	n/a	0.1353	NP Inter(NDs)

Groundwater Protection Standards

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		0.028	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		4.64	5
Fluoride, Total (mg/L)	4		0.21	4
Lead, Total (mg/L)	0.015		0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.017	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*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Confidence Intervals

Confidence Intervals - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:53 PM

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**	**30.81**	**23.85**	**5**	**Yes**	**17**	**27.49**	**5.796**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**35.73**	**24.33**	**5**	**Yes**	**17**	**30.91**	**10.45**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

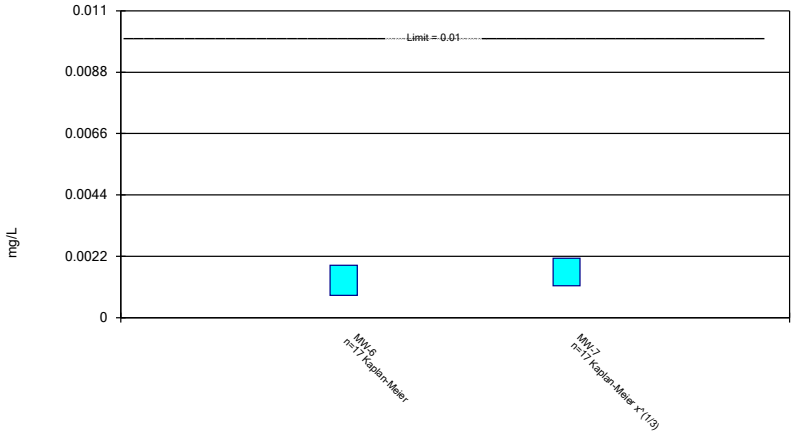
Confidence Intervals - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 5/19/2021, 2:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-6	0.001875	0.0008019	0.01	No	17	0.001684	0.0009191	23.53	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.002129	0.001143	0.01	No	17	0.002064	0.0009644	23.53	Kaplan-Meier	x^(1/3)	0.01	Param.
Barium (mg/L)	MW-6	0.0702	0.06026	2	No	17	0.06412	0.01085	5.882	None	x^3	0.01	Param.
Barium (mg/L)	MW-7	0.1067	0.06088	2	No	17	0.086	0.03812	5.882	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MW-6	0.001799	0.0009694	0.004	No	16	0.001384	0.0006378	12.5	None	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	16	0.002214	0.0007822	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-6	0.0025	0.0013	0.1	No	17	0.002429	0.000291	94.12	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.002448	0.001201	0.1	No	17	0.002353	0.001019	41.18	Kaplan-Meier	sqrt(x)	0.01	Param.
Cobalt (mg/L)	MW-7	0.0025	0.00029	0.006	No	15	0.002353	0.0005706	93.33	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**30.81**	**23.85**	**5**	**Yes**	**17**	**27.49**	**5.796**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**35.73**	**24.33**	**5**	**Yes**	**17**	**30.91**	**10.45**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	18	0.06306	0.02562	27.78	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.047	4	No	18	0.08706	0.02496	77.78	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.02121	0.01258	0.04	No	17	0.01689	0.006885	5.882	None	No	0.01	Param.
Lithium (mg/L)	MW-7	0.025	0.002	0.04	No	17	0.01704	0.01113	64.71	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-6	0.015	0.0011	0.1	No	17	0.01418	0.003371	94.12	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.008288	0.004904	0.1	No	17	0.009606	0.004752	29.41	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	MW-6	0.0013	0.00037	0.05	No	15	0.001093	0.0004135	73.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-7	0.0013	0.0003	0.05	No	15	0.001052	0.0004327	73.33	None	No	0.01	NP (NDs)

Parametric Confidence Interval

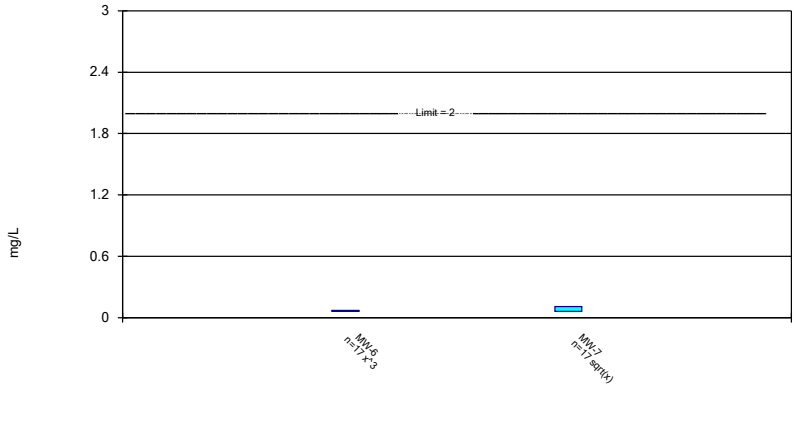
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric Confidence Interval

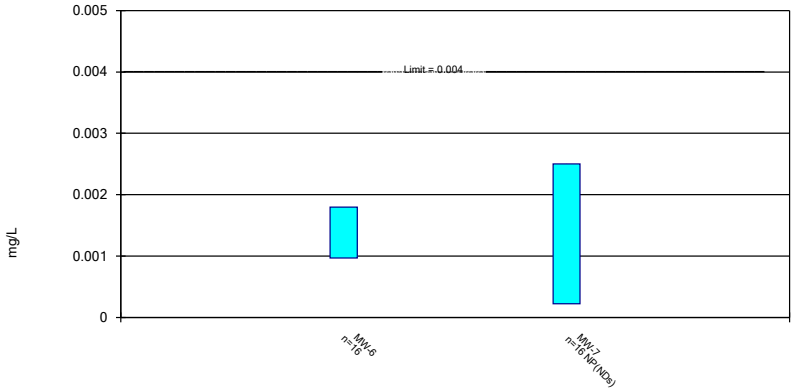
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

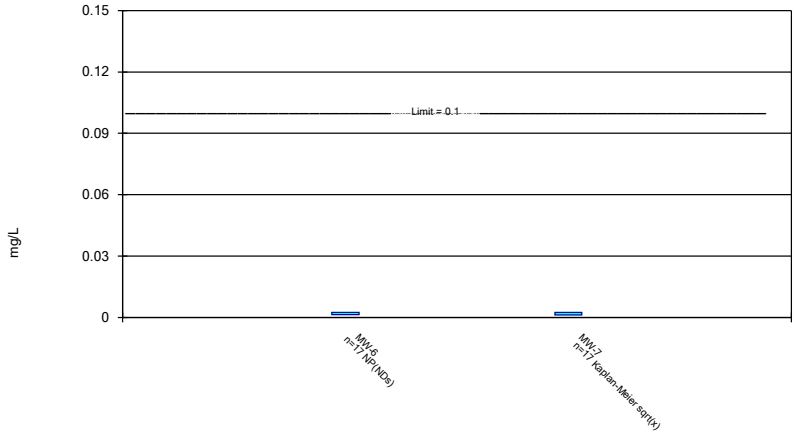
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

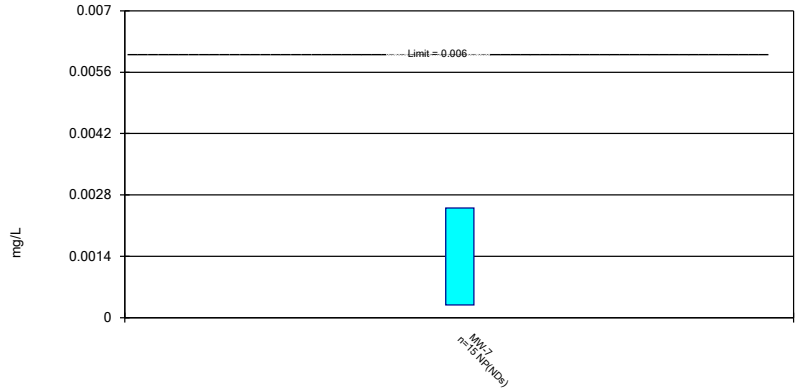
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

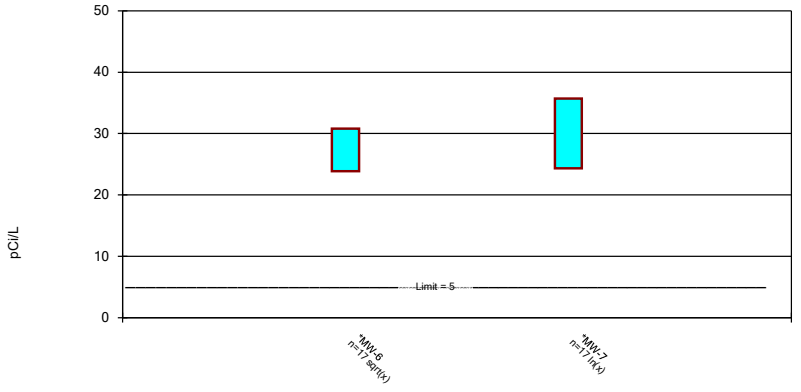
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cobalt Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric Confidence Interval

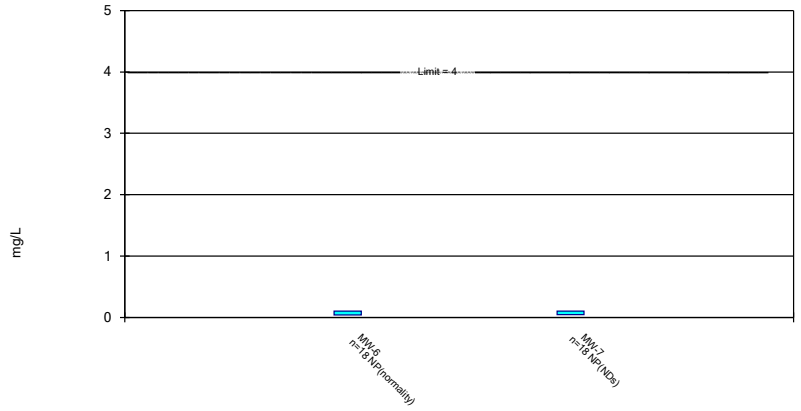
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

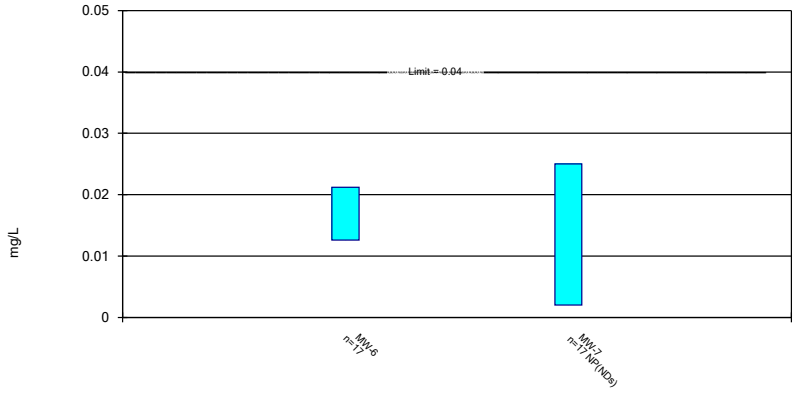
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Fluoride Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

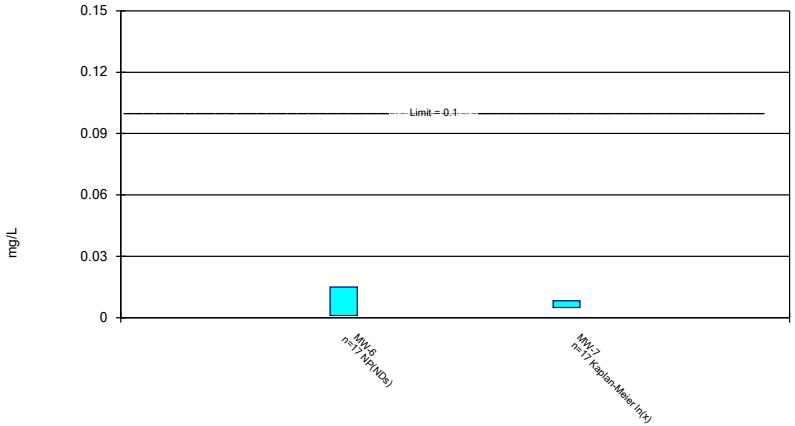
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/19/2021 2:52 PM View: Appendix 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.

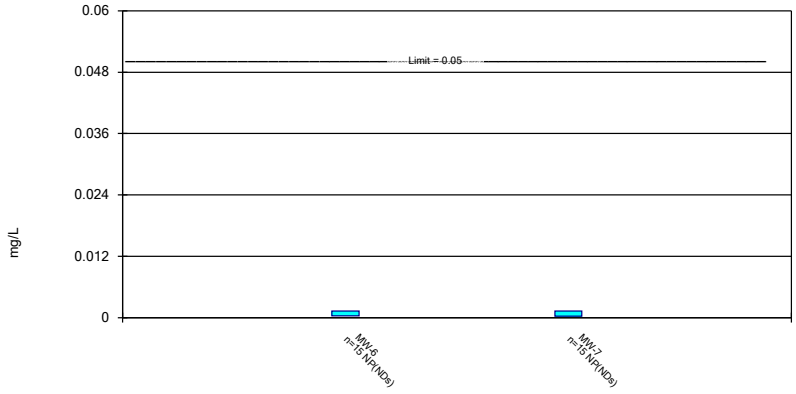


Constituent: Molybdenum Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

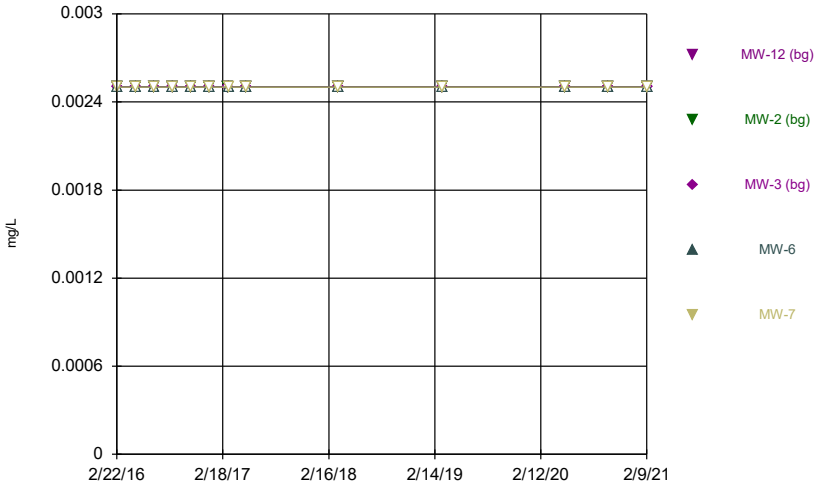


Constituent: Selenium Analysis Run 5/19/2021 2:52 PM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

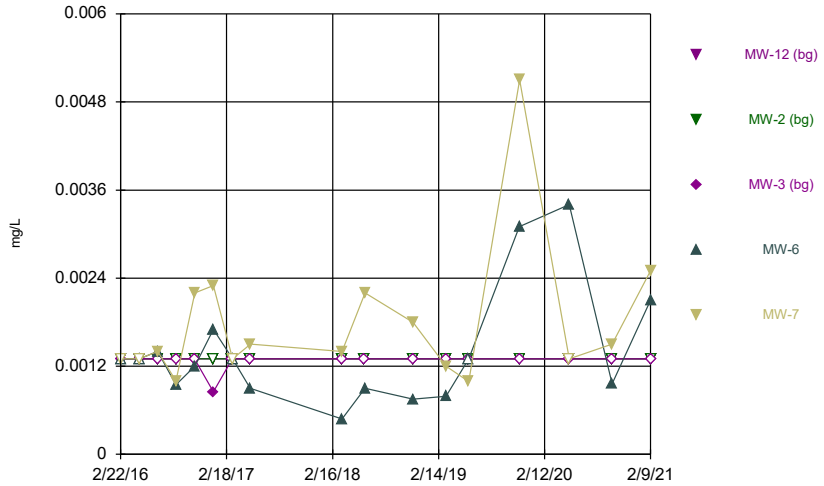
Time Series



Constituent: Antimony Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

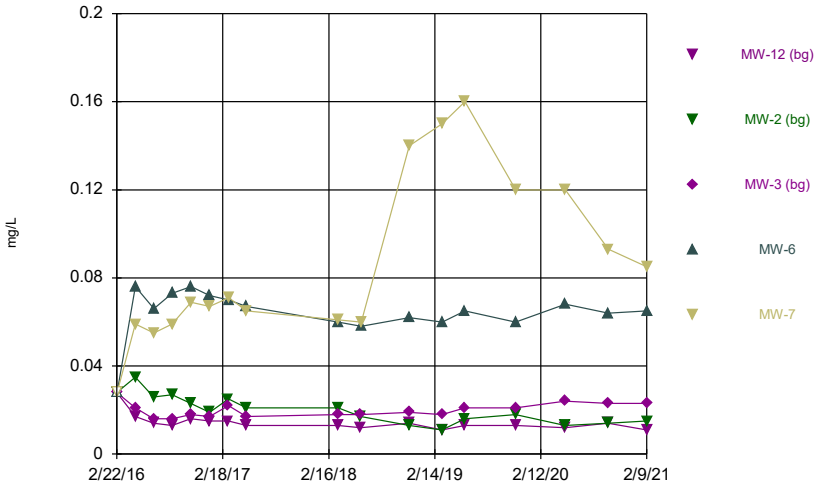
Time Series



Constituent: Arsenic Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

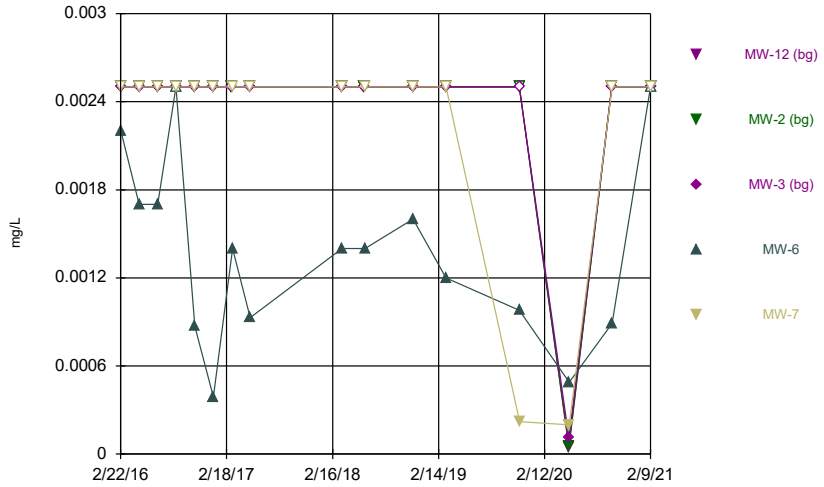
Time Series



Constituent: Barium Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

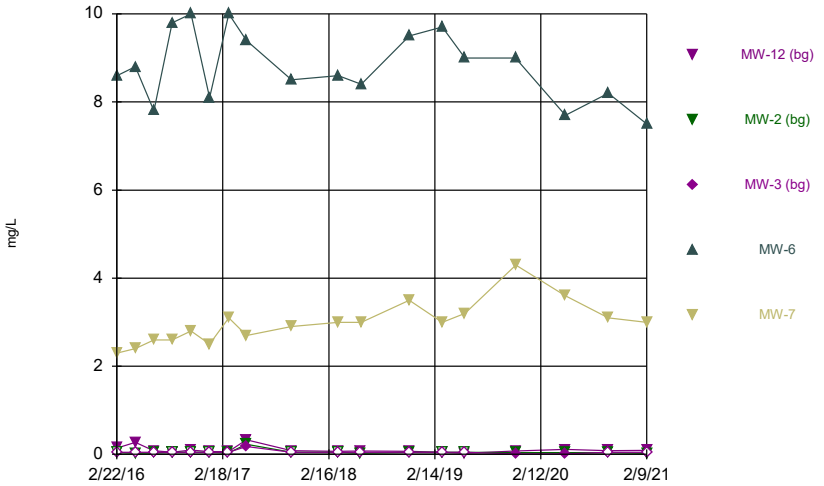
Time Series



Constituent: Beryllium Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

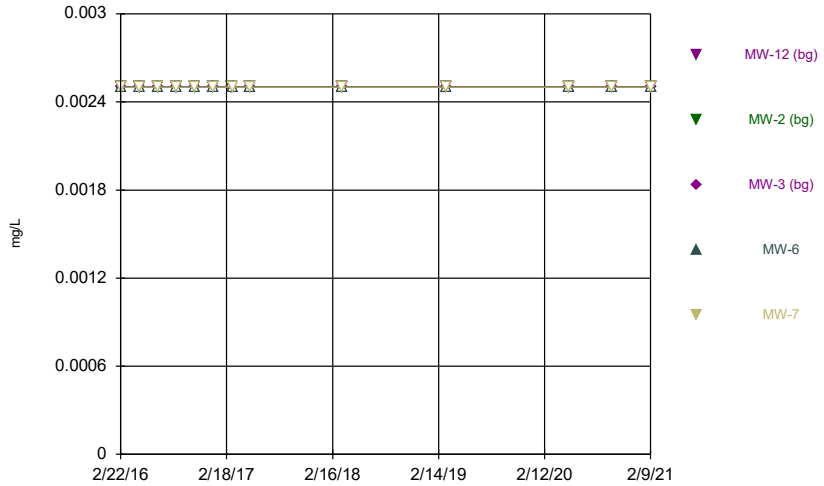
Time Series



Constituent: Boron Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

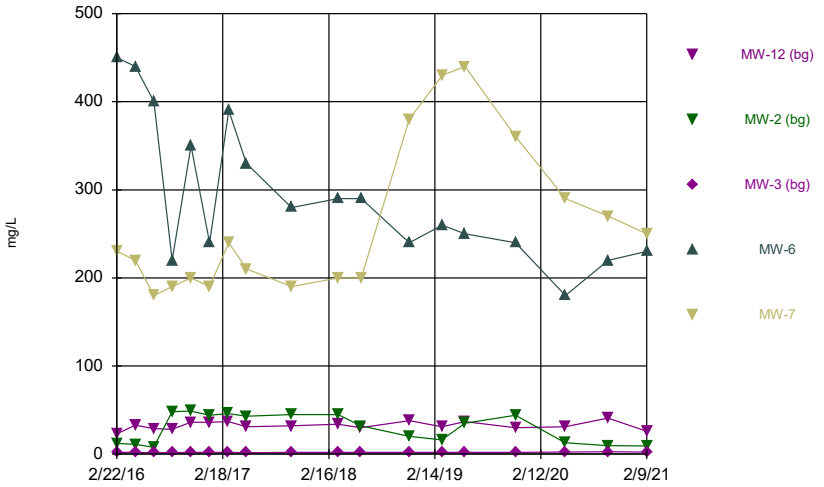
Time Series



Constituent: Cadmium Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

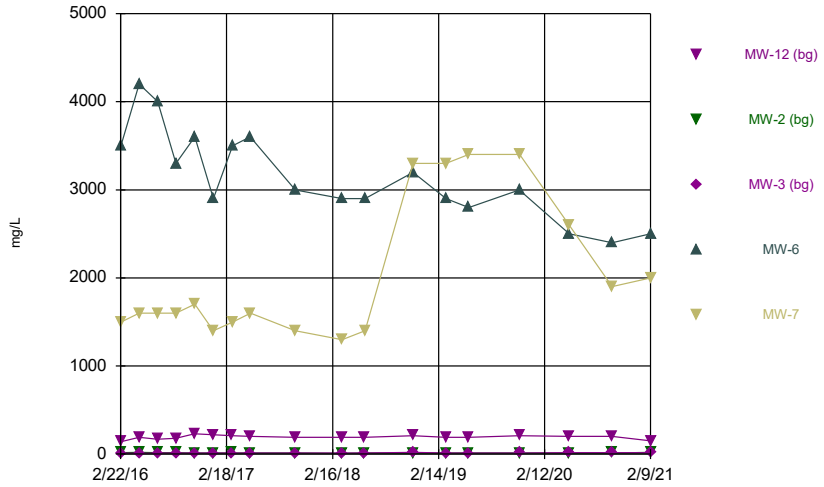
Time Series



Constituent: Calcium Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

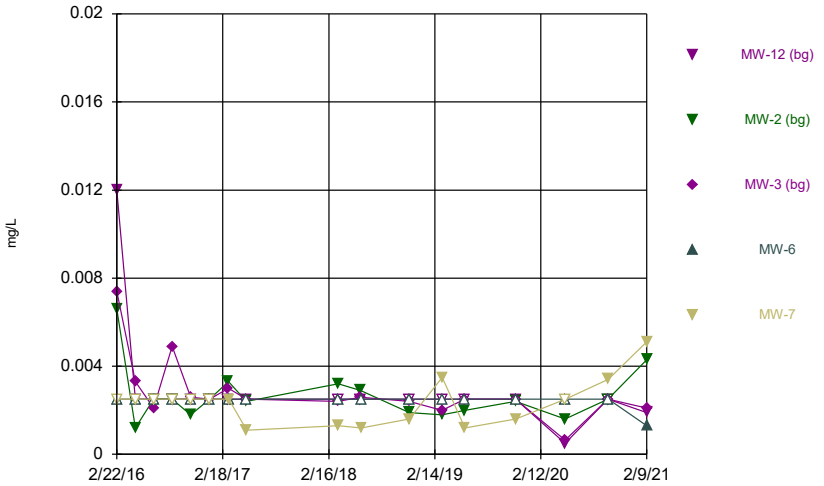
Time Series



Constituent: Chloride Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

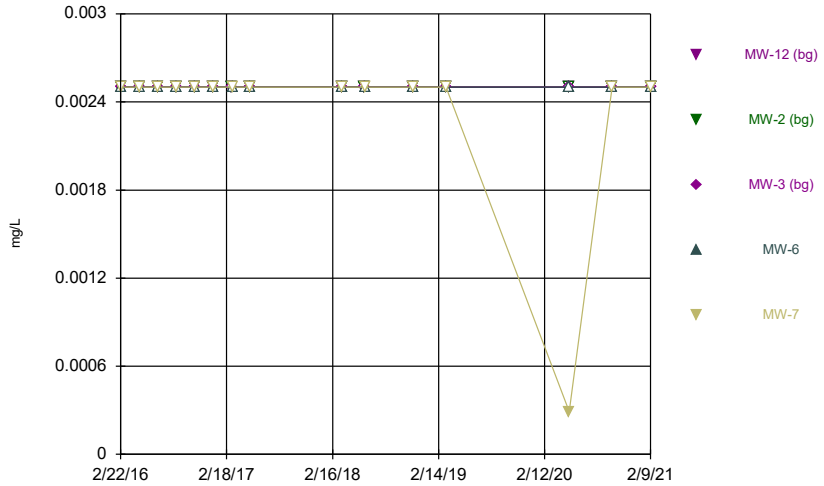
Time Series



Constituent: Chromium Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

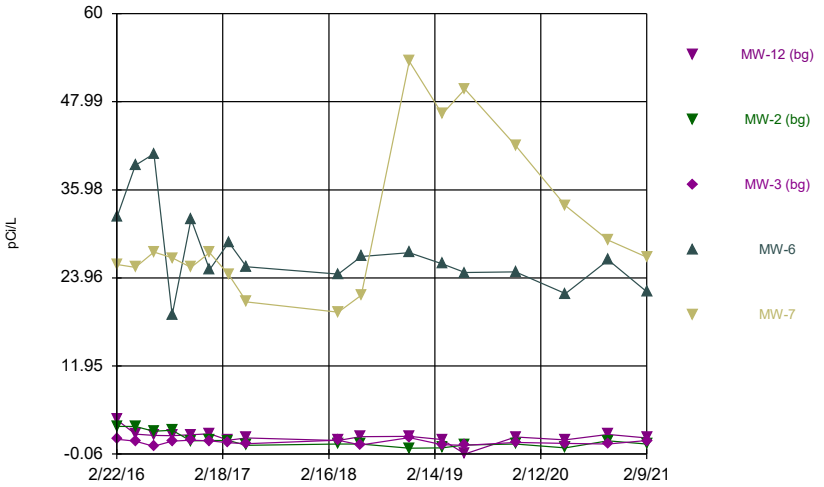
Time Series



Constituent: Cobalt Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

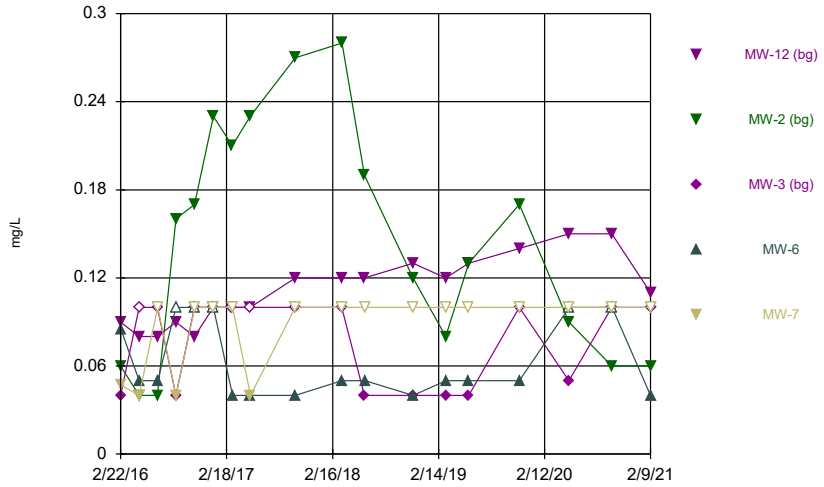
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

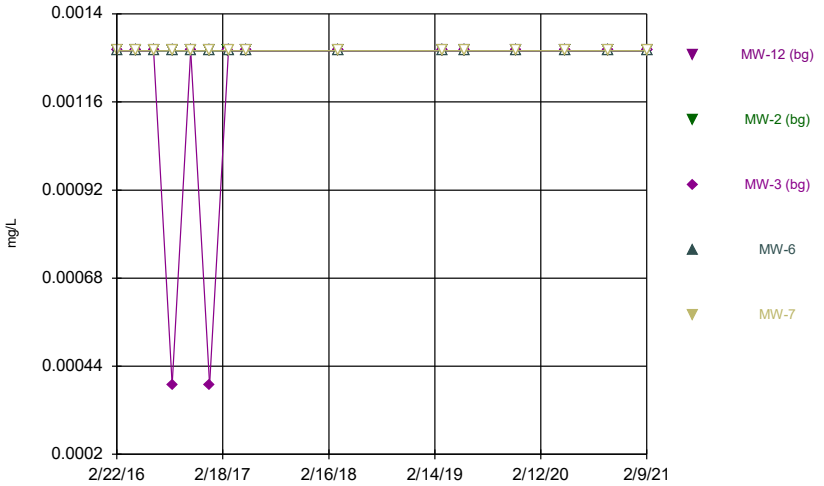
Time Series



Constituent: Fluoride Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

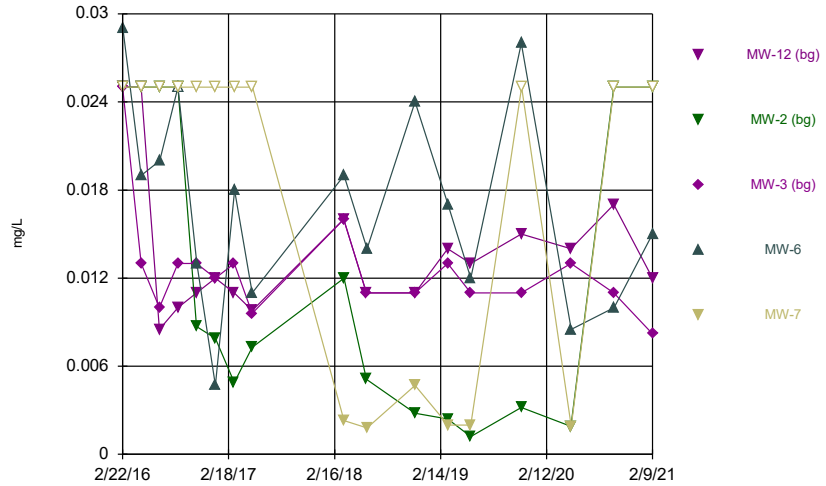
Time Series



Constituent: Lead Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

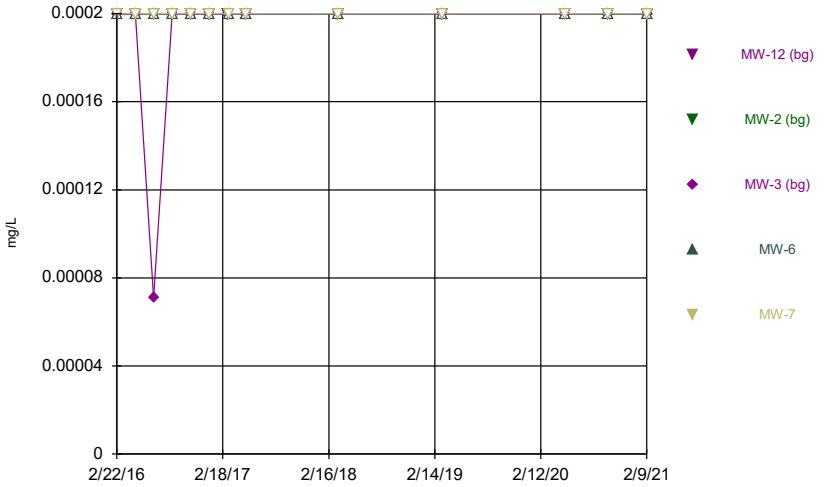
Time Series



Constituent: Lithium Analysis Run 5/19/2021 2:14 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

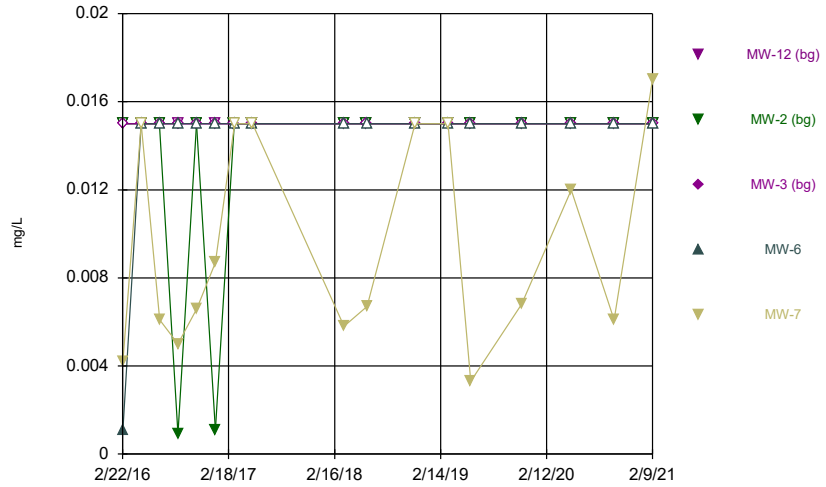
Time Series



Constituent: Mercury Analysis Run 5/19/2021 2:15 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

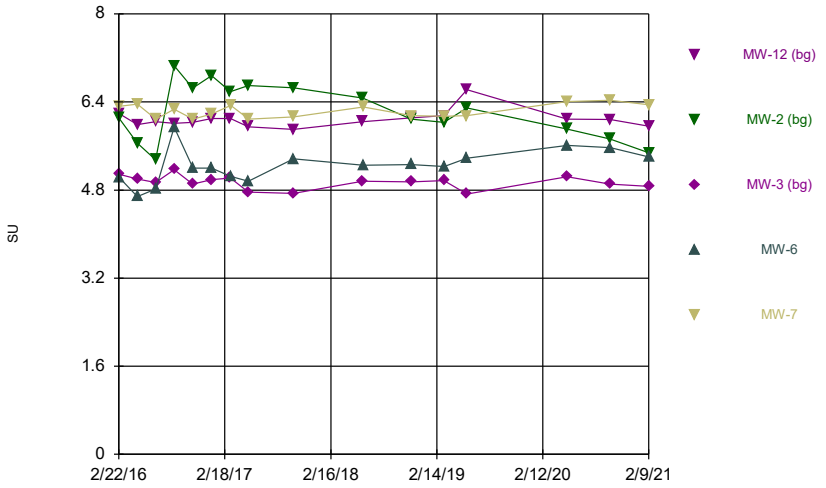
Time Series



Constituent: Molybdenum Analysis Run 5/19/2021 2:15 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



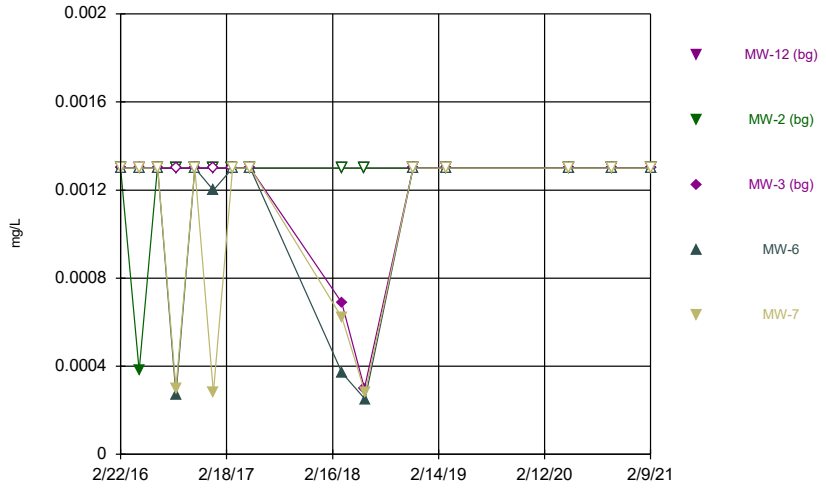
Constituent: pH Analysis Run 5/19/2021 2:15 PM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



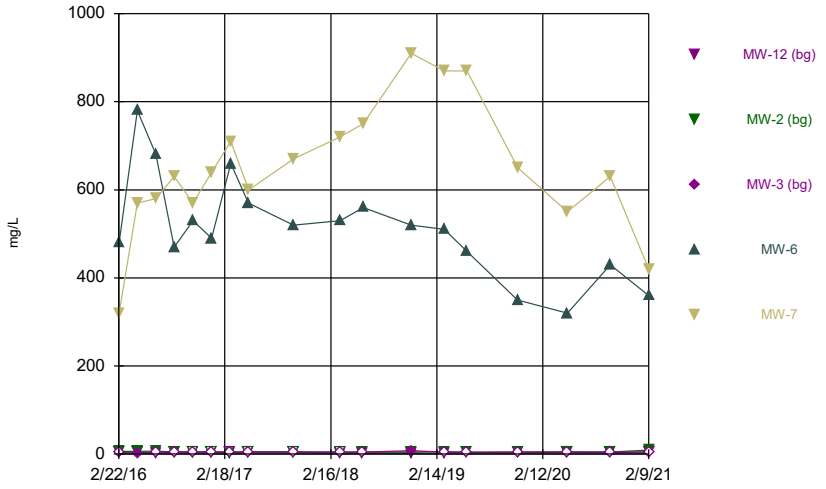
Constituent: Selenium Analysis Run 5/19/2021 2:15 PM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



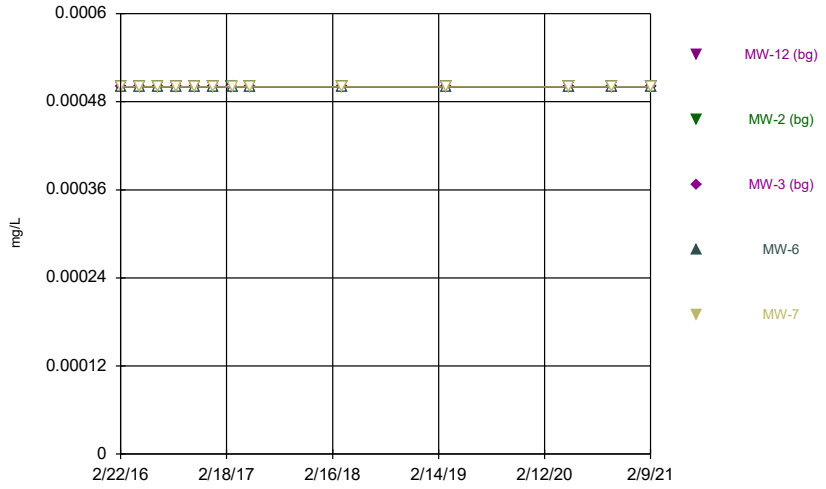
Constituent: Sulfate Analysis Run 5/19/2021 2:15 PM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

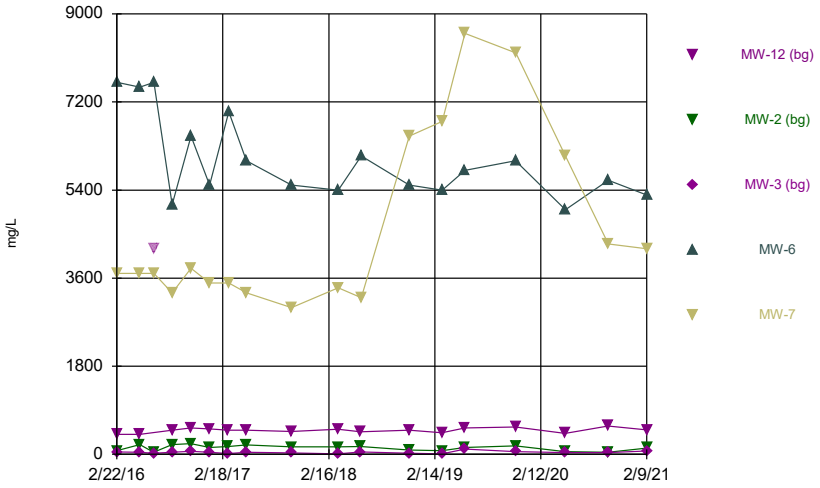
Time Series



Constituent: Thallium Analysis Run 5/19/2021 2:15 PM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/19/2021 2:15 PM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0013	<0.0013	<0.0013	0.0021	0.0025

Time Series

Constituent: Barium (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	0.011	0.015	0.023	0.065	0.085

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025

Time Series

Constituent: Boron (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	0.09	0.024 (I)	<0.05	7.5	3

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	26	9.1	2.4	230	250

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	150	20	15	2500	2000

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	0.0019 (I)	0.0043	0.0021 (I)	0.0013 (I)	0.0051

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	2.16	1.3	1.78	22.1	26.8

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	0.11	0.06 (I)	<0.1	0.04 (I)	<0.1

Time Series

Constituent: Lead (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/19/2021 2:16 PM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-6	MW-7
2/22/2016	<0.025	<0.025	<0.025		
2/23/2016				0.029	<0.025
4/25/2016		<0.025	0.013		
4/26/2016	0.025			0.019 (J)	<0.025
6/27/2016	0.0085	<0.025	0.01		
6/28/2016				0.02	<0.025
8/29/2016	0.01	<0.025	0.013	<0.025	<0.025
11/1/2016	0.011	0.0087	0.013		
11/2/2016				0.013	<0.025
1/4/2017	0.012	0.0079	0.012		
1/5/2017				0.0047 (J)	<0.025
3/10/2017	0.011	0.0049 (J)	0.013		
3/11/2017				0.018	<0.025
5/11/2017	0.0098	0.0073	0.0096	0.011	
5/12/2017					<0.025
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					<0.025
5/5/2020	0.014	0.0019	0.013		
5/6/2020				0.0085	0.0019
9/29/2020	0.017	<0.025	0.011		
9/30/2020				0.01	<0.025
2/9/2021	0.012	<0.025	0.0082	0.015 (I)	<0.025

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.015	<0.015	<0.015	<0.015	0.017

Time Series

Constituent: pH (SU) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	5.96	5.48	4.87	5.4	6.35

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<5	9.2	<5	360	420

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Time Series

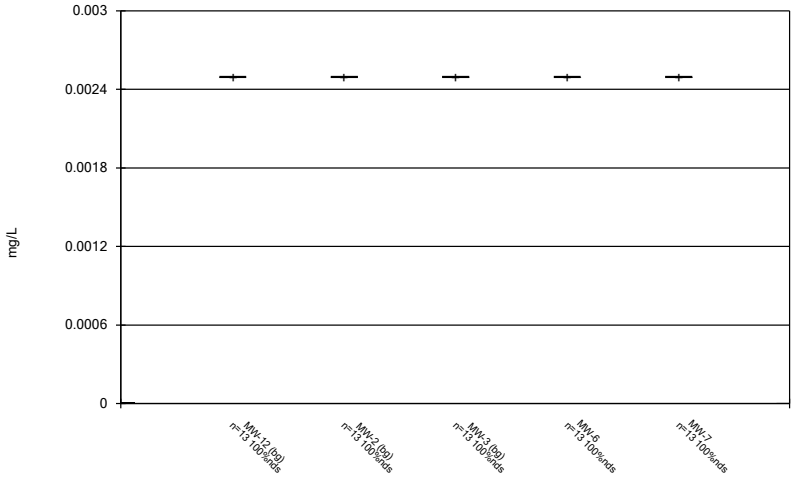
Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/19/2021 2:16 PM

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
2/9/2021	500	130	66	5300	4200

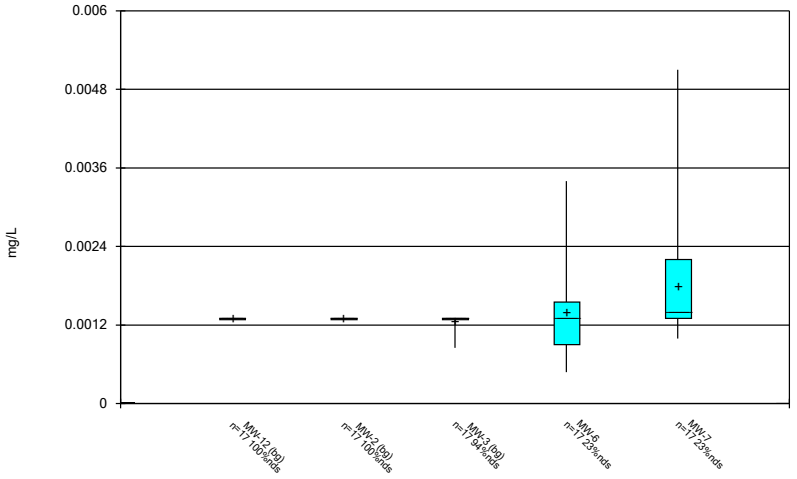
Box Plots

Box & Whiskers Plot



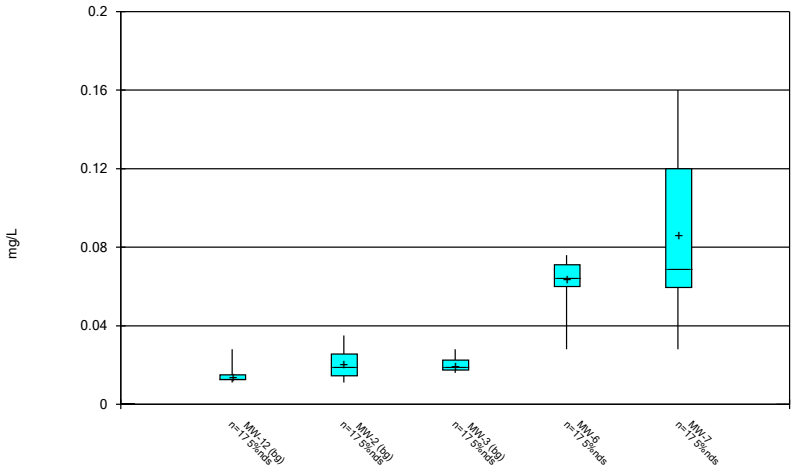
Constituent: Antimony Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



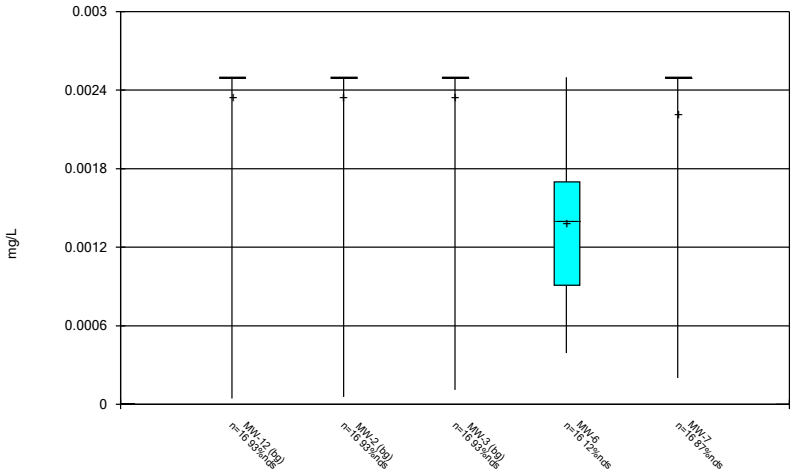
Constituent: Arsenic Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



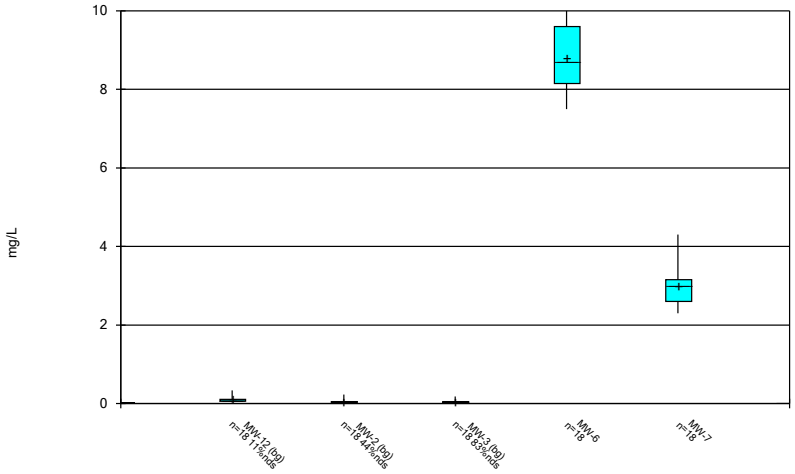
Constituent: Barium Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



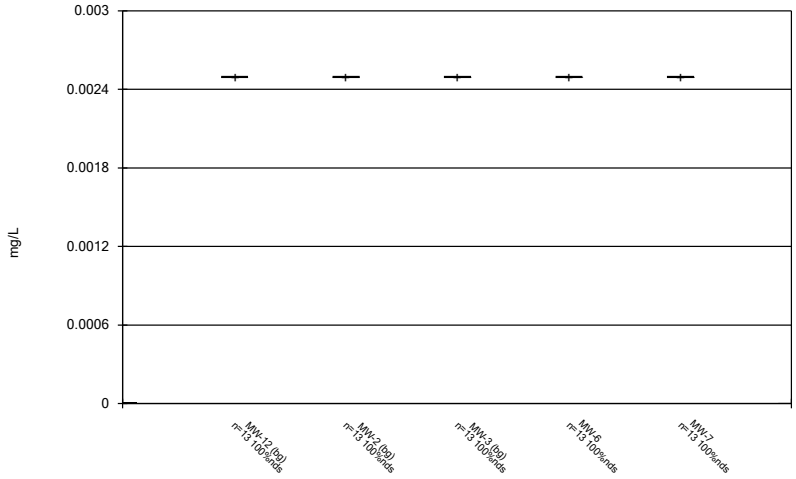
Constituent: Beryllium Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



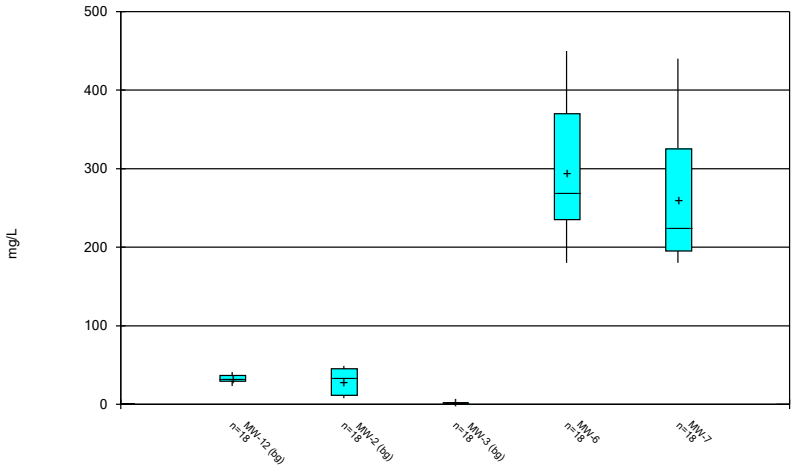
Constituent: Boron Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



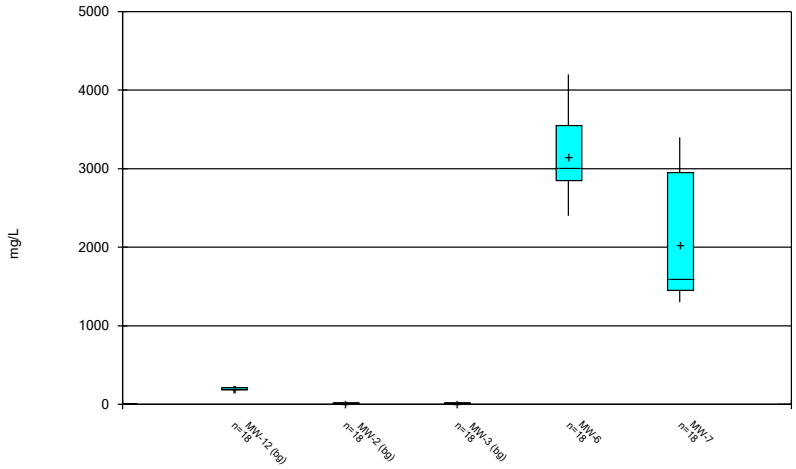
Constituent: Cadmium Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



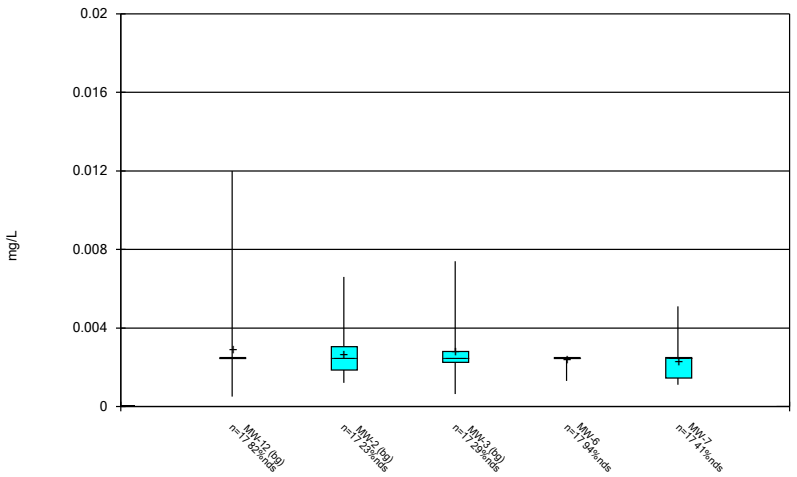
Constituent: Calcium Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



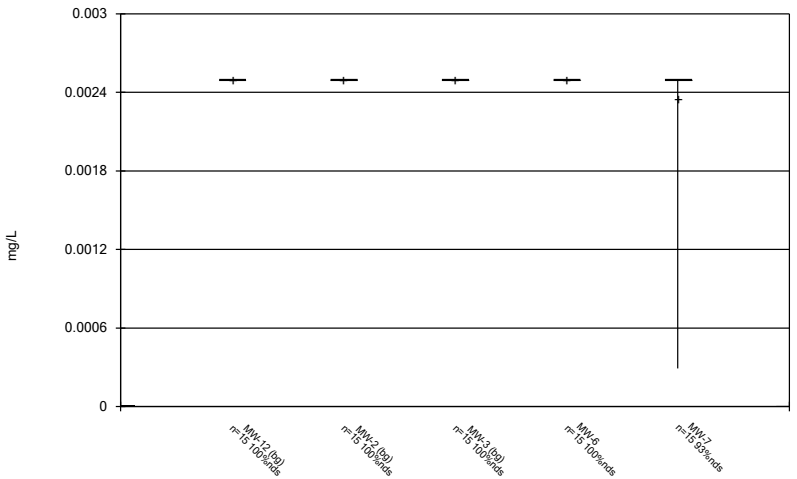
Constituent: Chloride Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



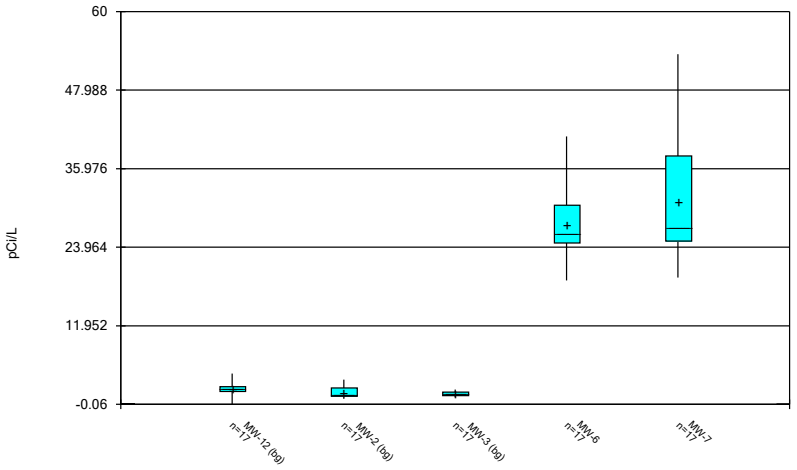
Constituent: Chromium Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



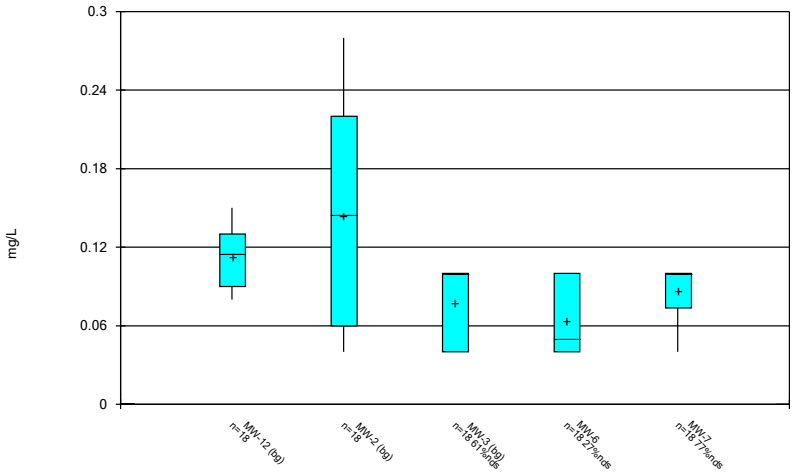
Constituent: Cobalt Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



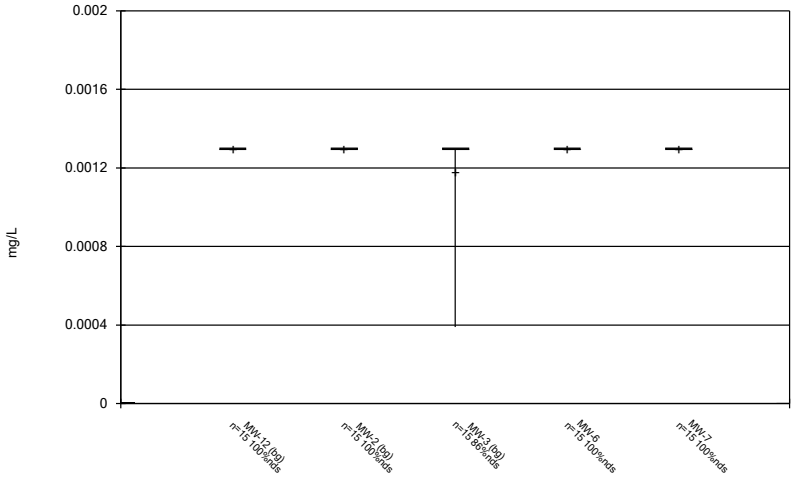
Constituent: Combined Radium 226 + 228 Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



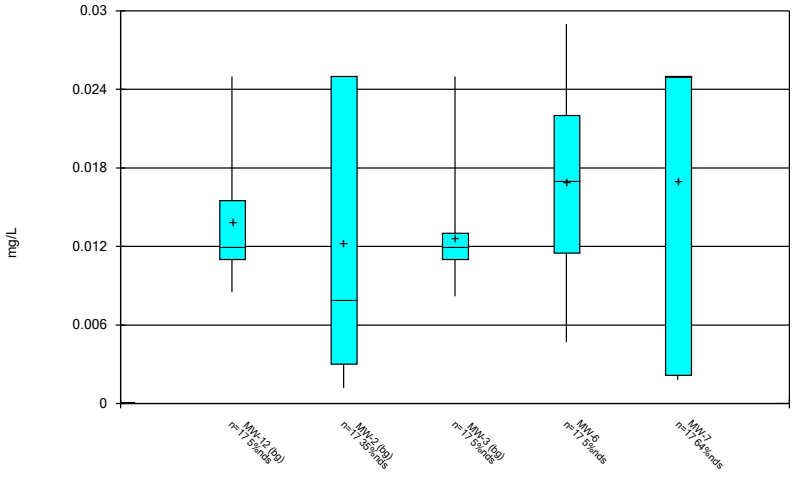
Constituent: Fluoride Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



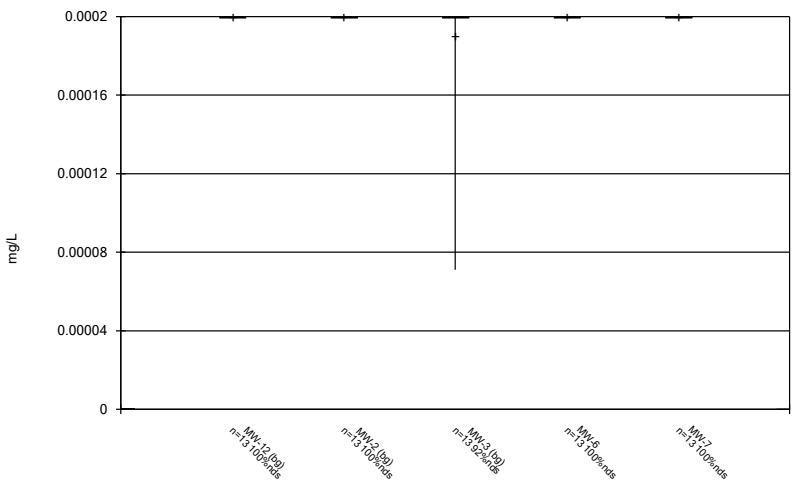
Constituent: Lead Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



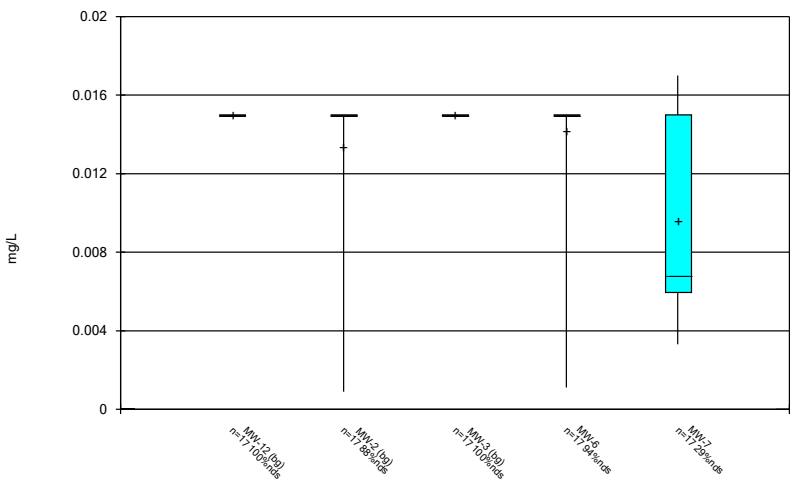
Constituent: Lithium Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



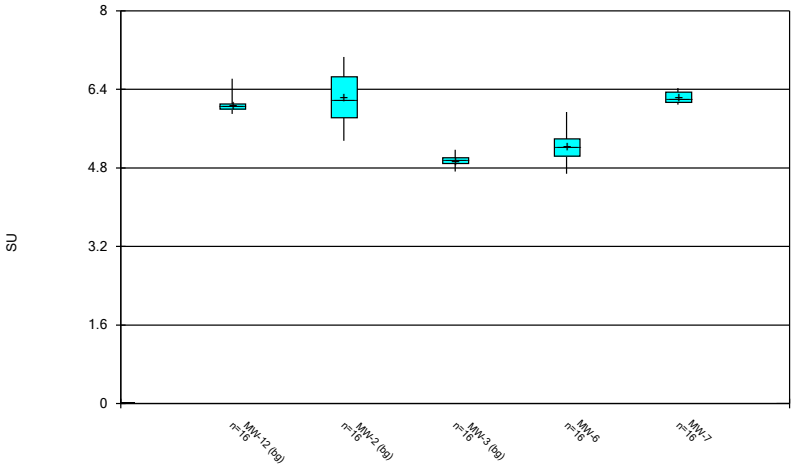
Constituent: Mercury Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



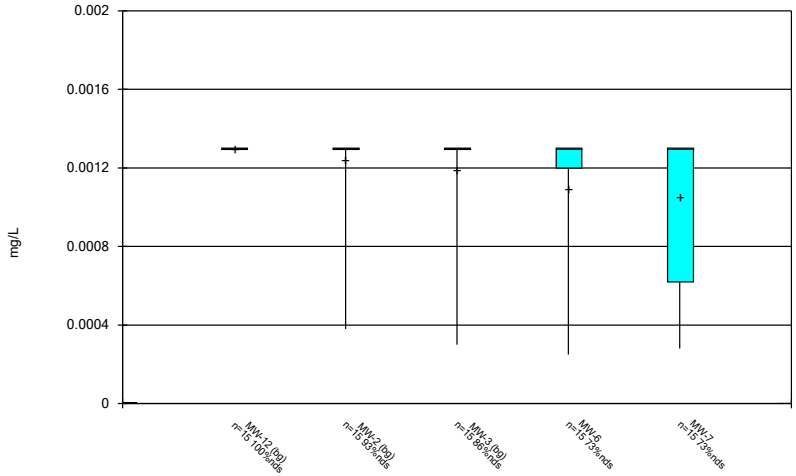
Constituent: Molybdenum Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



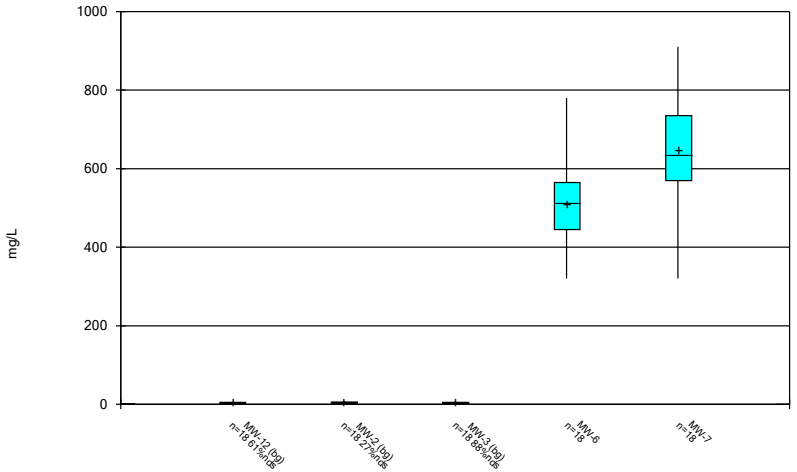
Constituent: pH Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



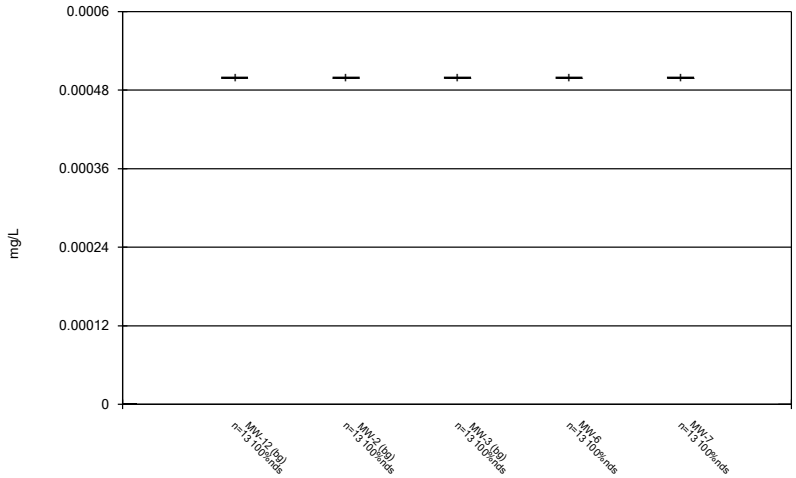
Constituent: Selenium Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



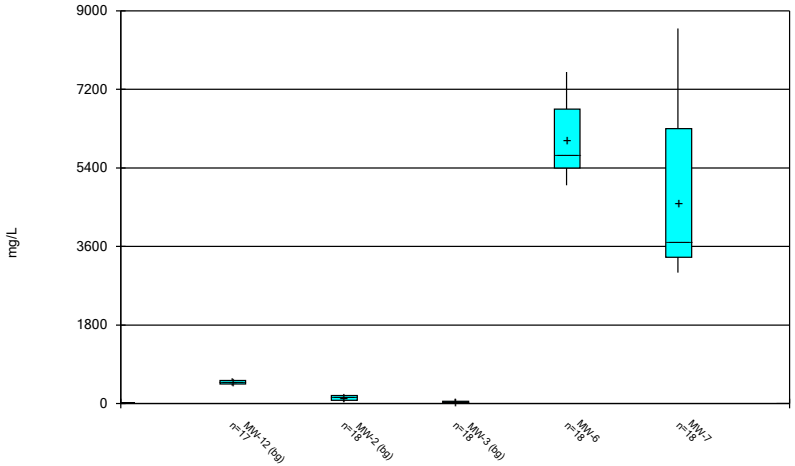
Constituent: Sulfate Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/19/2021 2:18 PM
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/19/2021 2:18 PM

Plant Smith Client: Geosyntec Data: Plant Smith CCR

APPENDIX C

Statistical Analyses – September 2021
Semi-Annual Monitoring

GROUNDWATER STATS CONSULTING

January 5, 2022

Geosyntec Consultants
Attn: Mr. Benjamin K. Amos, Ph.D., P.E.
1255 Roberts Boulevard, Suite 200
Kennesaw, GA 30144

Re: Plant Smith – September 2021 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 2021 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 throughout the report.

- **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 list of Appendix IV downgradient well/constituent pairs with 100% non-detects 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 were 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 non-detects, 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% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

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 Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III 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.

Seasonality

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

Trend Test Evaluation

While trends may be 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, but only pH was eligible for intrawell testing. 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.

Based on the above screening, intrawell methods were recommended for pH, and interwell methods were 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.

Outlier Analysis

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.

Mann-Whitney Evaluation

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.

Trend Tests

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 2021 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. The September 2021 sample from the same well is then compared to its respective background limit.

Interwell prediction limits, combined with a 1-of-2 resample plan, are constructed using all available data from upgradient wells through September 2021 for boron, calcium, chloride, fluoride, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. Background (upgradient) well data for constituents using interwell statistical limits were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. The September 2021 concentration for calcium at upgradient well MW-12 was flagged as an outlier during this analysis in order to maintain statistical limits that are conservative from a regulatory perspective. This sample will be re-evaluated during the next analysis. A summary of any flagged outliers follows this report.

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. For intrawell prediction limits, one exceedance was identified for pH at well MW-7. For interwell prediction limits, exceedances were noted for boron, chloride, sulfate, and TDS in both downgradient wells, as well as calcium in downgradient well MW-7.
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.

Trend Tests

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 the 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. Summaries of the trend tests follow this report and statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: MW-7
- Calcium: MW-3 (upgradient)
- Chloride: MW-3 (upgradient)

Decreasing:

- Chloride: MW-6
- Sulfate: MW-6
- TDS: MW-6

Evaluation of Appendix IV Parameters – September 2021 Sample Event

For Appendix IV parameters, data from upgradient wells are reassessed for outliers during each analysis prior to constructing statistical limits. The September 2021 reported concentrations for cadmium, cobalt, lithium, selenium, and thallium at upgradient well MW-12 were flagged as outliers during this event in order to maintain statistical limits that are conservative from a regulatory perspective. These values will be re-evaluated during the next analysis and a complete list of flagged outliers follows this report.

Interwell Upper Tolerance Limits

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 2021 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.

Groundwater Protection Standards

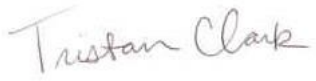
These limits were compared to the Maximum Contaminant Levels (MCLs) and CCR rule-specified levels to determine the highest limit for use as the Groundwater Protection Standard (GWPS) in the Confidence Interval comparisons.

Confidence Intervals

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 downgradient well/constituent pairs with 100% non-detects 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,





Tristan Clark
Groundwater Analyst

Andrew Collins
Project Manager

Appendix III Interwell Prediction Limits - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-6**	**0.33**	**n/a**	**9/17/2021**	**7.3**	**Yes**	**57**	**45.61**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**9/17/2021**	**2.8**	**Yes**	**57**	**45.61**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**250**	**n/a**	**9/17/2021**	**350**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**9/17/2021**	**2900**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**9/17/2021**	**2400**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**MW-6**	**9.2**	**n/a**	**9/17/2021**	**300**	**Yes**	**57**	**59.65**	**n/a**	**n/a**	**0.0005939**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**9.2**	**n/a**	**9/17/2021**	**320**	**Yes**	**57**	**59.65**	**n/a**	**n/a**	**0.0005939**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**954.7**	**n/a**	**9/17/2021**	**5000**	**Yes**	**57**	**0**	**None**	**ln(x)**	**0.003756**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**954.7**	**n/a**	**9/17/2021**	**5600**	**Yes**	**57**	**0**	**None**	**ln(x)**	**0.003756**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-6**	**0.33**	**n/a**	**9/17/2021**	**7.3**	**Yes**	**57**	**45.61**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**9/17/2021**	**2.8**	**Yes**	**57**	**45.61**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	MW-6	250	n/a	9/17/2021	230	No	57	0	n/a	n/a	0.0005939	NP Inter (normality) 1 of 2
Calcium (mg/L)	**MW-7**	**250**	**n/a**	**9/17/2021**	**350**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**9/17/2021**	**2900**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**9/17/2021**	**2400**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	MW-6	0.1679	n/a	9/17/2021	0.1ND	No	57	22.81	Kaplan-Meier	x^(1/3)	0.003756	Param Inter 1 of 2
Fluoride (mg/L)	MW-7	0.1679	n/a	9/17/2021	0.1ND	No	57	22.81	Kaplan-Meier	x^(1/3)	0.003756	Param Inter 1 of 2
pH (SU)	MW-6	6.785	4.682	9/17/2021	5.17	No	51	0	None	No	0.001878	Param Inter 1 of 2
pH (SU)	MW-7	6.785	4.682	9/17/2021	6.6	No	51	0	None	No	0.001878	Param Inter 1 of 2
Sulfate (mg/L)	**MW-6**	**9.2**	**n/a**	**9/17/2021**	**300**	**Yes**	**57**	**59.65**	**n/a**	**n/a**	**0.0005939**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**9.2**	**n/a**	**9/17/2021**	**320**	**Yes**	**57**	**59.65**	**n/a**	**n/a**	**0.0005939**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**954.7**	**n/a**	**9/17/2021**	**5000**	**Yes**	**57**	**0**	**None**	**ln(x)**	**0.003756**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**954.7**	**n/a**	**9/17/2021**	**5600**	**Yes**	**57**	**0**	**None**	**ln(x)**	**0.003756**	**Param Inter 1 of 2**

Appendix III Intrawell Prediction Limits - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	**MW-7**	**6.413**	**5.999**	**9/17/2021**	**6.6**	**Yes**	**12**	**0**	**None**	**No**	**0.001878**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-12	6.214	5.888	9/16/2021	5.9	No	12	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-2	7.353	5.354	9/16/2021	5.47	No	12	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-3	5.193	4.724	9/16/2021	4.98	No	12	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-6	5.781	4.55	9/17/2021	5.17	No	12	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	**MW-7**	**6.413**	**5.999**	**9/17/2021**	**6.6**	**Yes**	**12**	**0**	**None**	**No**	**0.001878**	**Param Intra 1 of 2**

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/3/2022, 4:10 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-7**	**0.2056**	**96**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-3 (bg)**	**0.1169**	**92**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.9005**	**110**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-225.3**	**-107**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-6**	**-55.92**	**-95**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**MW-6**	**-334.6**	**-84**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/3/2022, 4:10 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-12 (bg)	-0.001496	-7	-74	No	19	10.53	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0	-23	-74	No	19	42.11	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	-25	-74	No	19	84.21	n/a	n/a	0.01	NP
Boron (mg/L)	MW-6	-0.2141	-50	-74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-7**	**0.2056**	**96**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-12 (bg)	1.185	39	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-4.232	-59	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-3 (bg)**	**0.1169**	**92**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	21.13	69	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	0	-2	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.2544	-19	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.9005**	**110**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-225.3**	**-107**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	153.1	55	74	No	19	0	n/a	n/a	0.01	NP
pH (SU)	MW-12 (bg)	-0.003084	-5	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	MW-2 (bg)	-0.225	-54	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	MW-3 (bg)	-0.02124	-35	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	MW-7	0.02447	40	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-9	-74	No	19	63.16	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.1409	-38	-74	No	19	26.32	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	74	No	19	89.47	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-6**	**-55.92**	**-95**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-7	22.43	25	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	0	4	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-16.9	-61	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	2.461	20	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**MW-6**	**-334.6**	**-84**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	MW-7	276.5	44	74	No	19	0	n/a	n/a	0.01	NP

Upper Tolerance Limits - Summary Table

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/5/2022, 8:59 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0025	n/a	n/a	n/a	42	n/a	n/a	100	n/a	n/a	0.116	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0014	n/a	n/a	n/a	54	n/a	n/a	94.44	n/a	n/a	0.06267	NP Inter(NDs)
Barium (mg/L)	n/a	0.02787	n/a	n/a	n/a	54	0.017	0.005323	5.556	None	No	0.05	Inter
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	51	n/a	n/a	94.12	n/a	n/a	0.0731	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	41	n/a	n/a	100	n/a	n/a	0.1221	NP Inter(NDs)
Chromium (mg/L)	n/a	0.012	n/a	n/a	n/a	54	n/a	n/a	46.3	n/a	n/a	0.06267	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.64	n/a	n/a	n/a	54	n/a	n/a	0	n/a	n/a	0.06267	NP Inter(normality)
Fluoride (mg/L)	n/a	0.2057	n/a	n/a	n/a	57	0.4063	0.0907	22.81	Kaplan-Meier	x^(1/3)	0.05	Inter
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	48	n/a	n/a	95.83	n/a	n/a	0.08526	NP Inter(NDs)
Lithium (mg/L)	n/a	0.01867	n/a	n/a	n/a	53	0.07716	0.02904	16.98	Kaplan-Meier	sqrt(x)	0.05	Inter
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	42	n/a	n/a	97.62	n/a	n/a	0.116	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	54	n/a	n/a	96.3	n/a	n/a	0.06267	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0013	n/a	n/a	n/a	47	n/a	n/a	93.62	n/a	n/a	0.08974	NP Inter(NDs)
Thallium (mg/L)	n/a	0.0005	n/a	n/a	n/a	41	n/a	n/a	100	n/a	n/a	0.1221	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		0.0014	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		4.64	5
Fluoride, Total (mg/L)	4		0.21	4
Lead, Total (mg/L)	0.015		0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.019	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*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Confidence Intervals Summary Table - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/5/2022, 9:09 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**	**30.62**	**24.09**	**5**	**Yes**	**18**	**27.51**	**5.623**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**36.23**	**24.9**	**5**	**Yes**	**18**	**31.14**	**10.19**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**

Confidence Intervals Summary Table - All Results

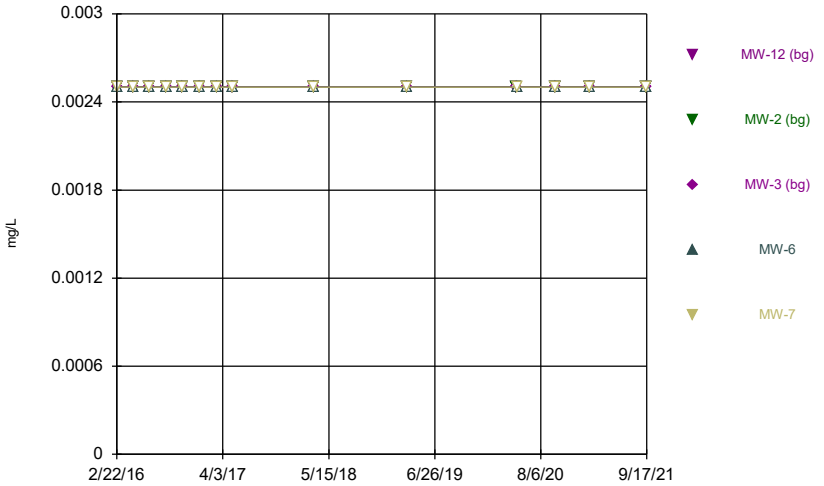
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/5/2022, 9:09 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-6	0.001964	0.0008837	0.01	No	18	0.001741	0.0009232	22.22	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.002364	0.001203	0.01	No	18	0.002172	0.001041	22.22	Kaplan-Meier	sqrt(x)	0.01	Param.
Barium (mg/L)	MW-6	0.07028	0.06092	2	No	18	0.0645	0.01065	5.556	None	x^3	0.01	Param.
Barium (mg/L)	MW-7	0.1108	0.06499	2	No	18	0.08789	0.03784	5.556	None	No	0.01	Param.
Beryllium (mg/L)	MW-6	0.001767	0.0009922	0.004	No	17	0.001379	0.0006179	11.76	None	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	17	0.002231	0.0007605	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-6	0.0025	0.0013	0.1	No	18	0.002433	0.0002828	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.002579	0.001264	0.1	No	18	0.002594	0.001424	38.89	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	MW-7	0.0025	0.00029	0.006	No	16	0.002362	0.0005525	93.75	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**30.62**	**24.09**	**5**	**Yes**	**18**	**27.51**	**5.623**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**36.23**	**24.9**	**5**	**Yes**	**18**	**31.14**	**10.19**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	19	0.065	0.0263	31.58	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.047	4	No	19	0.08774	0.02444	78.95	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.01972	0.0113	0.04	No	18	0.01551	0.006961	5.556	None	No	0.01	Param.
Lithium (mg/L)	MW-7	0.005	0.002	0.04	No	18	0.00415	0.001377	66.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-6	0.015	0.0011	0.1	No	18	0.01423	0.003276	94.44	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.015	0.0058	0.1	No	18	0.009906	0.004782	33.33	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-6	0.0013	0.00037	0.05	No	16	0.001106	0.0004028	75	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-7	0.0013	0.0003	0.05	No	16	0.001068	0.0004226	75	None	No	0.01	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

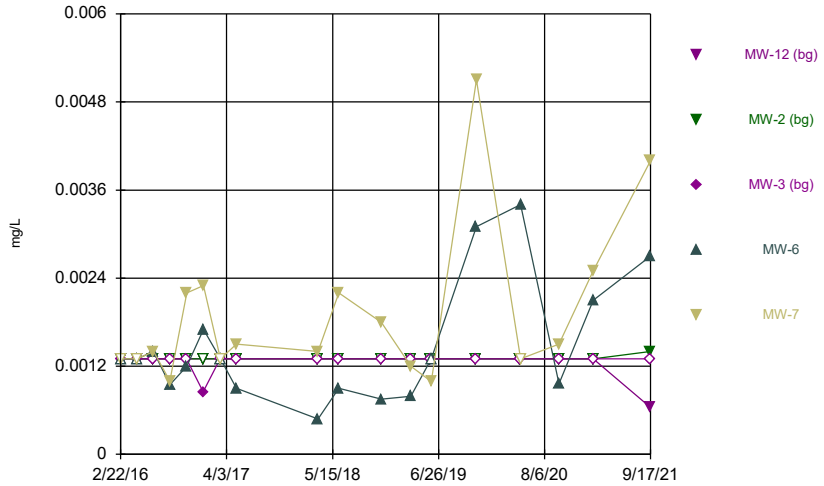
Time Series



Constituent: Antimony Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

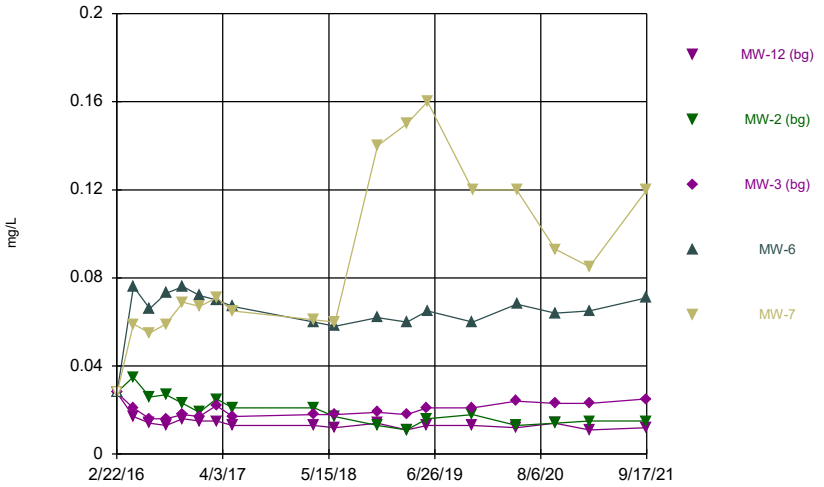
Time Series



Constituent: Arsenic Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

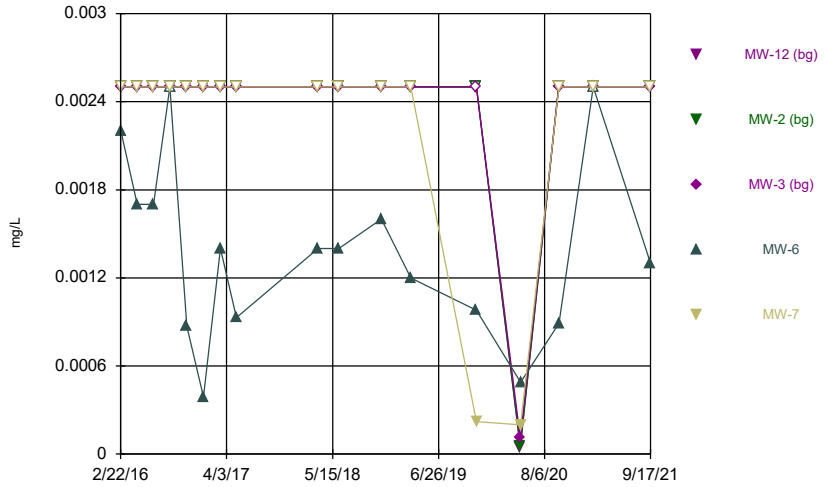
Time Series



Constituent: Barium Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

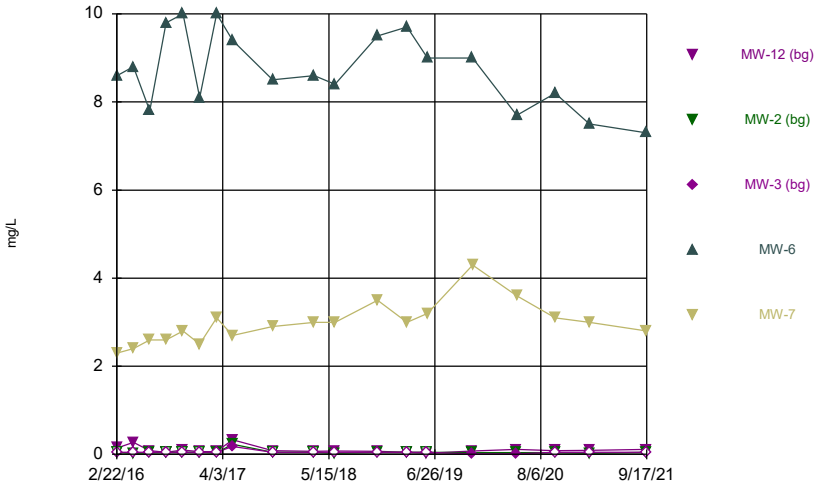
Time Series



Constituent: Beryllium Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

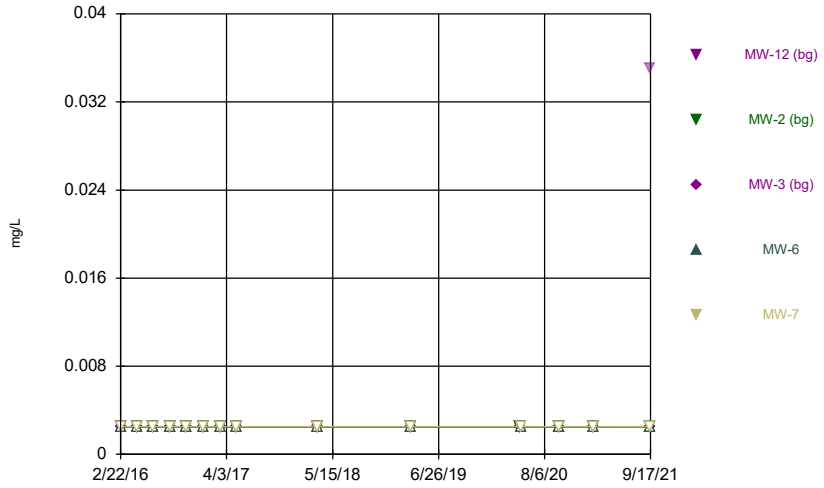
Time Series



Constituent: Boron Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

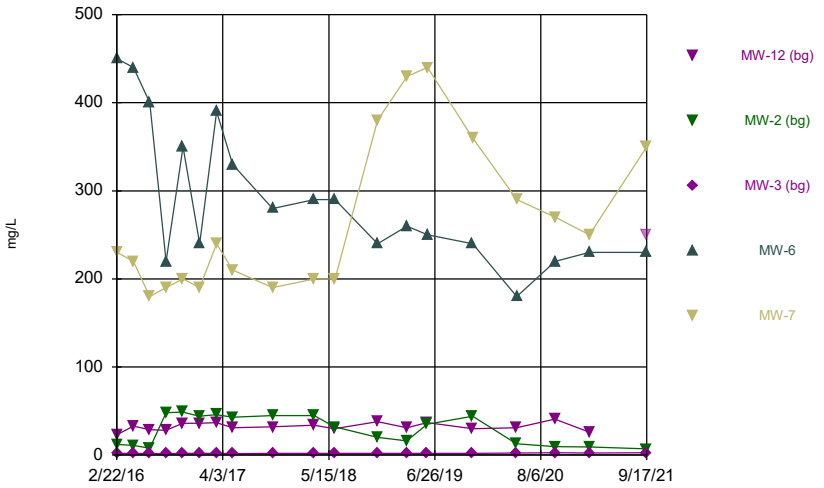
Time Series



Constituent: Cadmium Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

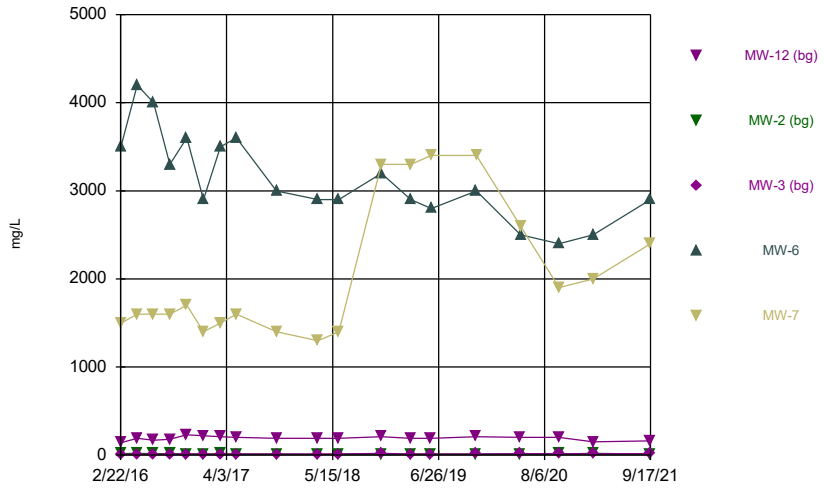
Time Series



Constituent: Calcium Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

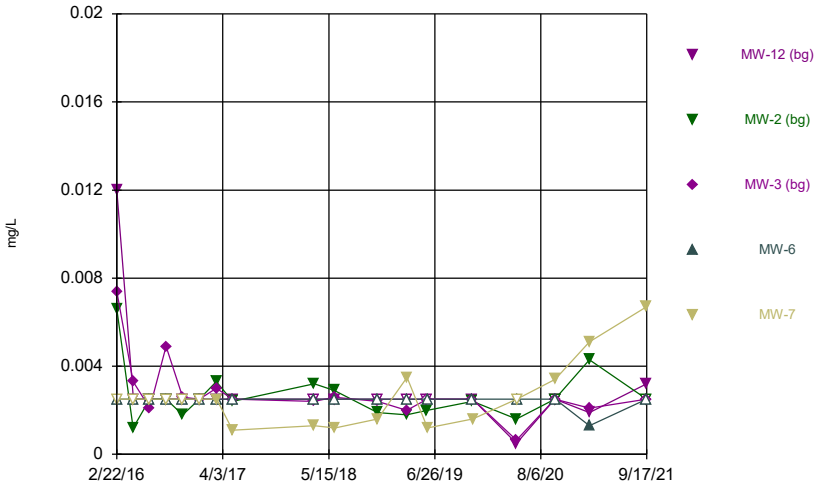
Time Series



Constituent: Chloride Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

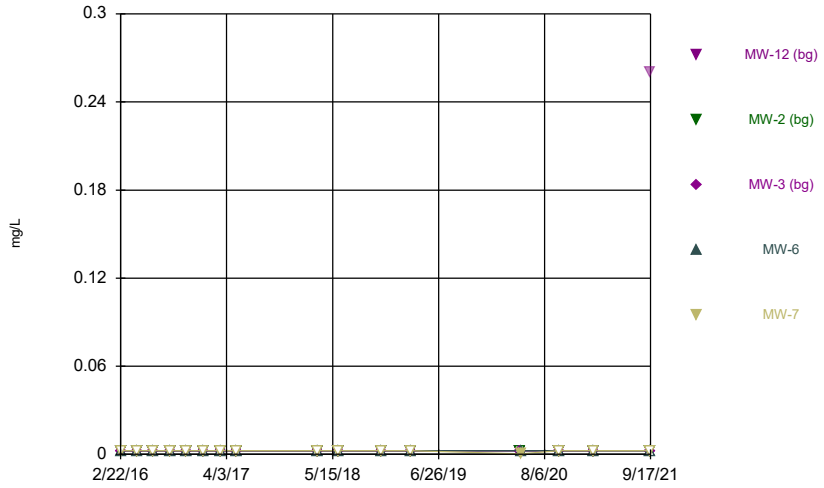
Time Series



Constituent: Chromium Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

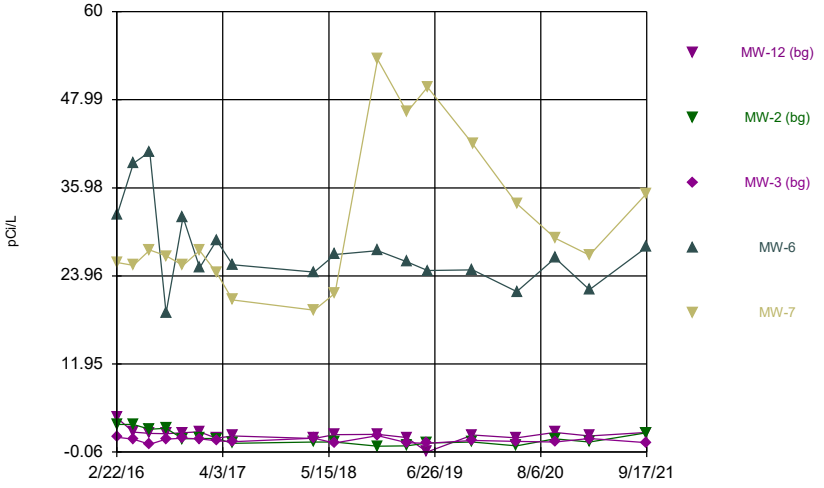
Time Series



Constituent: Cobalt Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

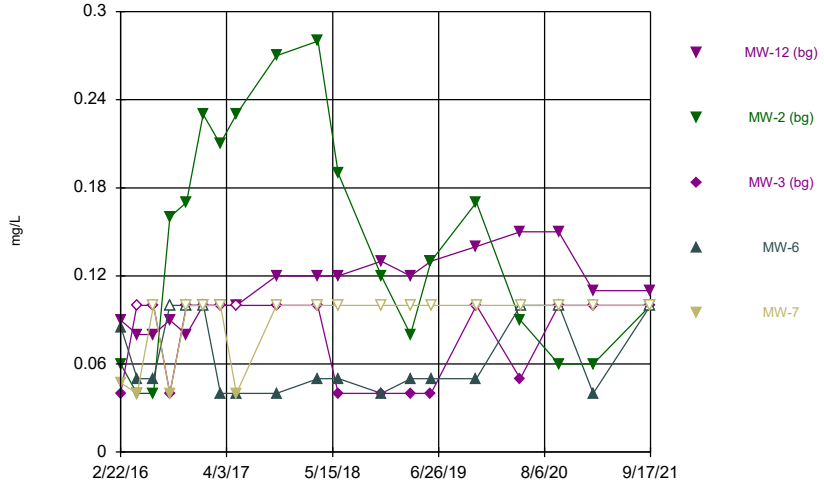
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

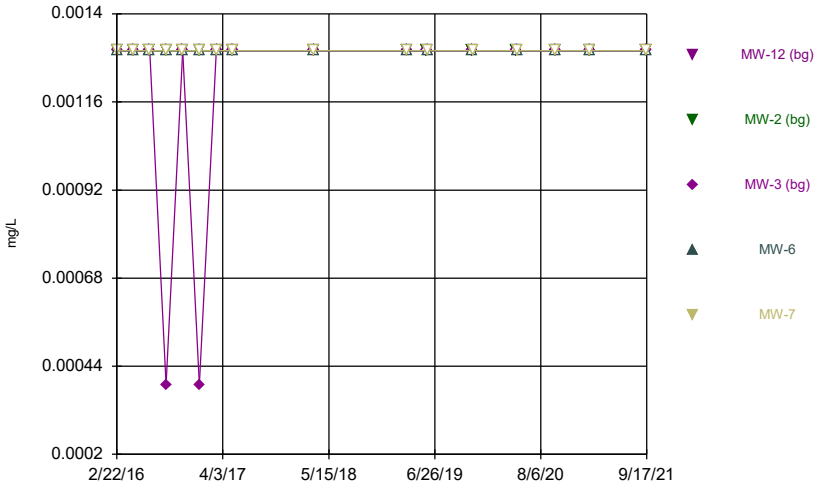
Time Series



Constituent: Fluoride Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

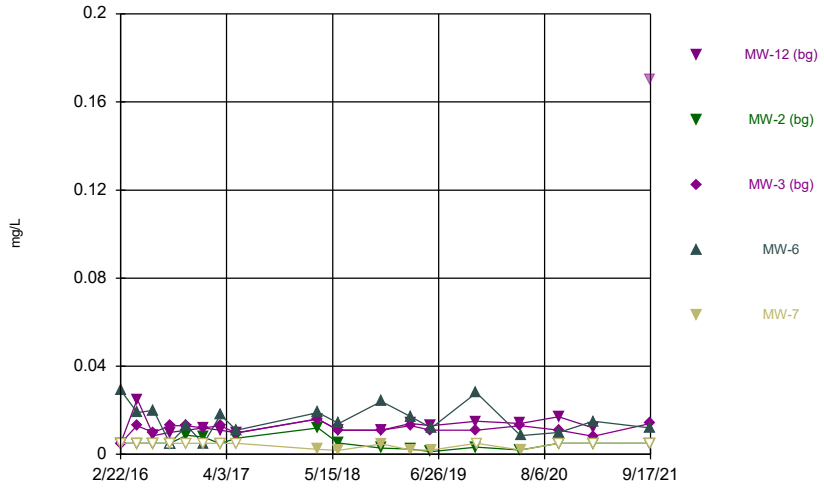
Time Series



Constituent: Lead Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

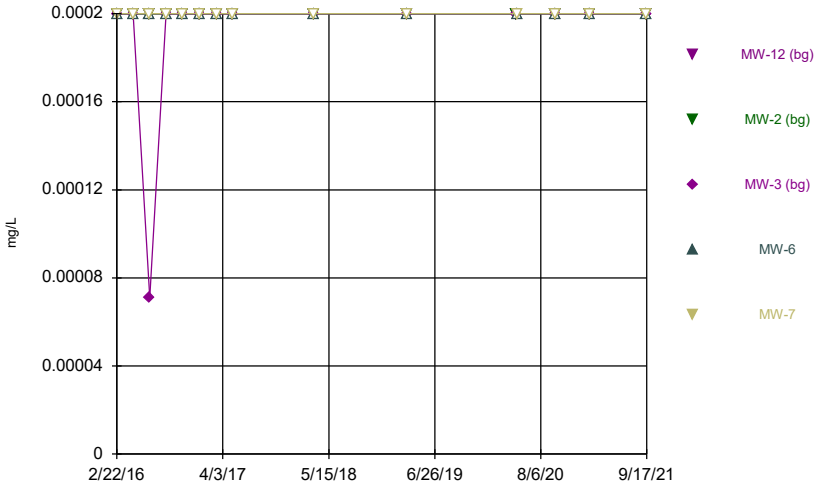
Time Series



Constituent: Lithium Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

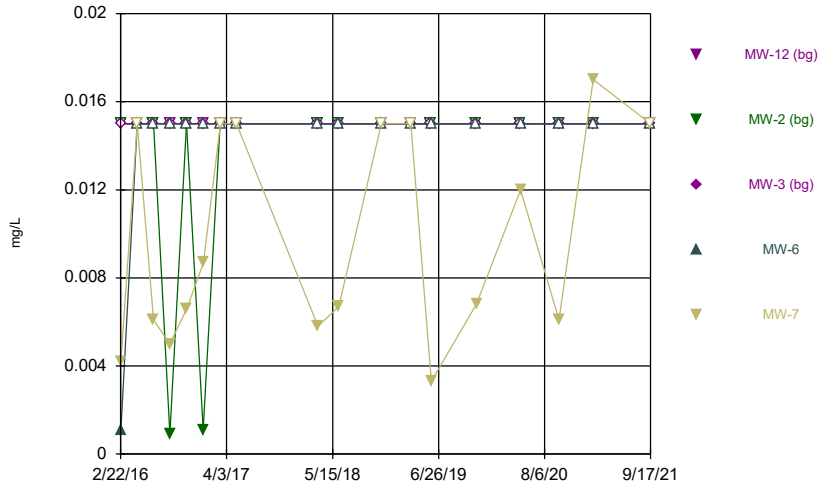
Time Series



Constituent: Mercury Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

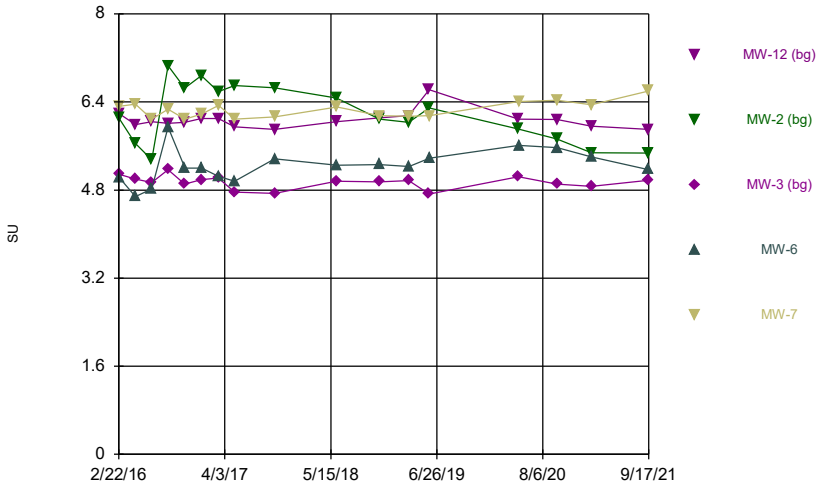
Time Series



Constituent: Molybdenum Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

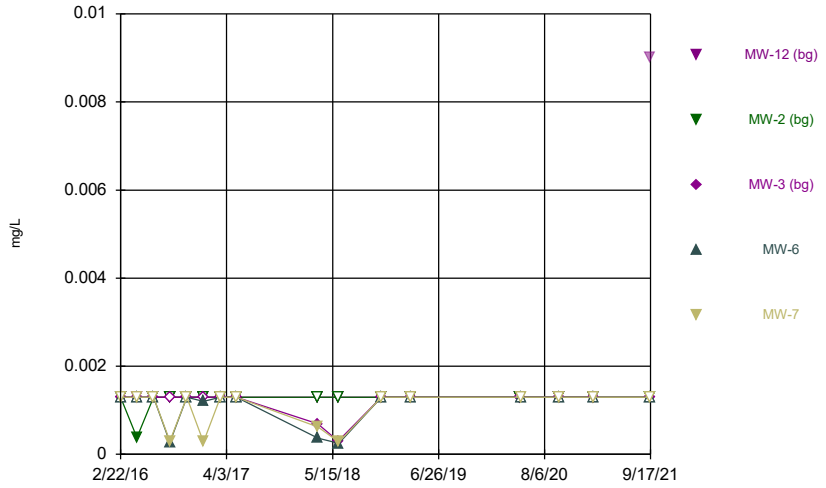
Time Series



Constituent: pH Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

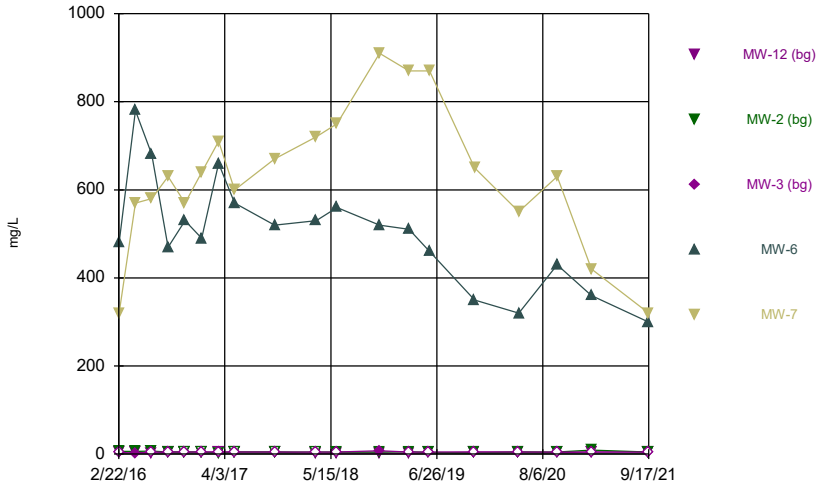
Time Series



Constituent: Selenium Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

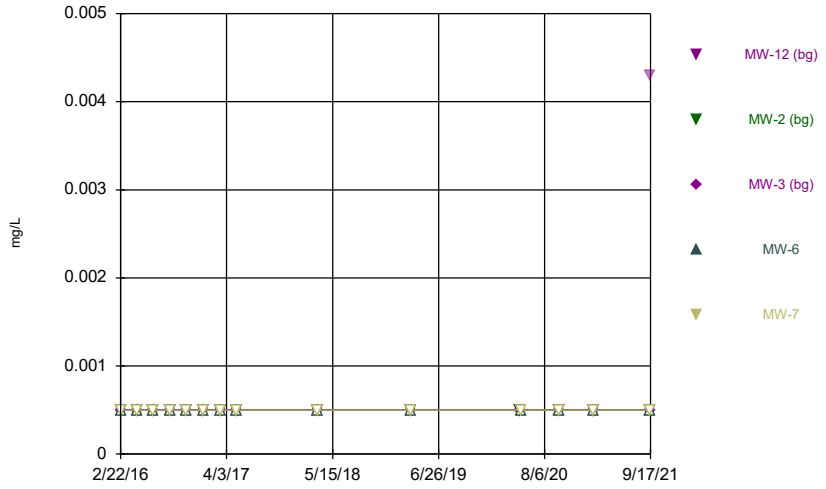
Time Series



Constituent: Sulfate Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

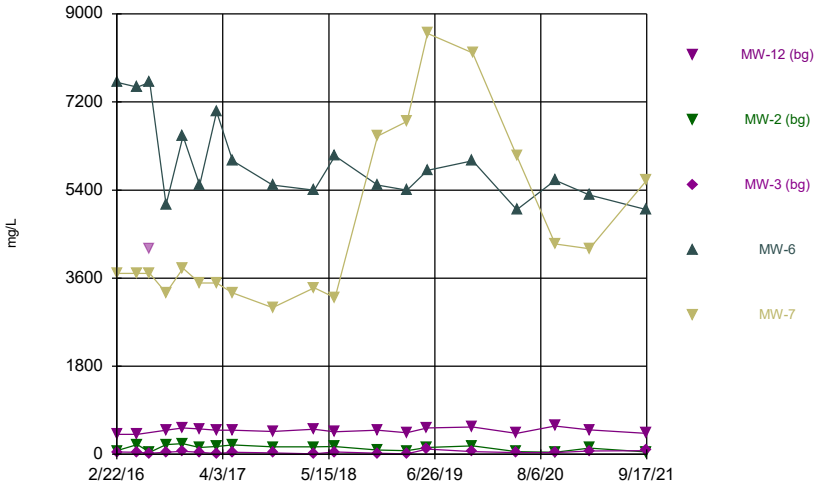
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 12/29/2021 2:36 PM View: Appendix III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/16/2021	<0.0025	<0.0025	<0.0025		
9/17/2021				<0.0025	<0.0025

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0013	<0.0013	<0.0013	0.0021	0.0025
9/16/2021	0.00064 (I)	0.0014	<0.0013		
9/17/2021				0.0027	0.004

Time Series

Constituent: Barium (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
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
2/9/2021	0.011	0.015	0.023	0.065	0.085
9/16/2021	0.012 (V)	0.015	0.025		
9/17/2021				0.071	0.12

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/16/2021	<0.0025	<0.0025	<0.0025		
9/17/2021				0.0013 (I)	<0.0025

Time Series

Constituent: Boron (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	0.09	0.024 (I)	<0.05	7.5	3
9/16/2021	0.11	0.045 (I)	<0.05		
9/17/2021				7.3	2.8

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/16/2021	0.035 (o)	<0.0025	<0.0025		
9/17/2021				<0.0025	<0.0025

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
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
2/9/2021	26	9.1	2.4	230	250
9/16/2021	250 (o)	6.9	2.6		
9/17/2021				230	350

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
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
2/9/2021	150	20	15	2500	2000
9/16/2021	160	11	15		
9/17/2021				2900	2400

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	0.0019 (I)	0.0043	0.0021 (I)	0.0013 (I)	0.0051
9/16/2021	0.0032 (V)	<0.0025	<0.0025		
9/17/2021				<0.0025	0.0067

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/16/2021	0.26 (o)	<0.0025	<0.0025		
9/17/2021				<0.0025	<0.0025

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	2.16	1.3	1.78	22.1	26.8
9/16/2021	2.61	2.57	1.24		
9/17/2021				27.9	35.2

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
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
2/9/2021	0.11	0.06 (I)	<0.1	0.04 (I)	<0.1
9/16/2021	0.11	<0.1	<0.1		
9/17/2021				<0.1	<0.1

Time Series

Constituent: Lead (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
9/16/2021	<0.0013	<0.0013	<0.0013		
9/17/2021				<0.0013	<0.0013

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
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
2/9/2021	0.012	<0.005	0.0082	0.015 (I)	<0.005
9/16/2021	0.17 (o)	<0.005	0.014		
9/17/2021				0.012	<0.005

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/16/2021	<0.0002	<0.0002	<0.0002		
9/17/2021				<0.0002	<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.015	<0.015	<0.015	<0.015	0.017
9/16/2021	<0.015	<0.015	<0.015		
9/17/2021				<0.015	<0.015

Time Series

Constituent: pH (SU) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	5.96	5.48	4.87	5.4	6.35
9/16/2021	5.9	5.47	4.98		
9/17/2021				5.17	6.6

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
9/16/2021	0.009 (o)	<0.0013	<0.0013		
9/17/2021				<0.0013	<0.0013

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
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
2/9/2021	<5	9.2	<5	360	420
9/16/2021	<5	5	<5		
9/17/2021				300	320

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
9/16/2021	0.0043 (o)	<0.0005	<0.0005		
9/17/2021				<0.0005	<0.0005

Time Series

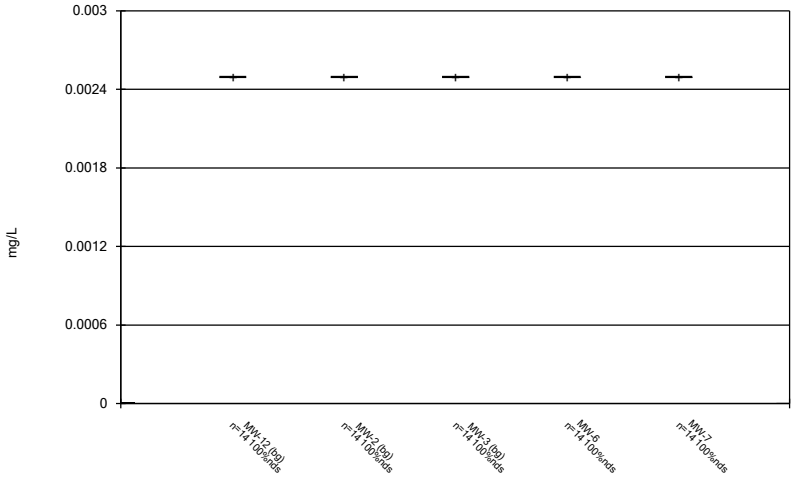
Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

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
2/9/2021	500	130	66	5300	4200
9/16/2021	430	50	76		
9/17/2021				5000	5600

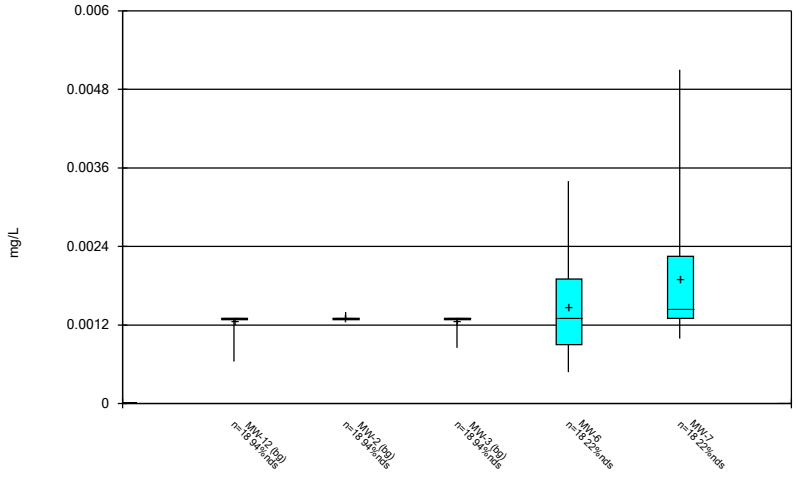
FIGURE B.

Box & Whiskers Plot



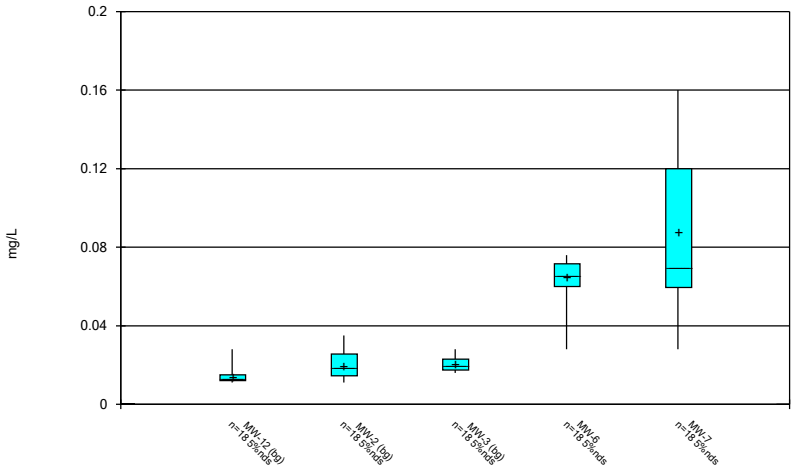
Constituent: Antimony Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



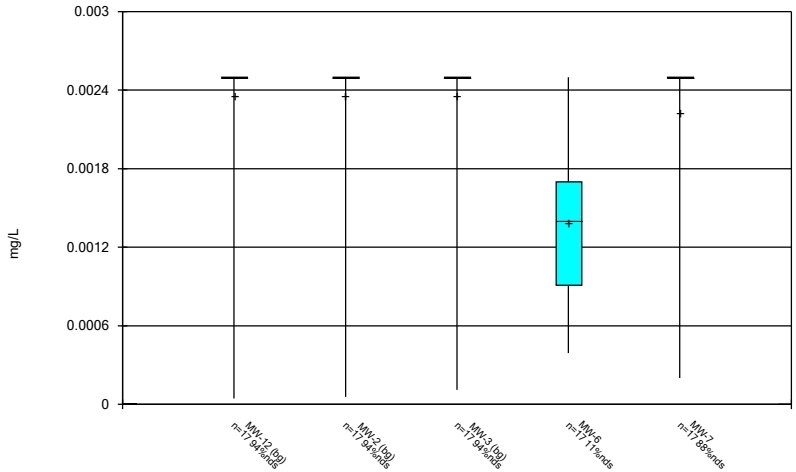
Constituent: Arsenic Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



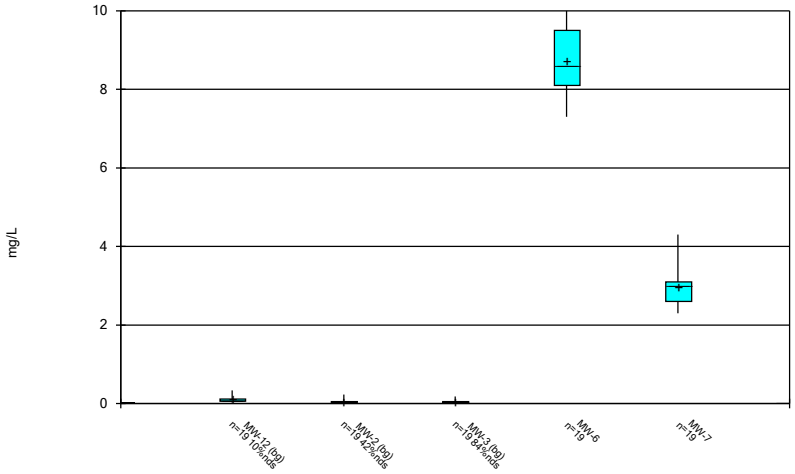
Constituent: Barium Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



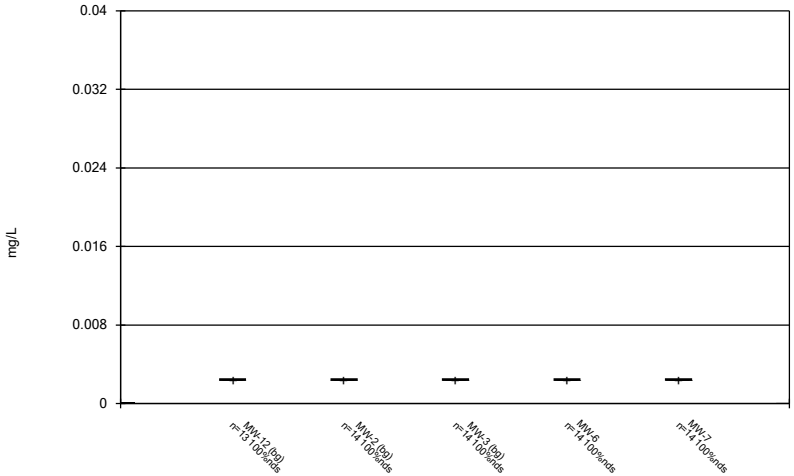
Constituent: Beryllium Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



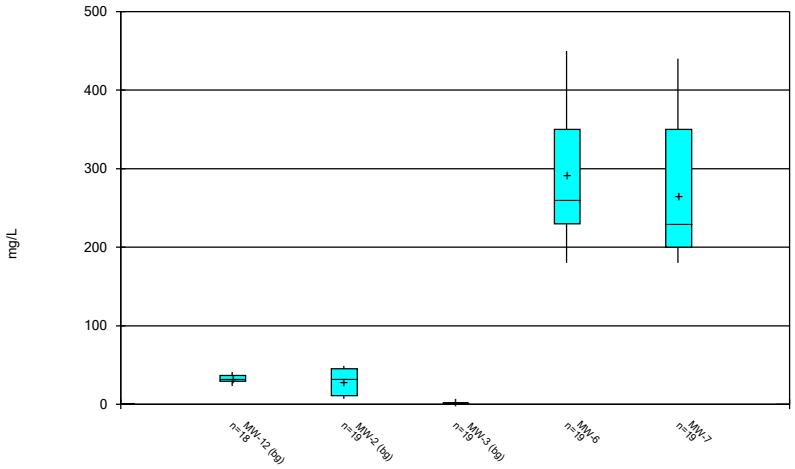
Constituent: Boron Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



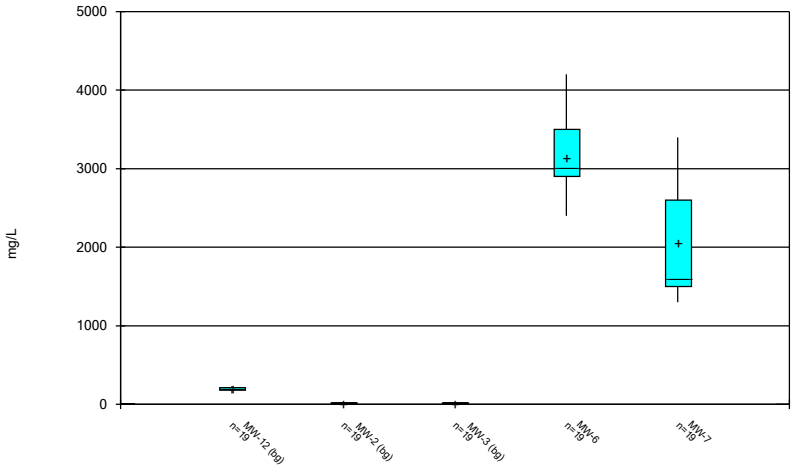
Constituent: Cadmium Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



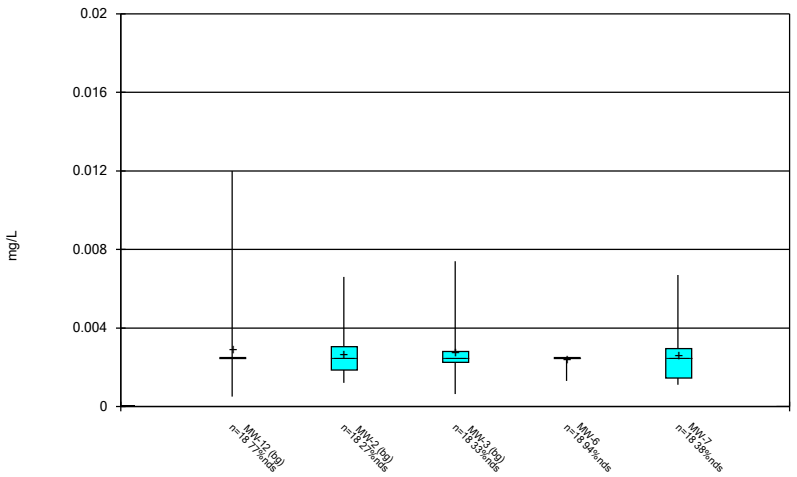
Constituent: Calcium Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



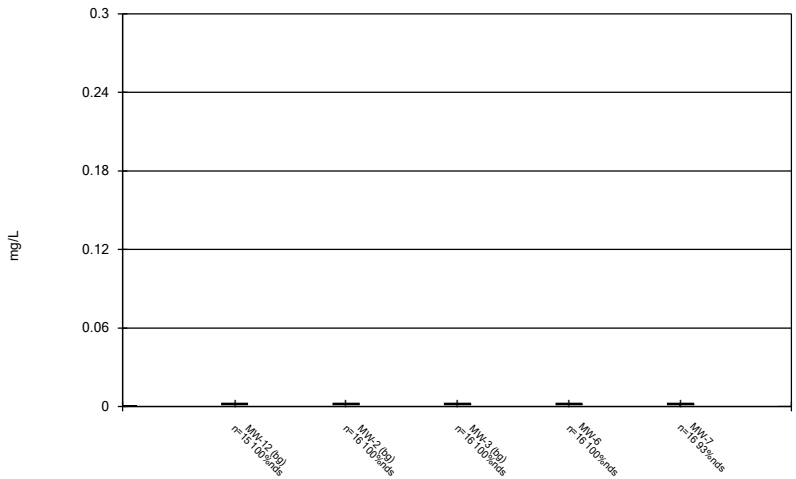
Constituent: Chloride Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



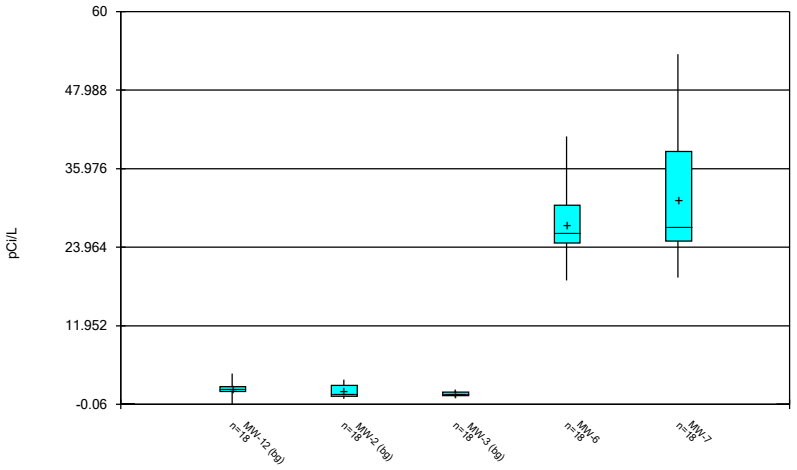
Constituent: Chromium Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



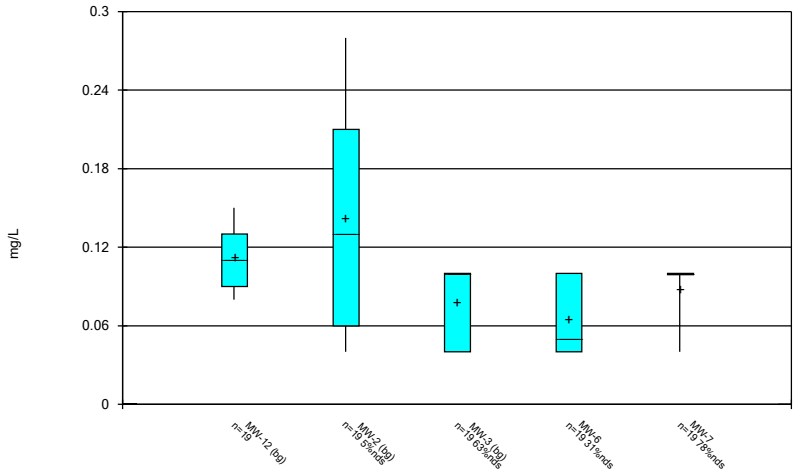
Constituent: Cobalt Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



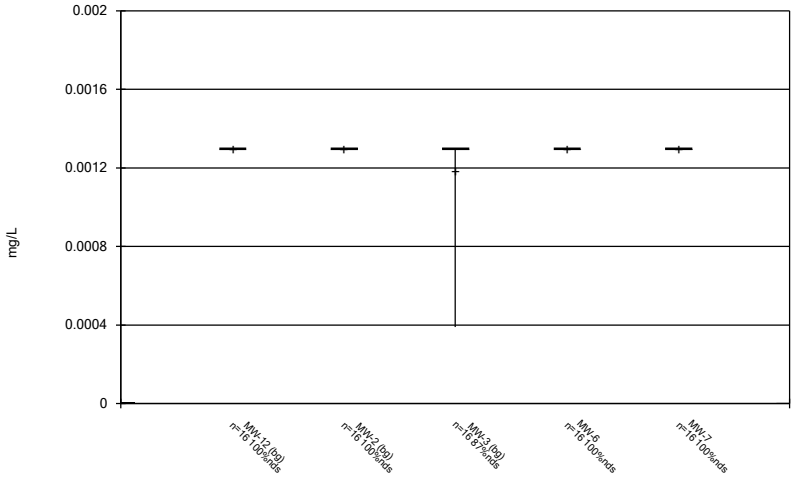
Constituent: Combined Radium 226 + 228 Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



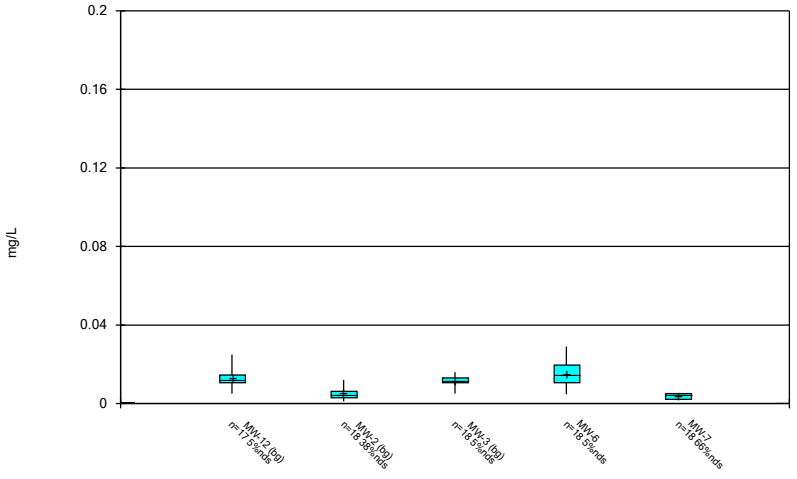
Constituent: Fluoride Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



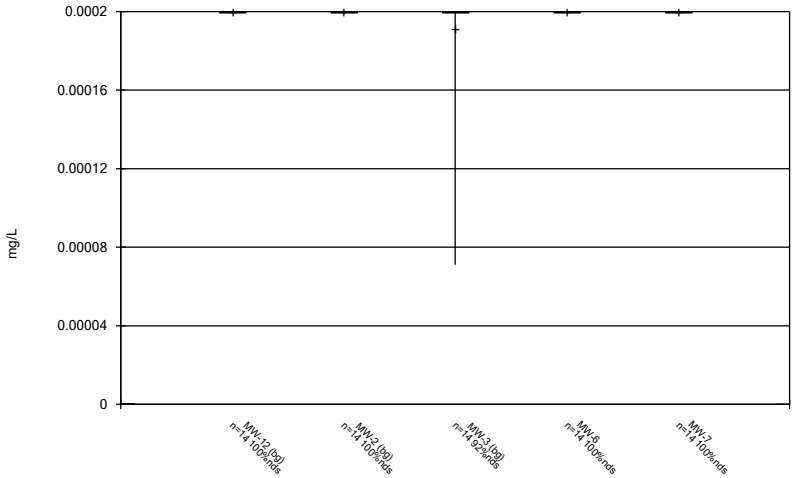
Constituent: Lead Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



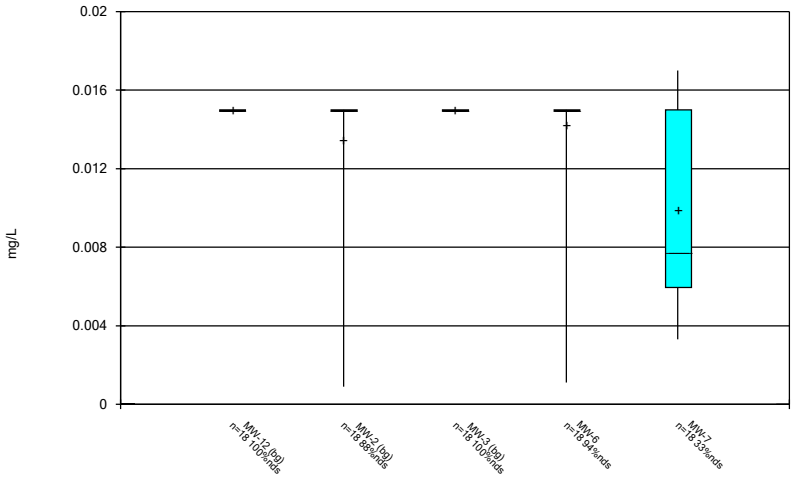
Constituent: Lithium Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



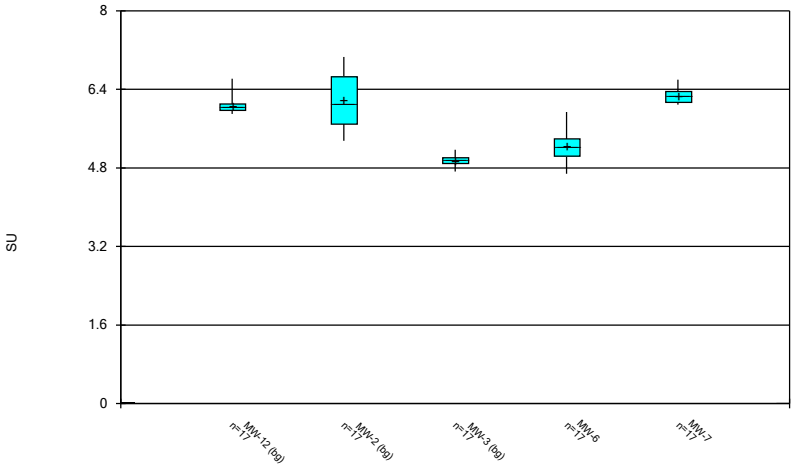
Constituent: Mercury Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

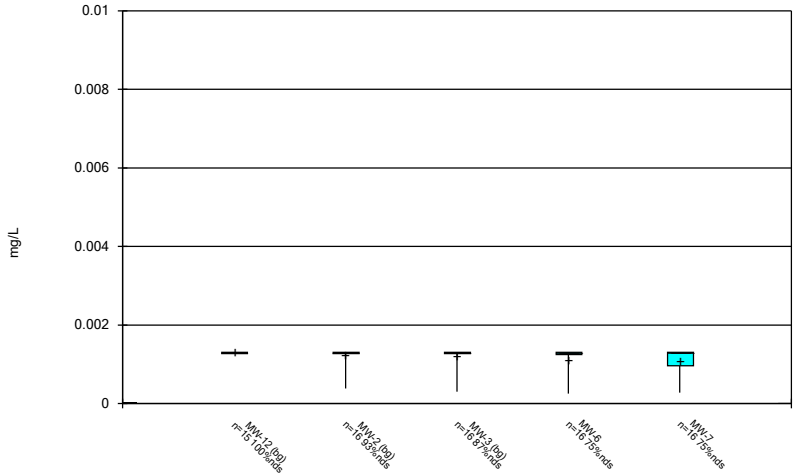
Box & Whiskers Plot



Constituent: pH Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

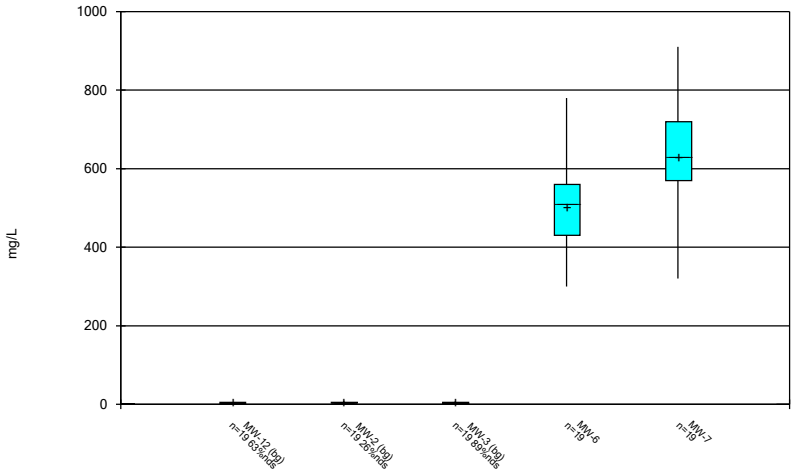
Box & Whiskers Plot



Constituent: Selenium Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

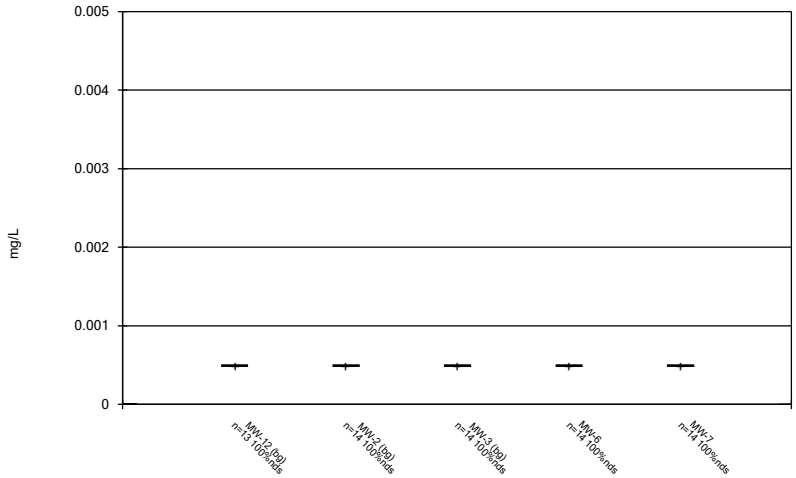
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

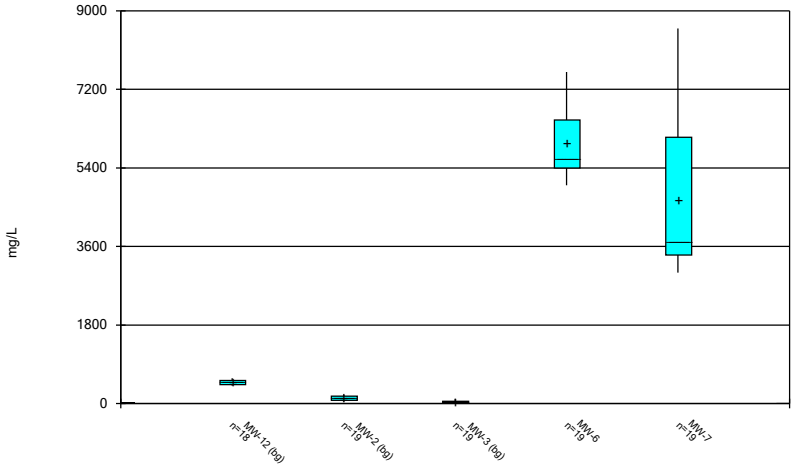
Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 12/29/2021 2:37 PM View: Appendix III & IV

Plant Smith Client: Geosyntec Data: Plant Smith CCR

FIGURE C.

Outlier Summary

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:38 PM

	MW-12 Cadmium (mg/L)	MW-12 Calcium (mg/L)	MW-12 Cobalt (mg/L)	MW-12 Lithium (mg/L)	MW-12 Selenium (mg/L)	MW-12 Thallium (mg/L)	MW-12 Total Dissolved Solids (mg/L)
6/27/2016							4200 (o)
9/16/2021	0.035 (o)	250 (o)	0.26 (o)	0.17 (o)	0.009 (o)	0.0043 (o)	

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-6**	**0.33**	**n/a**	**9/17/2021**	**7.3**	**Yes**	**57**	**45.61**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**9/17/2021**	**2.8**	**Yes**	**57**	**45.61**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**MW-7**	**250**	**n/a**	**9/17/2021**	**350**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**9/17/2021**	**2900**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**9/17/2021**	**2400**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**MW-6**	**9.2**	**n/a**	**9/17/2021**	**300**	**Yes**	**57**	**59.65**	**n/a**	**n/a**	**0.0005939**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**9.2**	**n/a**	**9/17/2021**	**320**	**Yes**	**57**	**59.65**	**n/a**	**n/a**	**0.0005939**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**954.7**	**n/a**	**9/17/2021**	**5000**	**Yes**	**57**	**0**	**None**	**ln(x)**	**0.003756**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**954.7**	**n/a**	**9/17/2021**	**5600**	**Yes**	**57**	**0**	**None**	**ln(x)**	**0.003756**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

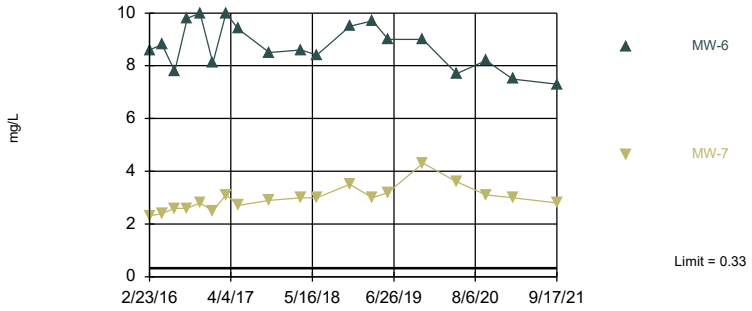
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**MW-6**	**0.33**	**n/a**	**9/17/2021**	**7.3**	**Yes**	**57**	**45.61**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**MW-7**	**0.33**	**n/a**	**9/17/2021**	**2.8**	**Yes**	**57**	**45.61**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	MW-6	250	n/a	9/17/2021	230	No	57	0	n/a	n/a	0.0005939	NP Inter (normality) 1 of 2
Calcium (mg/L)	**MW-7**	**250**	**n/a**	**9/17/2021**	**350**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-6**	**230**	**n/a**	**9/17/2021**	**2900**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**MW-7**	**230**	**n/a**	**9/17/2021**	**2400**	**Yes**	**57**	**0**	**n/a**	**n/a**	**0.0005939**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	MW-6	0.1679	n/a	9/17/2021	0.1ND	No	57	22.81	Kaplan-Meier	x^(1/3)	0.003756	Param Inter 1 of 2
Fluoride (mg/L)	MW-7	0.1679	n/a	9/17/2021	0.1ND	No	57	22.81	Kaplan-Meier	x^(1/3)	0.003756	Param Inter 1 of 2
pH (SU)	MW-6	6.785	4.682	9/17/2021	5.17	No	51	0	None	No	0.001878	Param Inter 1 of 2
pH (SU)	MW-7	6.785	4.682	9/17/2021	6.6	No	51	0	None	No	0.001878	Param Inter 1 of 2
Sulfate (mg/L)	**MW-6**	**9.2**	**n/a**	**9/17/2021**	**300**	**Yes**	**57**	**59.65**	**n/a**	**n/a**	**0.0005939**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	**MW-7**	**9.2**	**n/a**	**9/17/2021**	**320**	**Yes**	**57**	**59.65**	**n/a**	**n/a**	**0.0005939**	**NP Inter (NDs) 1 of 2**
Total Dissolved Solids (mg/L)	**MW-6**	**954.7**	**n/a**	**9/17/2021**	**5000**	**Yes**	**57**	**0**	**None**	**ln(x)**	**0.003756**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**MW-7**	**954.7**	**n/a**	**9/17/2021**	**5600**	**Yes**	**57**	**0**	**None**	**ln(x)**	**0.003756**	**Param Inter 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 57 background values. 45.61% NDs. Annual per-constituent alpha = 0.002374. Individual comparison alpha = 0.0005939 (1 of 2). Comparing 2 points to limit.

Constituent: Boron Analysis Run 12/29/2021 2:43 PM View: Appendix III

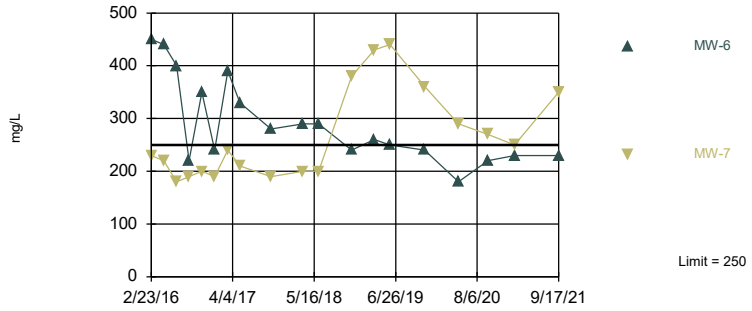
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: 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 57 background values. Annual per-constituent alpha = 0.002374. Individual comparison alpha = 0.0005939 (1 of 2). Comparing 2 points to limit.

Constituent: Calcium Analysis Run 12/29/2021 2:43 PM View: Appendix III

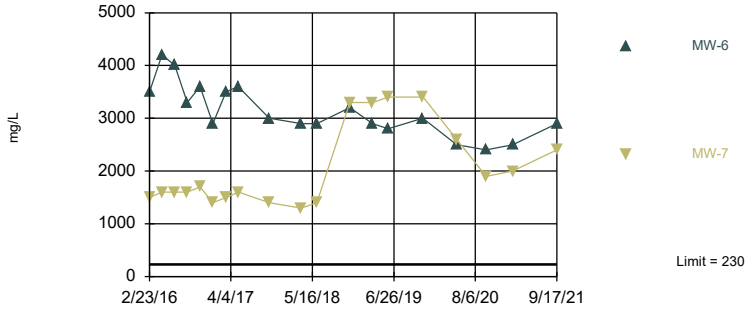
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 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 57 background values. Annual per-constituent alpha = 0.002374. Individual comparison alpha = 0.0005939 (1 of 2). Comparing 2 points to limit.

Constituent: Chloride Analysis Run 12/29/2021 2:43 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

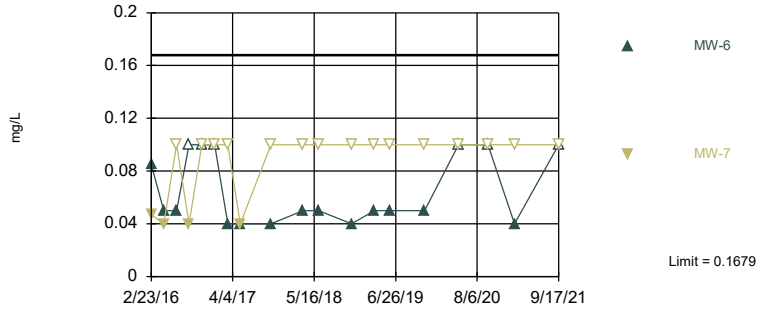
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.4063, Std. Dev.=0.0907, n=57, 22.81% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9444, critical = 0.944. Kappa = 1.602 (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.

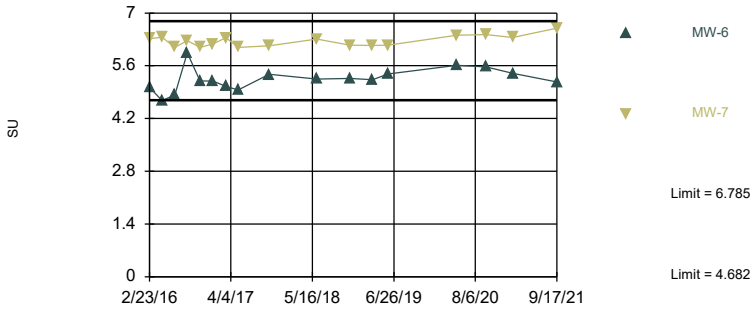
Constituent: Fluoride Analysis Run 12/29/2021 2:43 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Within Limits

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=5.734, Std. Dev.=0.6514, n=51. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9365, critical = 0.935. Kappa = 1.614 (c=7, w=2, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001878. Comparing 2 points to limit.

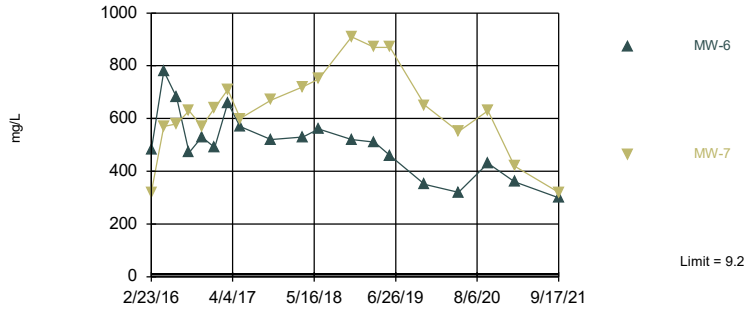
Constituent: pH Analysis Run 12/29/2021 2:43 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

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 57 background values. 59.65% NDs. Annual per-constituent alpha = 0.002374. Individual comparison alpha = 0.0005939 (1 of 2). Comparing 2 points to limit.

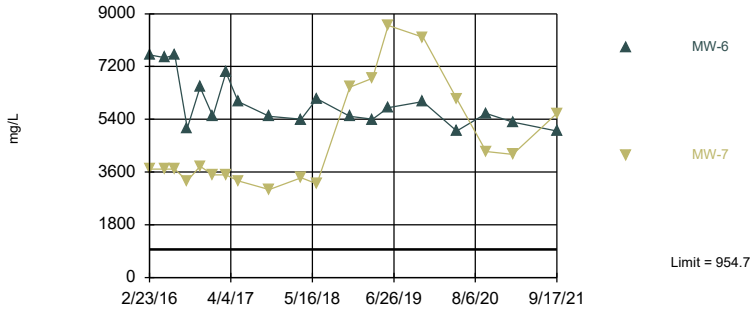
Constituent: Sulfate Analysis Run 12/29/2021 2:43 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Exceeds Limit: MW-6, MW-7

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=4.874, Std. Dev.=1.241, n=57. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9469, critical = 0.944. Kappa = 1.602 (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 12/29/2021 2:43 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/29/2021 2:45 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-7	MW-6
2/22/2016	0.14 (J)	<0.05	<0.05		
2/23/2016				2.3	8.6
4/25/2016		0.022 (J)	<0.05		
4/26/2016	0.27			2.4	8.8
6/27/2016	0.083	0.032 (J)	<0.05		
6/28/2016				2.6	7.8
8/29/2016	<0.05 (*)	<0.05 (*)	<0.05	2.6	9.8
11/1/2016	0.1	<0.05	<0.05		
11/2/2016				2.8	10
1/4/2017	0.062	<0.05	<0.05		
1/5/2017				2.5	8.1
3/10/2017	0.06	0.032 (J)	<0.05		
3/11/2017				3.1	10
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	2.9	8.5
3/20/2018	0.072		<0.05		
3/21/2018		<0.05		3	8.6
6/6/2018	0.077	0.027 (J)	<0.05		
6/8/2018				3	8.4
11/19/2018	0.071	0.045 (J)	<0.05	3.5	9.5
3/11/2019	<0.05	<0.05	<0.05		
3/12/2019				3	9.7
5/28/2019	0.024 (J)	<0.05	<0.05		
5/29/2019				3.2	9
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				3.6	7.7
9/29/2020	0.086	0.04	<0.05		
9/30/2020				3.1	8.2
2/9/2021	0.09	0.024 (I)	<0.05	3	7.5
9/16/2021	0.11	0.045 (I)	<0.05		
9/17/2021				2.8	7.3

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/29/2021 2:45 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-7	MW-6
2/22/2016	23	12	1.9		
2/23/2016				230	450
4/25/2016		11	1.8		
4/26/2016	33			220	440
6/27/2016	29	7.7	1.7		
6/28/2016				180	400
8/29/2016	28	48	1.7	190	220
11/1/2016	36	49	1.9		
11/2/2016				200	350
1/4/2017	36	44	1.8		
1/5/2017				190	240
3/10/2017	37	46	1.9		
3/11/2017				240	390
5/11/2017	31	43	1.7		330
5/12/2017				210	
10/12/2017	32	45	1.9	190	280
3/20/2018	34		1.9		
3/21/2018		45		200	290
6/6/2018	30	32	1.8		
6/8/2018				200	290
11/19/2018	38	20	1.8	380	240
3/11/2019	31	16	1.9		
3/12/2019				430	260
5/28/2019	37	35	2.1		
5/29/2019				440	250
11/18/2019	30	44	1.9		240
11/19/2019				360	
5/5/2020	31	13	2.3		
5/6/2020				290	180
9/29/2020	41	9.6	2.6		
9/30/2020				270	220
2/9/2021	26	9.1	2.4	250	230
9/16/2021	250 (o)	6.9	2.6		
9/17/2021				350	230

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/29/2021 2:45 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-7	MW-6
2/22/2016	140	15	11		
2/23/2016				1500	3500
4/25/2016		18	10		
4/26/2016	190			1600	4200
6/27/2016	170	17	11		
6/28/2016				1600	4000
8/29/2016	180	16	11	1600	3300
11/1/2016	230	11	11		
11/2/2016				1700	3600
1/4/2017	220	11	11		
1/5/2017				1400	2900
3/10/2017	210	14	11		
3/11/2017				1500	3500
5/11/2017	200	11	12		3600
5/12/2017				1600	
10/12/2017	190	12	12	1400	3000
3/20/2018	190		11		
3/21/2018		9.3		1300	2900
6/6/2018	190	13	11		
6/8/2018				1400	2900
11/19/2018	210	13	19.9 (D)	3300	3200
3/11/2019	190	12	13		
3/12/2019				3300	2900
5/28/2019	190	13	13		
5/29/2019				3400	2800
11/18/2019	210	12	14		3000
11/19/2019				3400	
5/5/2020	200	13	15		
5/6/2020				2600	2500
9/29/2020	200	14	16		
9/30/2020				1900	2400
2/9/2021	150	20	15	2000	2500
9/16/2021	160	11	15		
9/17/2021				2400	2900

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/29/2021 2:45 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-7	MW-6
2/22/2016	0.09 (J)	0.06 (J)	0.04 (J)		
2/23/2016				0.047 (J)	0.085 (J)
4/25/2016		0.04 (J)	<0.1		
4/26/2016	0.08 (J)			0.04 (J)	0.05 (J)
6/27/2016	0.08 (J)	0.04 (J)	<0.1		
6/28/2016				<0.1	0.05 (J)
8/29/2016	0.09 (J)	0.16	0.04 (J)	0.04 (J)	<0.1
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				<0.1	0.04 (J)
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	<0.1	0.04
3/20/2018	0.12		<0.1		
3/21/2018		0.28		<0.1	0.05 (J)
6/6/2018	0.12	0.19	0.04 (J)		
6/8/2018				<0.1	0.05 (J)
11/19/2018	0.13	0.12	0.04 (J)	<0.1	0.04 (J)
3/11/2019	0.12	0.08 (J)	0.04 (J)		
3/12/2019				<0.1	0.05 (J)
5/28/2019	0.13	0.13	0.04 (J)		
5/29/2019				<0.1	0.05 (J)
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
2/9/2021	0.11	0.06 (I)	<0.1	<0.1	0.04 (I)
9/16/2021	0.11	<0.1	<0.1		
9/17/2021				<0.1	<0.1

Prediction Limit

Constituent: pH (SU) Analysis Run 12/29/2021 2:45 PM View: Appendix III

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
2/9/2021	5.96	5.48	4.87	5.4	6.35
9/16/2021	5.9	5.47	4.98		
9/17/2021				5.17	6.6

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/29/2021 2:45 PM View: Appendix III

Plant Smith Client: Geosyntec Data: Plant Smith CCR

	MW-12 (bg)	MW-2 (bg)	MW-3 (bg)	MW-7	MW-6
2/22/2016	<5	6.3	<5		
2/23/2016				320	480
4/25/2016		6.1	1.4 (J)		
4/26/2016	<5			570	780
6/27/2016	1.6 (J)	6.6	<5		
6/28/2016				580	680
8/29/2016	<5	4.5 (J)	<5	630	470 (J)
11/1/2016	<5	<5	<5		
11/2/2016				570	530
1/4/2017	<5	<5 (*)	<5 (*)		
1/5/2017				640	490
3/10/2017	<5	2.3 (J)	<5		
3/11/2017				710	660
5/11/2017	<5	<5	<5		570
5/12/2017				600	
10/12/2017	<5	<5	<5	670	520
3/20/2018	1.8 (J)		<5		
3/21/2018		<5		720	530
6/6/2018	2.3 (J)	4.8 (J)	<5		
6/8/2018				750	560
11/19/2018	2.2 (J)	4.4 (J)	7.473 (D)	910	520
3/11/2019	1.5 (J)	5.2	<5		
3/12/2019				870	510
5/28/2019	3 (J)	4.3 (J)	<5		
5/29/2019				870	460
11/18/2019	<5	2.8 (I)	<5		350
11/19/2019				650	
5/5/2020	<5	4.4 (J)	<5		
5/6/2020				550	320
9/29/2020	3.3	4.8	<5		
9/30/2020				630	430
2/9/2021	<5	9.2	<5	420	360
9/16/2021	<5	5	<5		
9/17/2021				320	300

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/29/2021 2:45 PM View: Appendix III

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
2/9/2021	500	130	66	4200	5300
9/16/2021	430	50	76		
9/17/2021				5600	5000

FIGURE E.

Appendix III Intrawell Prediction Limits - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	**MW-7**	**6.413**	**5.999**	**9/17/2021**	**6.6**	**Yes**	**12**	**0**	**None**	**No**	**0.001878**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

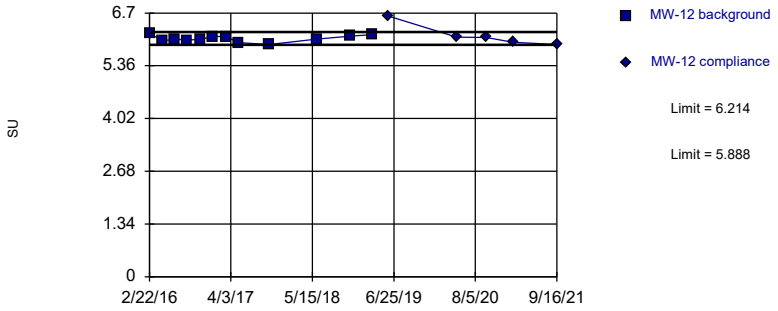
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 12/29/2021, 2:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	MW-12	6.214	5.888	9/16/2021	5.9	No	12	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-2	7.353	5.354	9/16/2021	5.47	No	12	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-3	5.193	4.724	9/16/2021	4.98	No	12	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	MW-6	5.781	4.55	9/17/2021	5.17	No	12	0	None	No	0.001878	Param Intra 1 of 2
pH (SU)	**MW-7**	**6.413**	**5.999**	**9/17/2021**	**6.6**	**Yes**	**12**	**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 12/29/2021 2:46 PM View: Intrawell PL

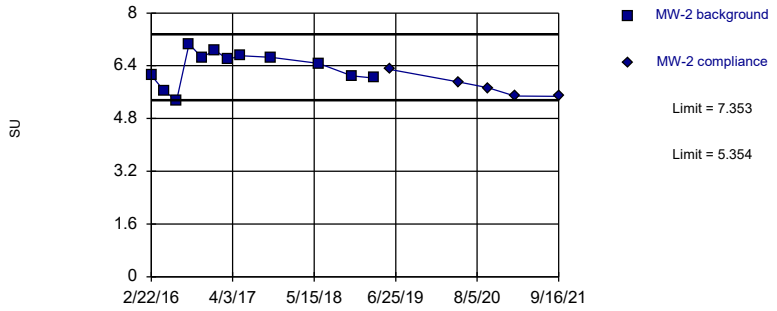
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 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 12/29/2021 2:46 PM View: Intrawell PL

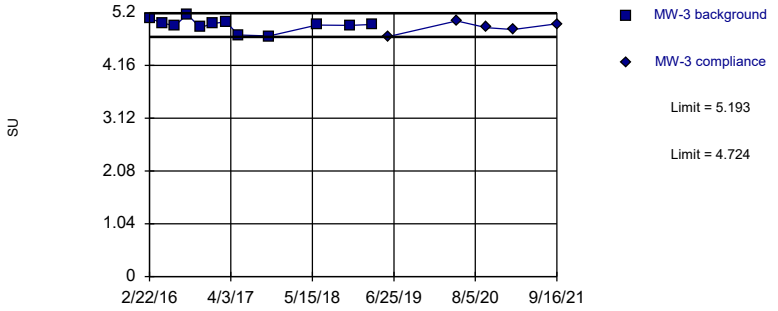
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 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 12/29/2021 2:46 PM View: Intrawell PL

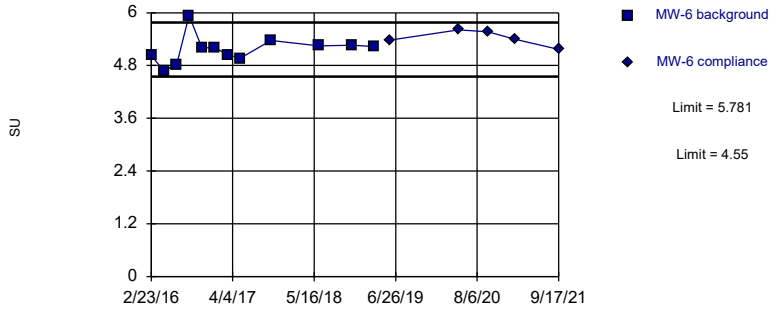
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 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.

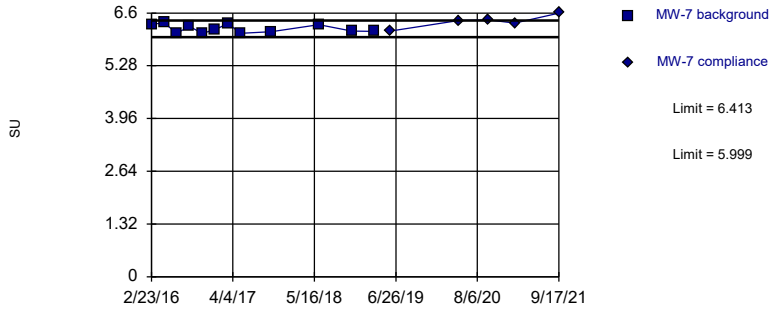
Constituent: pH Analysis Run 12/29/2021 2:46 PM View: Intrawell PL

Plant Smith Client: Geosyntec Data: Plant Smith CCR

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 12/29/2021 2:46 PM View: Intrawell PL

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Prediction Limit

Constituent: pH (SU) Analysis Run 12/29/2021 2:48 PM View: Intrawell PL

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
2/9/2021		5.96
9/16/2021		5.9

Prediction Limit

Constituent: pH (SU) Analysis Run 12/29/2021 2:48 PM View: Intrawell PL

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
2/9/2021		5.48
9/16/2021		5.47

Prediction Limit

Constituent: pH (SU) Analysis Run 12/29/2021 2:48 PM View: Intrawell PL

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
2/9/2021		4.87
9/16/2021		4.98

Prediction Limit

Constituent: pH (SU) Analysis Run 12/29/2021 2:48 PM View: Intrawell PL

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
2/9/2021		5.4
9/17/2021		5.17

Prediction Limit

Constituent: pH (SU) Analysis Run 12/29/2021 2:48 PM View: Intrawell PL

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
2/9/2021		6.35
9/17/2021		6.6

FIGURE F.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/3/2022, 4:10 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-7**	**0.2056**	**96**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**MW-3 (bg)**	**0.1169**	**92**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-3 (bg)**	**0.9005**	**110**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-225.3**	**-107**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-6**	**-55.92**	**-95**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**MW-6**	**-334.6**	**-84**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

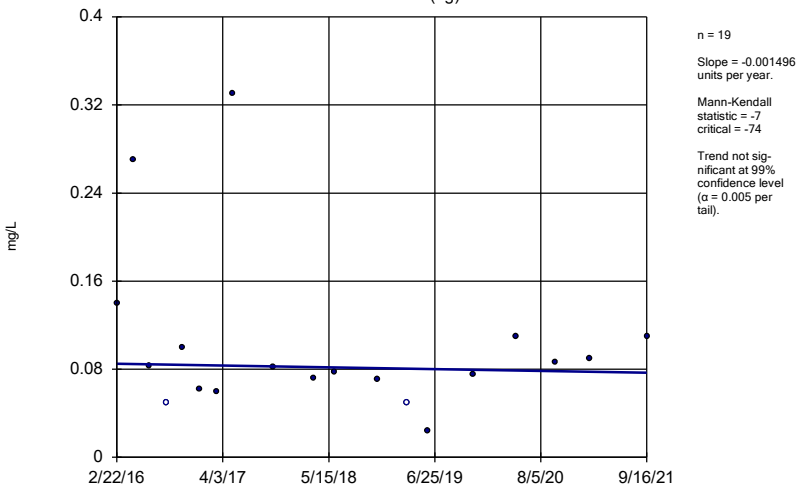
Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/3/2022, 4:10 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-12 (bg)	-0.001496	-7	-74	No	19	10.53	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0	-23	-74	No	19	42.11	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	-25	-74	No	19	84.21	n/a	n/a	0.01	NP
Boron (mg/L)	MW-6	-0.2141	-50	-74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-7**	**0.2056**	**96**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-12 (bg)	1.185	39	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	-4.232	-59	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**MW-3 (bg)**	**0.1169**	**92**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-7	21.13	69	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-12 (bg)	0	-2	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.2544	-19	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**MW-3 (bg)**	**0.9005**	**110**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**MW-6**	**-225.3**	**-107**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-7	153.1	55	74	No	19	0	n/a	n/a	0.01	NP
pH (SU)	MW-12 (bg)	-0.003084	-5	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	MW-2 (bg)	-0.225	-54	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	MW-3 (bg)	-0.02124	-35	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	MW-7	0.02447	40	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-12 (bg)	0	-9	-74	No	19	63.16	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-0.1409	-38	-74	No	19	26.32	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	0	19	74	No	19	89.47	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-6**	**-55.92**	**-95**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	MW-7	22.43	25	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-12 (bg)	0	4	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-2 (bg)	-16.9	-61	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-3 (bg)	2.461	20	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**MW-6**	**-334.6**	**-84**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	MW-7	276.5	44	74	No	19	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-12 (bg)



n = 19

Slope = -0.001496 units per year.

Mann-Kendall statistic = -7
critical = -74

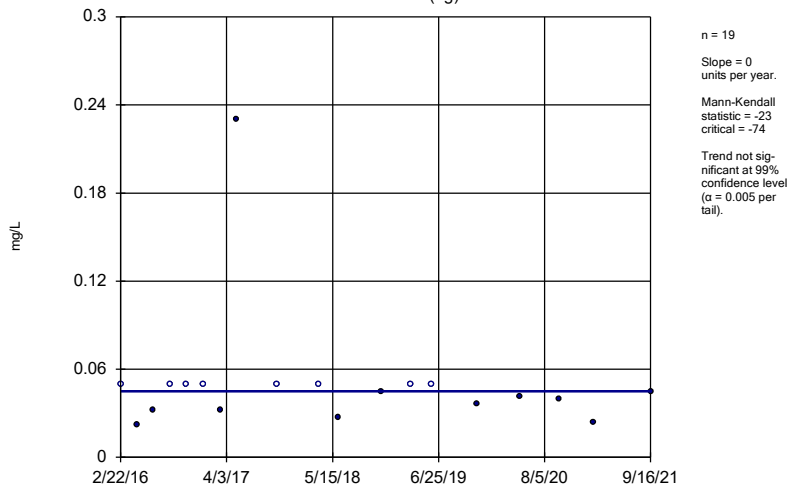
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = -23
critical = -74

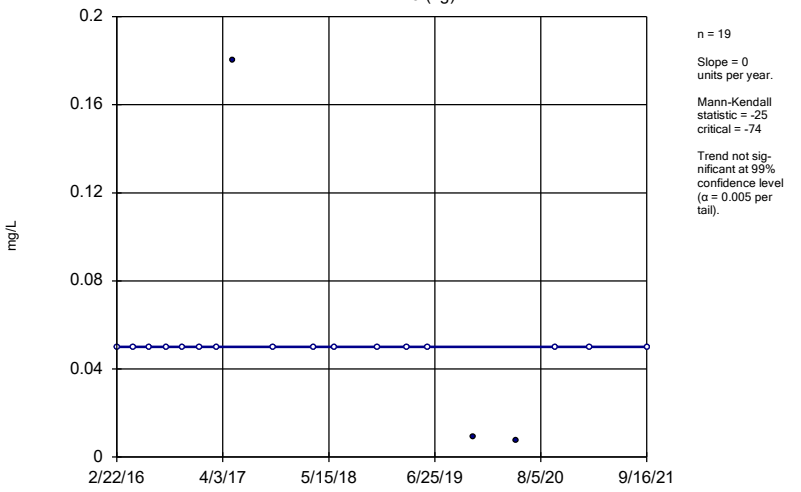
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = -25
critical = -74

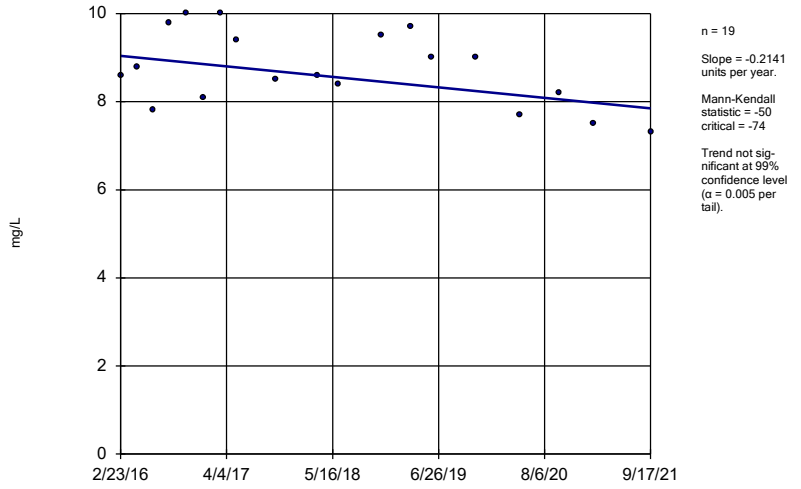
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 19

Slope = -0.2141 units per year.

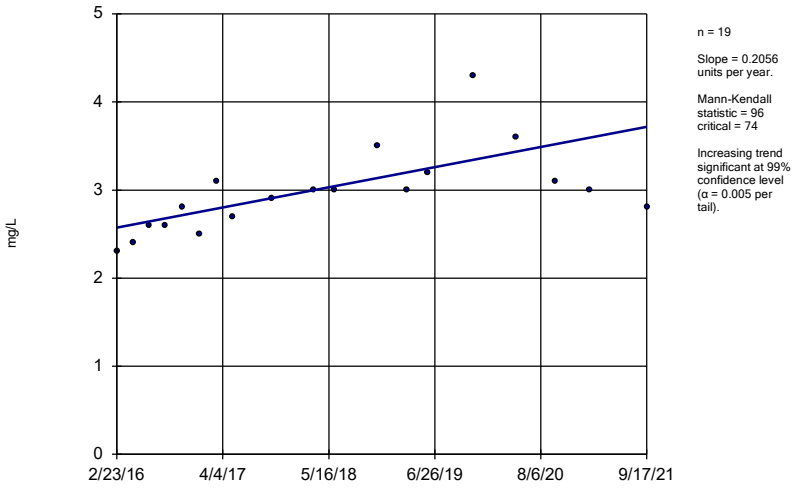
Mann-Kendall statistic = -50
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-7



n = 19

Slope = 0.2056 units per year.

Mann-Kendall statistic = 96
critical = 74

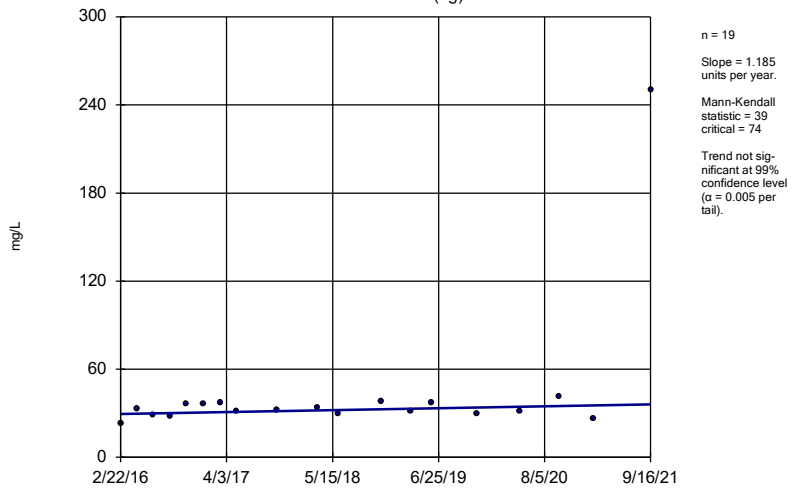
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 19

Slope = 1.185 units per year.

Mann-Kendall statistic = 39
critical = 74

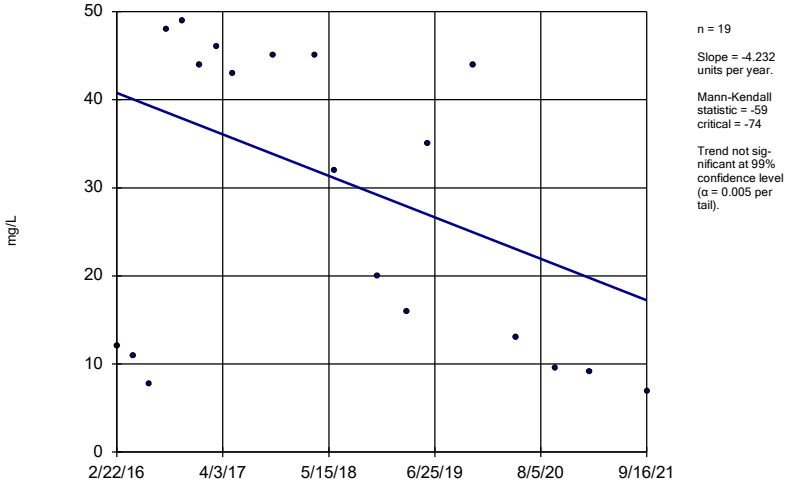
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 19

Slope = -4.232 units per year.

Mann-Kendall statistic = -59
critical = -74

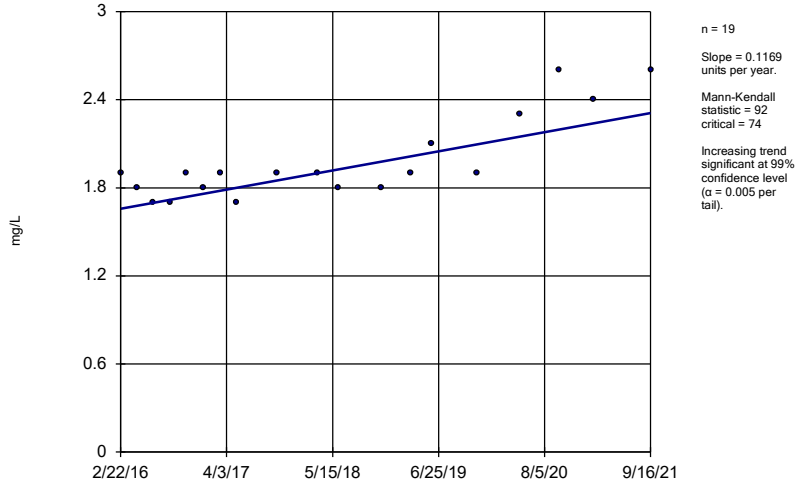
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 19

Slope = 0.1169 units per year.

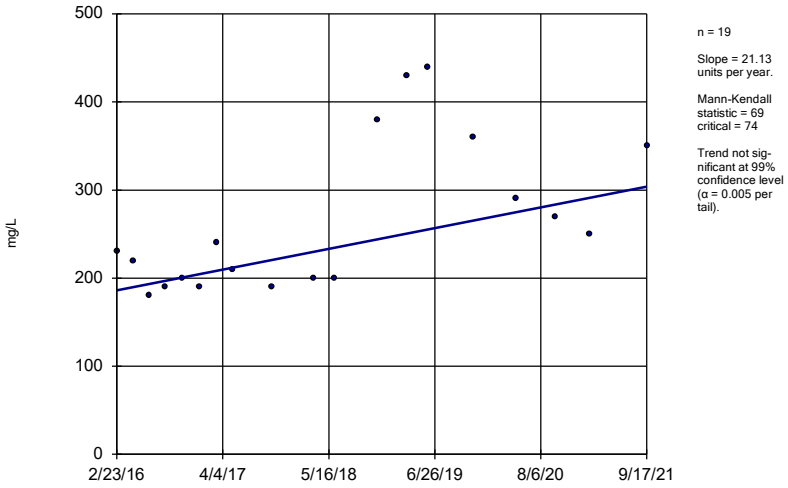
Mann-Kendall statistic = 92
critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-7



n = 19

Slope = 21.13 units per year.

Mann-Kendall statistic = 69 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

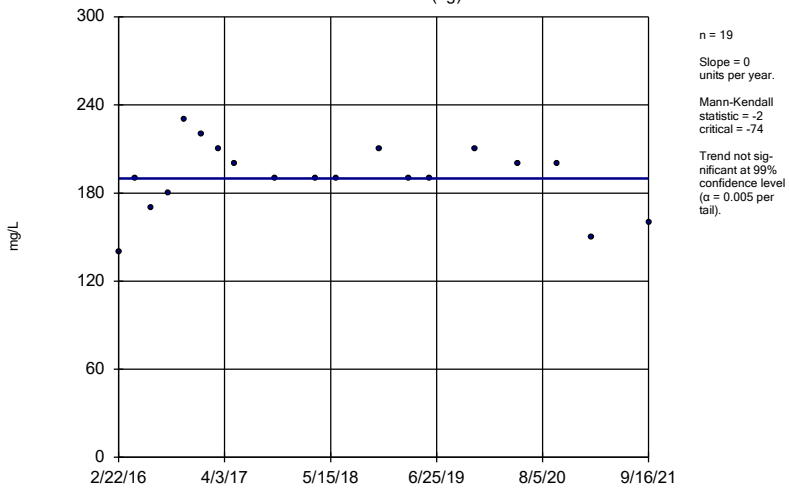
Constituent: Calcium Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = -2 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

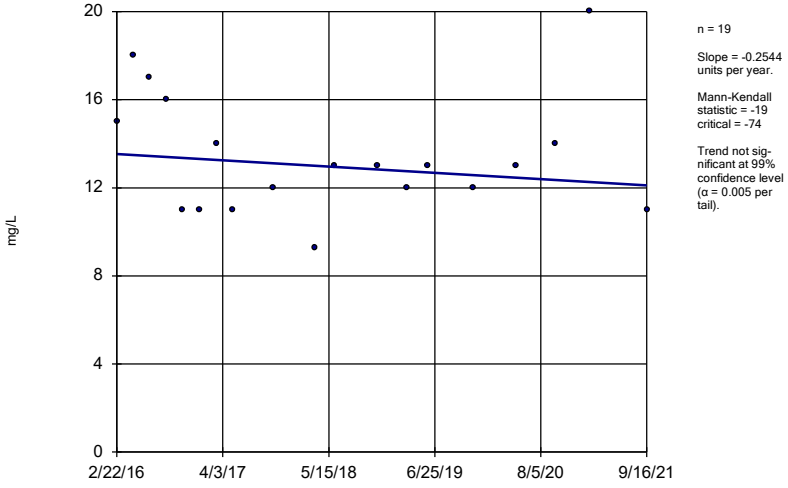
Constituent: Chloride Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 19

Slope = -0.2544 units per year.

Mann-Kendall statistic = -19 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

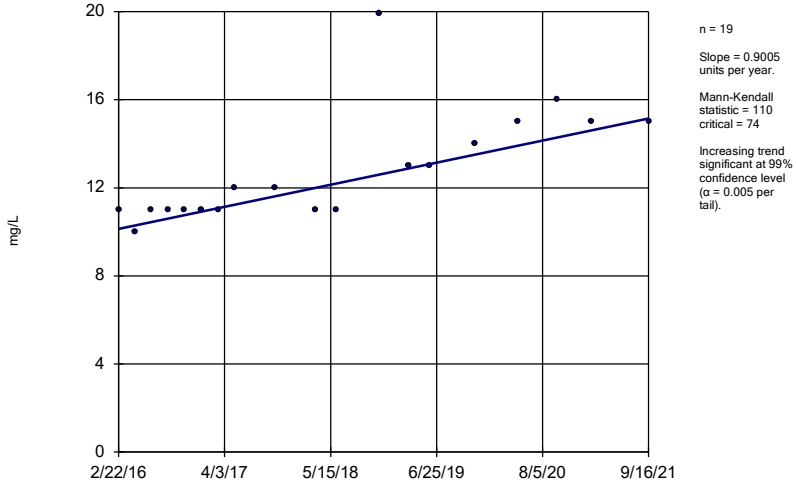
Constituent: Chloride Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 19

Slope = 0.9005 units per year.

Mann-Kendall statistic = 110 critical = 74

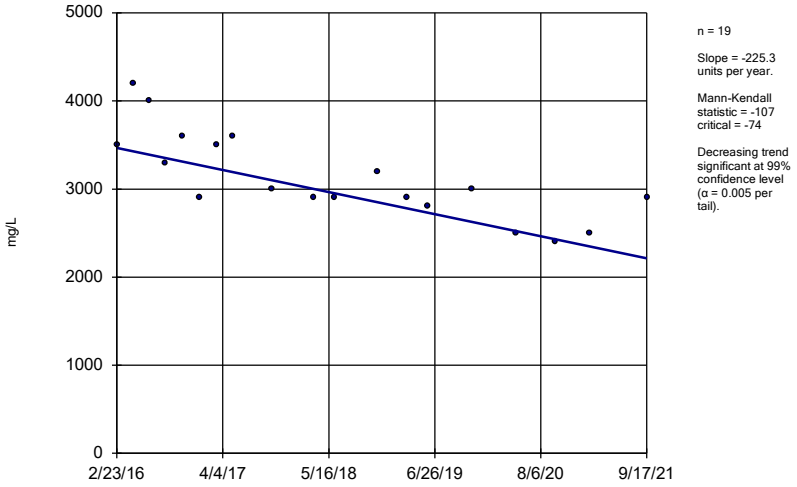
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-6



n = 19

Slope = -225.3 units per year.

Mann-Kendall statistic = -107
critical = -74

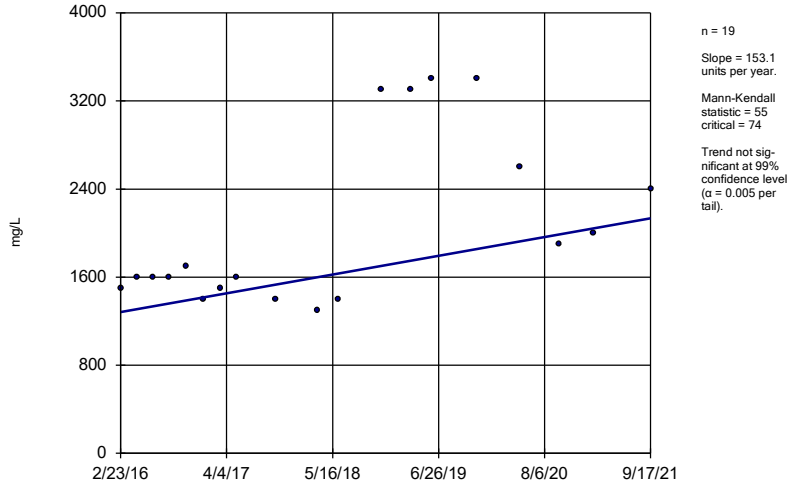
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 19

Slope = 153.1 units per year.

Mann-Kendall statistic = 55
critical = 74

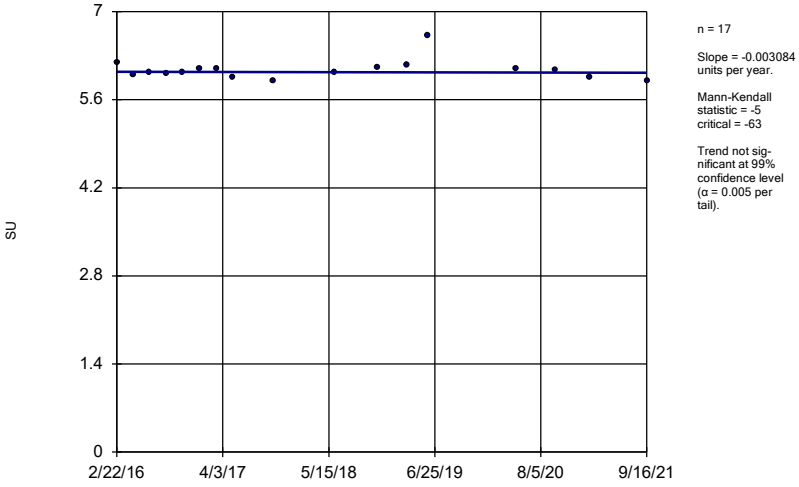
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 17

Slope = -0.003084 units per year.

Mann-Kendall statistic = -5
critical = -63

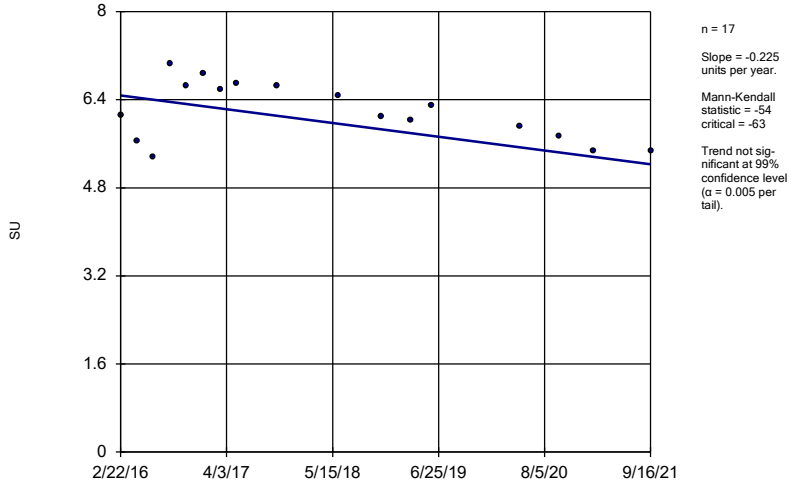
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 17

Slope = -0.225 units per year.

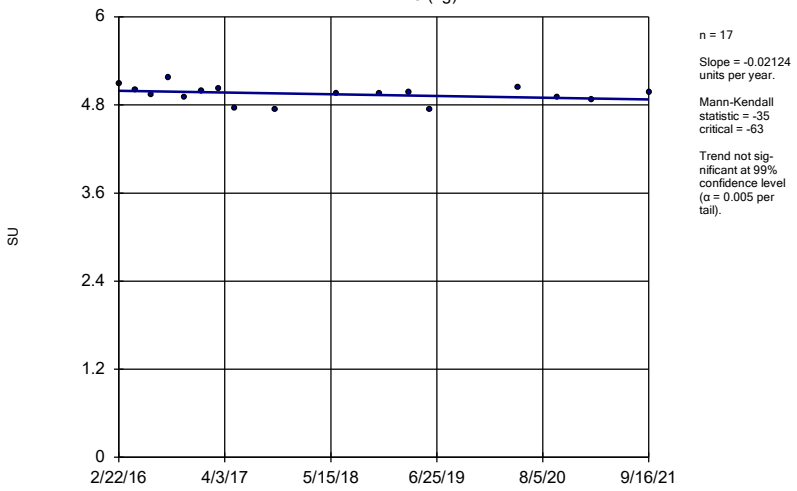
Mann-Kendall statistic = -54
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-3 (bg)



n = 17

Slope = -0.02124 units per year.

Mann-Kendall statistic = -35
critical = -63

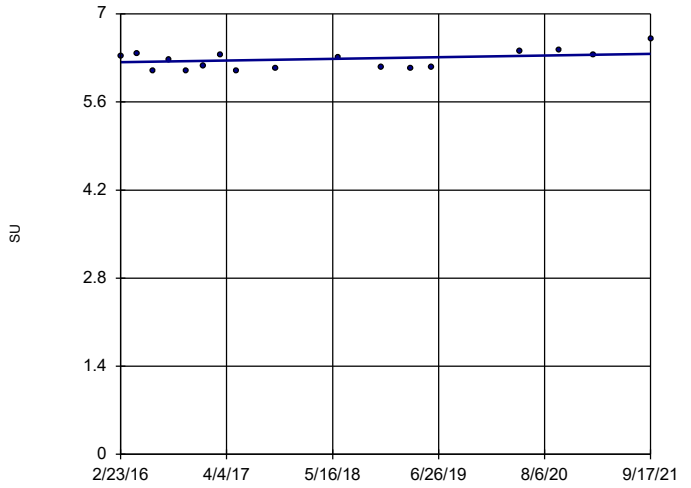
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 17

Slope = 0.02447 units per year.

Mann-Kendall statistic = 40
critical = 63

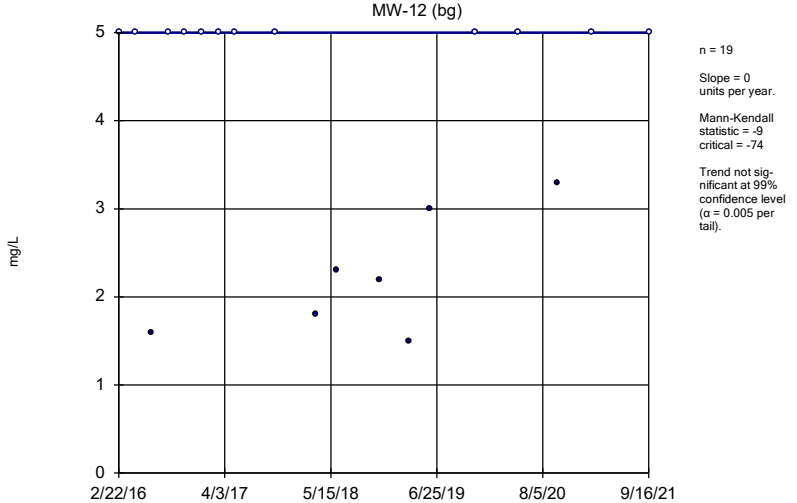
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-12 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = -9
critical = -74

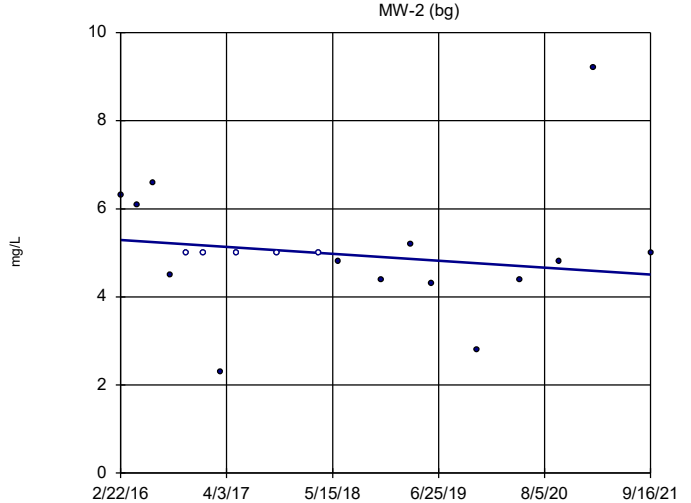
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 19

Slope = -0.1409 units per year.

Mann-Kendall statistic = -38
critical = -74

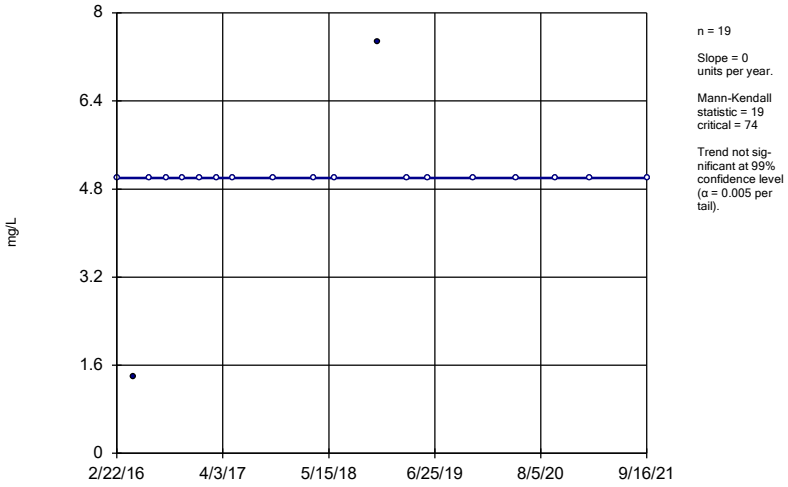
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = 19
critical = 74

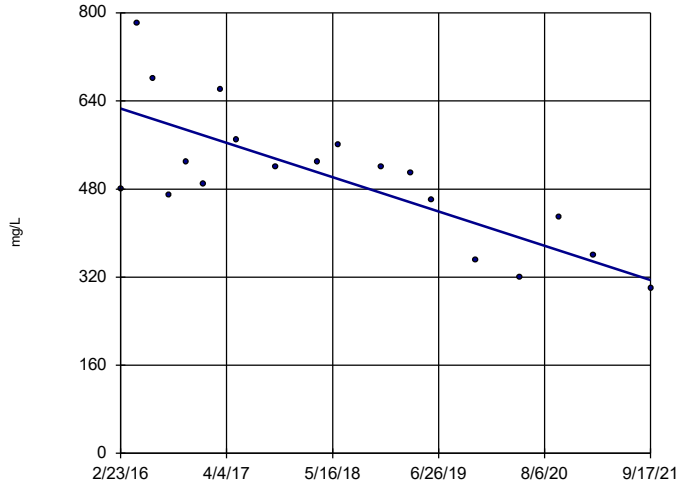
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 19

Slope = -55.92
units per year.

Mann-Kendall
statistic = -95
critical = -74

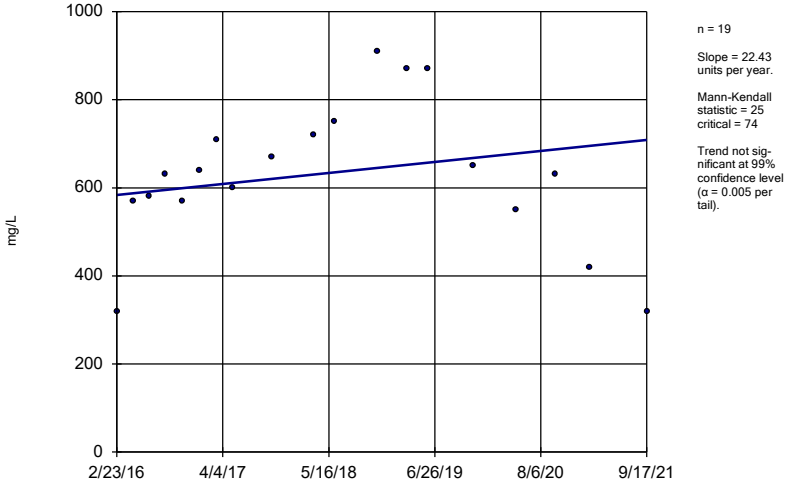
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 19

Slope = 22.43
units per year.

Mann-Kendall
statistic = 25
critical = 74

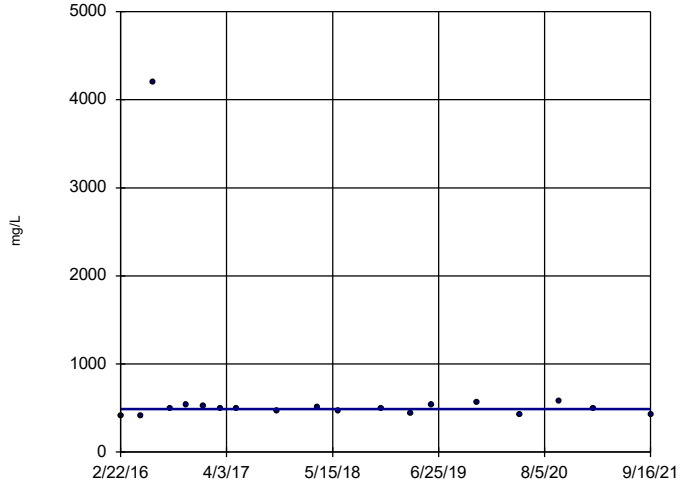
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-12 (bg)



n = 19

Slope = 0
units per year.

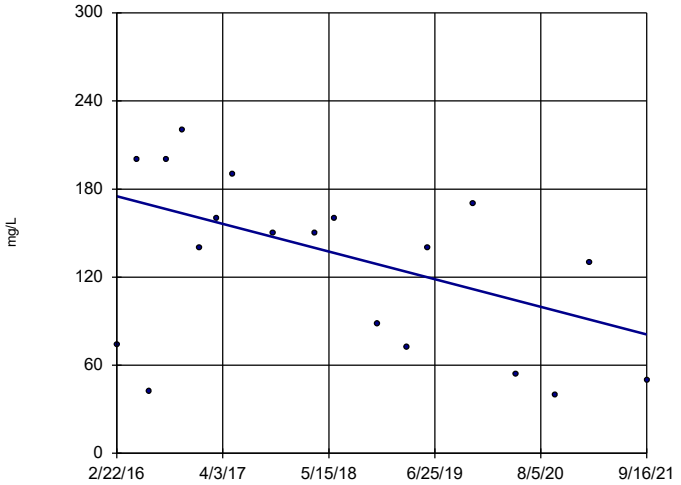
Mann-Kendall
statistic = 4
critical = 74

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Total Dissolved Solids Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sen's Slope Estimator

MW-2 (bg)



n = 19

Slope = -16.9 units per year.

Mann-Kendall statistic = -61 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

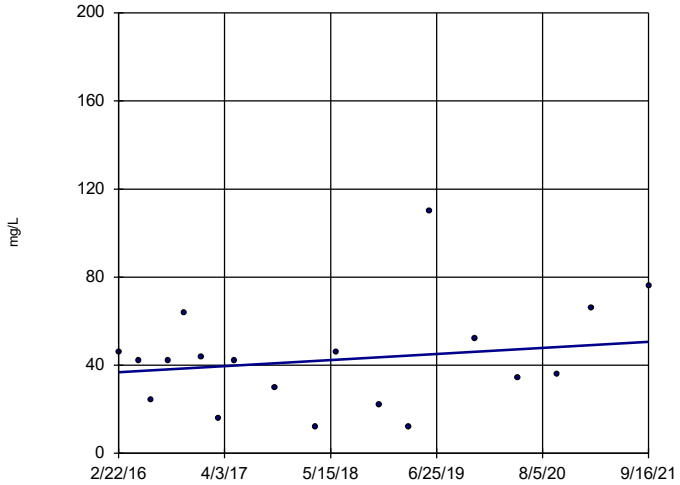
Constituent: Total Dissolved Solids Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 19

Slope = 2.461 units per year.

Mann-Kendall statistic = 20 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

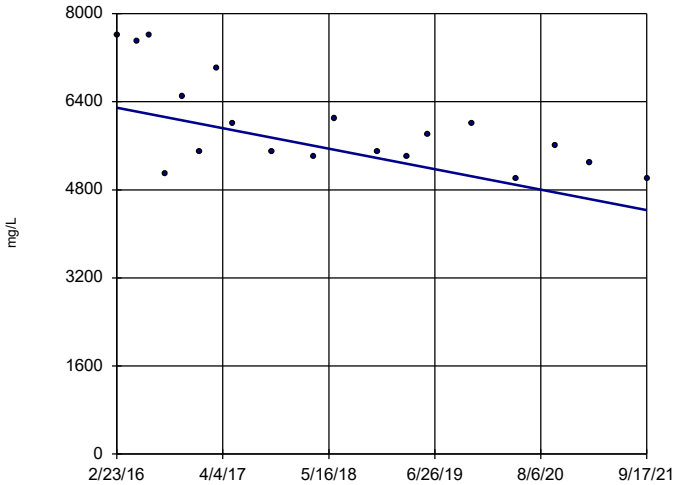
Constituent: Total Dissolved Solids Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 19

Slope = -334.6 units per year.

Mann-Kendall statistic = -84 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

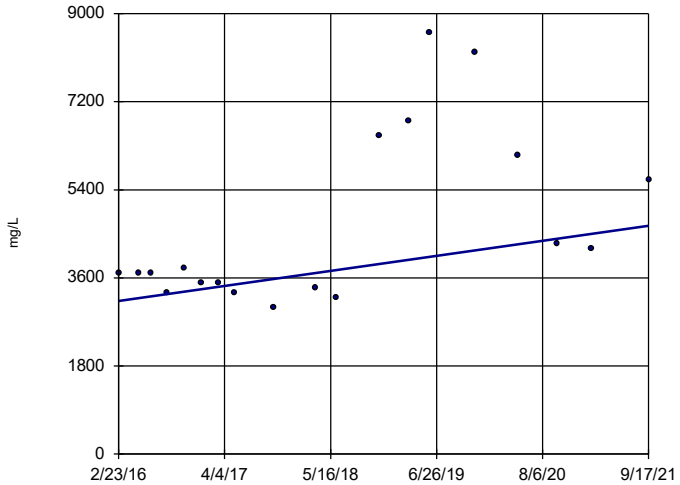
Constituent: Total Dissolved Solids Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test

Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 19

Slope = 276.5 units per year.

Mann-Kendall statistic = 44 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 1/3/2022 4:09 PM View: Appendix III Trend Test

Plant Smith Client: Geosyntec Data: Plant Smith CCR

FIGURE G.

Upper Tolerance Limits - Summary Table

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/5/2022, 8:59 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0025	n/a	n/a	n/a	42	n/a	n/a	100	n/a	n/a	0.116	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0014	n/a	n/a	n/a	54	n/a	n/a	94.44	n/a	n/a	0.06267	NP Inter(NDs)
Barium (mg/L)	n/a	0.02787	n/a	n/a	n/a	54	0.017	0.005323	5.556	None	No	0.05	Inter
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	51	n/a	n/a	94.12	n/a	n/a	0.0731	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	41	n/a	n/a	100	n/a	n/a	0.1221	NP Inter(NDs)
Chromium (mg/L)	n/a	0.012	n/a	n/a	n/a	54	n/a	n/a	46.3	n/a	n/a	0.06267	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.64	n/a	n/a	n/a	54	n/a	n/a	0	n/a	n/a	0.06267	NP Inter(normality)
Fluoride (mg/L)	n/a	0.2057	n/a	n/a	n/a	57	0.4063	0.0907	22.81	Kaplan-Meier	x^(1/3)	0.05	Inter
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	48	n/a	n/a	95.83	n/a	n/a	0.08526	NP Inter(NDs)
Lithium (mg/L)	n/a	0.01867	n/a	n/a	n/a	53	0.07716	0.02904	16.98	Kaplan-Meier	sqrt(x)	0.05	Inter
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	42	n/a	n/a	97.62	n/a	n/a	0.116	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	54	n/a	n/a	96.3	n/a	n/a	0.06267	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0013	n/a	n/a	n/a	47	n/a	n/a	93.62	n/a	n/a	0.08974	NP Inter(NDs)
Thallium (mg/L)	n/a	0.0005	n/a	n/a	n/a	41	n/a	n/a	100	n/a	n/a	0.1221	NP Inter(NDs)

FIGURE H.

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		0.0014	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		4.64	5
Fluoride, Total (mg/L)	4		0.21	4
Lead, Total (mg/L)	0.015		0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.019	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*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE I.

Confidence Intervals Summary Table - Significant Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/5/2022, 9:09 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**	**30.62**	**24.09**	**5**	**Yes**	**18**	**27.51**	**5.623**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**36.23**	**24.9**	**5**	**Yes**	**18**	**31.14**	**10.19**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**

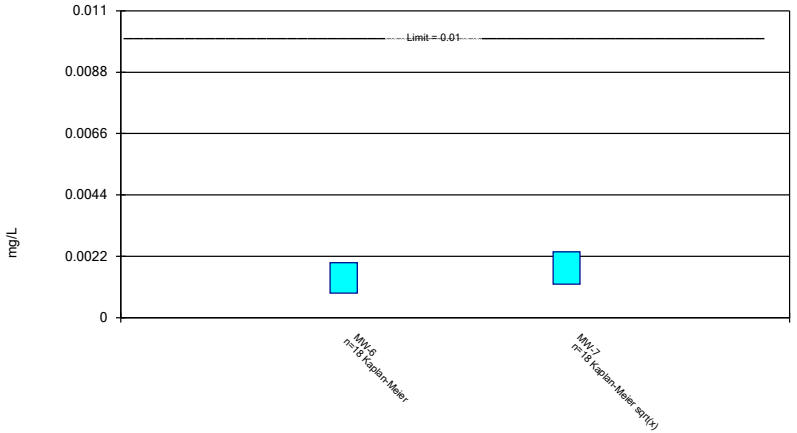
Confidence Intervals Summary Table - All Results

Plant Smith Client: Geosyntec Data: Plant Smith CCR Printed 1/5/2022, 9:09 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-6	0.001964	0.0008837	0.01	No	18	0.001741	0.0009232	22.22	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.002364	0.001203	0.01	No	18	0.002172	0.001041	22.22	Kaplan-Meier	sqrt(x)	0.01	Param.
Barium (mg/L)	MW-6	0.07028	0.06092	2	No	18	0.0645	0.01065	5.556	None	x^3	0.01	Param.
Barium (mg/L)	MW-7	0.1108	0.06499	2	No	18	0.08789	0.03784	5.556	None	No	0.01	Param.
Beryllium (mg/L)	MW-6	0.001767	0.0009922	0.004	No	17	0.001379	0.0006179	11.76	None	No	0.01	Param.
Beryllium (mg/L)	MW-7	0.0025	0.00022	0.004	No	17	0.002231	0.0007605	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-6	0.0025	0.0013	0.1	No	18	0.002433	0.0002828	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.002579	0.001264	0.1	No	18	0.002594	0.001424	38.89	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	MW-7	0.0025	0.00029	0.006	No	16	0.002362	0.0005525	93.75	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	**MW-6**	**30.62**	**24.09**	**5**	**Yes**	**18**	**27.51**	**5.623**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Combined Radium 226 + 228 (pCi/L)	**MW-7**	**36.23**	**24.9**	**5**	**Yes**	**18**	**31.14**	**10.19**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Fluoride (mg/L)	MW-6	0.1	0.04	4	No	19	0.065	0.0263	31.58	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.1	0.047	4	No	19	0.08774	0.02444	78.95	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-6	0.01972	0.0113	0.04	No	18	0.01551	0.006961	5.556	None	No	0.01	Param.
Lithium (mg/L)	MW-7	0.005	0.002	0.04	No	18	0.00415	0.001377	66.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-6	0.015	0.0011	0.1	No	18	0.01423	0.003276	94.44	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-7	0.015	0.0058	0.1	No	18	0.009906	0.004782	33.33	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-6	0.0013	0.00037	0.05	No	16	0.001106	0.0004028	75	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-7	0.0013	0.0003	0.05	No	16	0.001068	0.0004226	75	None	No	0.01	NP (NDs)

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

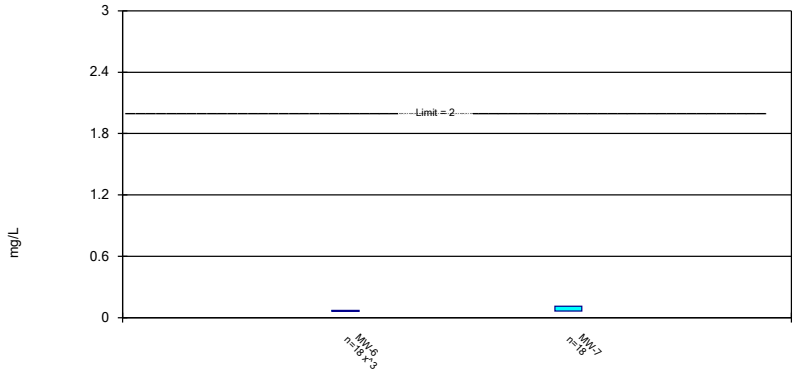


Constituent: Arsenic Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

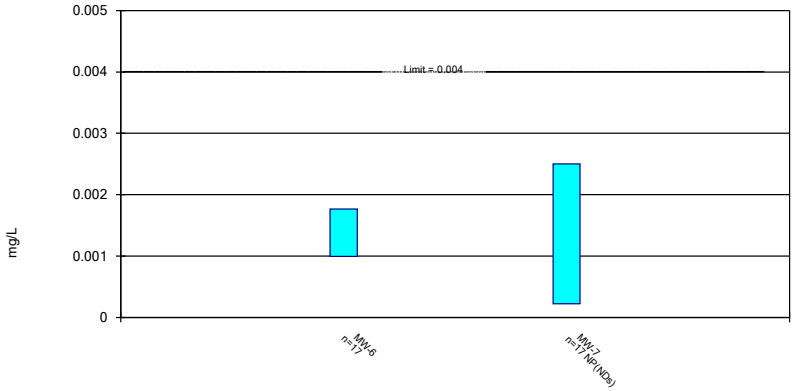


Constituent: Barium Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.32 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.

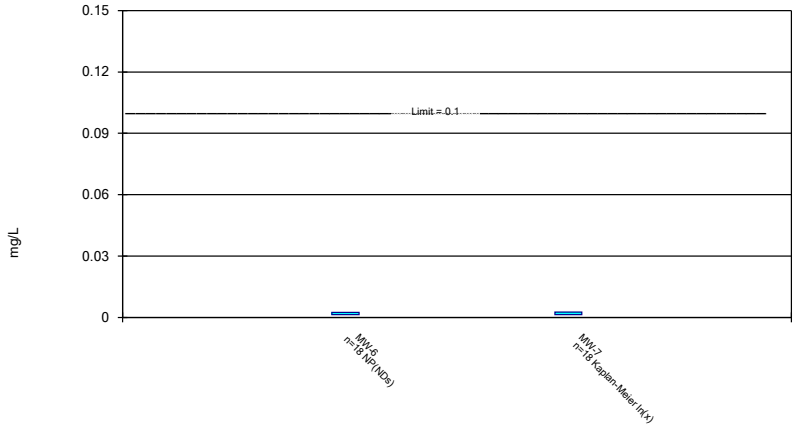


Constituent: Beryllium Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

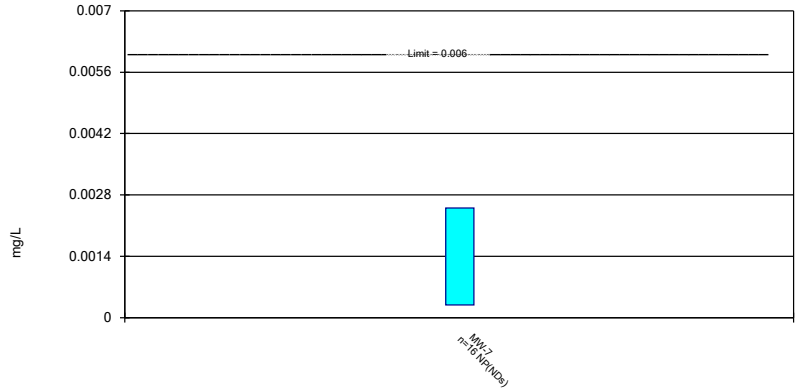
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

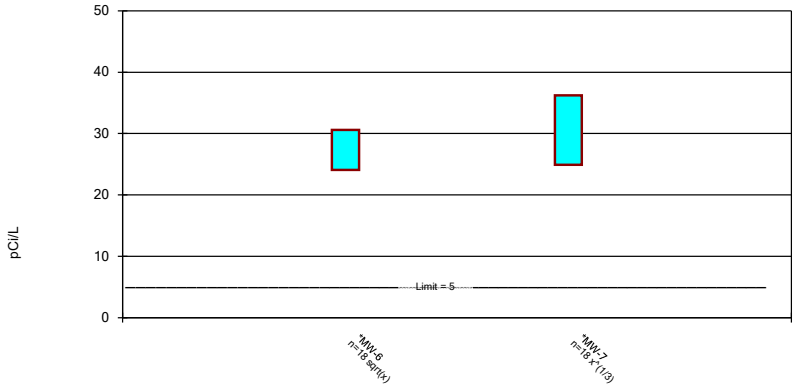
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cobalt Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric Confidence Interval

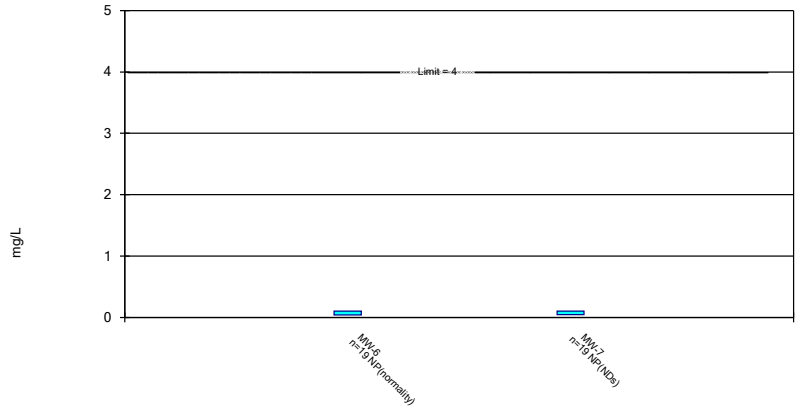
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

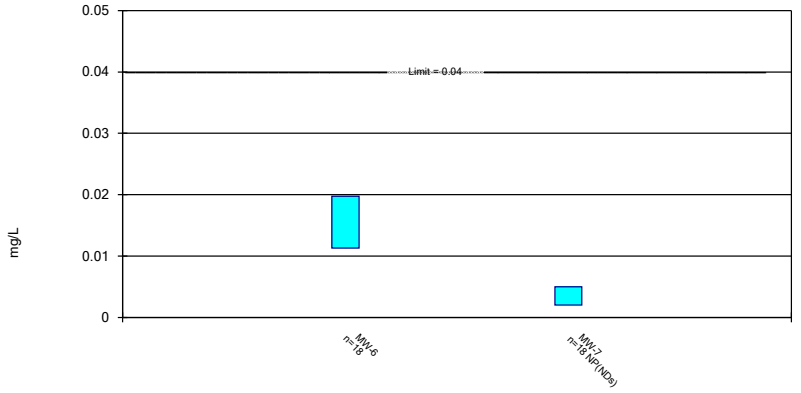
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Fluoride Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Parametric and Non-Parametric (NP) Confidence Interval

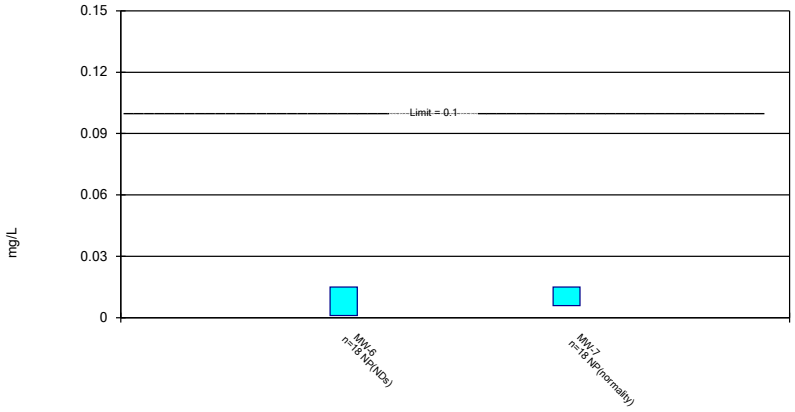
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

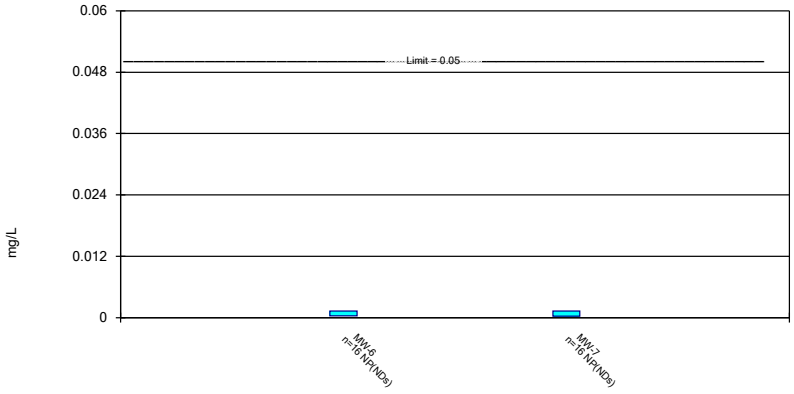


Constituent: Molybdenum Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 1/5/2022 9:03 AM View: Appendix IV
Plant Smith Client: Geosyntec Data: Plant Smith CCR